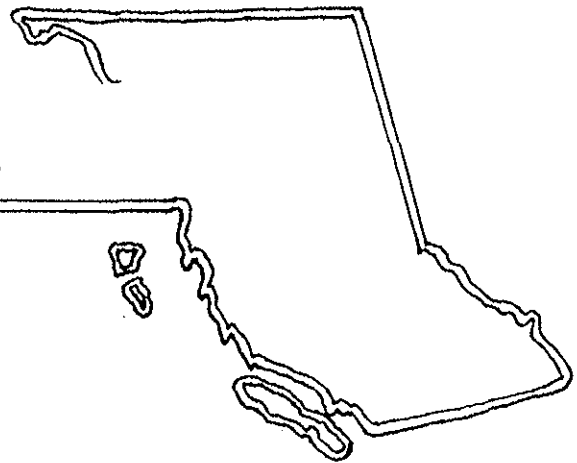


# **ROLLCALL 93**

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**A STATUS REPORT OF SELECTED HEALTH  
PERSONNEL IN THE PROVINCE OF  
BRITISH COLUMBIA**

**HHRU 94:3**

Health Human Resources Unit  
Centre for Health Services and Policy Research  
The University of British Columbia  
Vancouver, British Columbia V6T 1Z3

May 1994

## HEALTH HUMAN RESOURCES UNIT

The Health Human Resources Unit (HHRU) of the Centre for Health Services and Policy Research was established as a demonstration project by the British Columbia Ministry of Health in 1973. Since that time, the Unit has been carried on an ongoing basis within the Ministry's annual operating budget. The Unit undertakes a series of research studies that are relevant to health human resources management and to public policy decisions.

The HHRU's research agenda is determined through extensive discussion of key current issues and available resources with the members of the Health Human Resources Working Group of the Ministry of Health. Various health care provider groups participate indirectly, through ongoing formal and informal communication with Ministry of Health officials and with HHRU researchers.

Three types of research activity are variously included on the Unit's research agenda and draw on different skills and research expertise of its faculty and staff. In conjunction with the professional licensing bodies or associations, the HHRU develops and maintains a co-operative health human resources database. The Unit uses these data to produce regular status reports that provide a basis for future in-depth studies and for health human resources planning. The Unit conducts in-depth studies that have a particular policy relevance or assess the impact of specific policy measures, based on secondary analyses of data from the co-operative database or primary data collected through large scale surveys. The HHRU also conducts specific projects pertaining to the management of health human resources at local, regional, or provincial levels.

Copies of studies and reports produced by the HHRU are available at no charge.

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Mr. Tom Vincent  
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16 May 1994

Dear Mr. Vincent:

It is with pleasure that I transmit to you and to the members of the Health Human Resources Working Group the eleventh edition of our *ROLLCALL* series, *ROLLCALL 93*. This edition is the first full version of *ROLLCALL* to use Health Regions rather than Regional Hospital Districts as the unit of analysis. The amount of information available for some groups has increased, which has allowed us to increase the number of tables presented. In particular, *ROLLCALL 93* contains Analysis of Change tables for several more groups; this table describes place of graduation for new registrants, and records the number of reactivations and the amount of attrition within each health human resource group for which relevant data are available.

Data for the province as a whole suggest that the number of personnel relative to population increased between 1991 and 1993 for most of the health human resources groups included in *ROLLCALL 93*. Notable exceptions to this are the nursing groups, all of which recorded a negative rate of change relative to the population during this time period, though only the licensed practical nurses recorded a decline in actual membership numbers. For all groups, ratios for specific regions of the province may have increased or decreased as a result of changes in the numbers of personnel and/or varying regional population growth rates.

Each new edition of *ROLLCALL* may differ somewhat from those of previous years as a result of redesigned and improved databases of the professional associations and licensing bodies that provide data for publication. Wherever possible, however, inter-temporal consistency is emphasised.

*ROLLCALL 93* represents the culmination of two years of file updating and editing, surveying, text and table production and verification, and data analysis. As in past years, all of the staff of the HHRU were involved in the project. Financial support from the Ministry of Health and the University of British Columbia is gratefully acknowledged. We are indebted to the staff and officials of the professional groups who contributed to the completion of this report.

We look forward to receiving comments and suggestions from the members of the Working Group as well as from other readers.

Sincerely

Arminée Kazanjian, Dr. Soc.  
A/ Director

## ACKNOWLEDGEMENTS

Special appreciation is extended to the regulatory bodies and membership groups and to survey respondents, all of whom took the time to answer our written and verbal requests for information.

*ROLLCALL 93* represents the culmination of two years of file maintenance and updating, topped off most recently with six intensive months of surveying, consistency checks, table generation, definition and other text verification, proof-reading and analysis. The programming team working on this edition was headed by Kerry Kerluke and included Harold Yip, Brian McCashin, Thomas Huang, and Patrick Wong Fung. Lebby Balakshin, Carlene Swan, Kim McGrail, and Laura Wood handled the surveying, editing, and updating. Kim McGrail and Kerry Kerluke co-ordinated the report production. Tables were produced on a 486 IBM<sup>TM</sup> compatible PC running under DOS<sup>TM</sup> 6.0 and Windows<sup>TM</sup> v3.1 using Excel<sup>TM</sup> 4.0 and software written in FoxPRO<sup>TM</sup> v2.5. Maps were produced on an IBM<sup>TM</sup> 3081/63 using Display Integrated Software Systems and Plotting Language<sup>TM</sup> (DISSPLA) v8.2 running under MTS. Text was produced using Microsoft Word<sup>TM</sup> 2.0. All printing was done on a QMS 815 Postscript<sup>TM</sup> laser printer.

Finally, financial support from the University of British Columbia and the British Columbia Ministry of Health is gratefully acknowledged.



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## INTRODUCTION

*ROLLCALL 93* is the eleventh situation report produced by the Health Human Resources Unit (HHRU) at the University of British Columbia. It describes the distribution of selected health personnel in British Columbia by Health Region. Formerly the Health Manpower Research Unit of the Division of Health Services Research and Development, the HHRU is part of the Centre for Health Services and Policy Research, which was officially established in July 1991 at the University of British Columbia.

The HHRU's predecessor was initially funded as a demonstration project by the Ministry of Health in September 1973. It was charged with the development of the provincial health human resources database and the creation of models to analyse the forces influencing human resources levels and the effect of certain policy options upon the type and distribution of stock. The Unit has produced a number of reports, directories, and in-depth analyses of human resources data for the professional bodies, the Provincial Health Human Resources Working Group and the Federal/Provincial Advisory Committee on Health Human Resources. Since 1973, a large and varied amount of data have been collected by the Unit to provide research support to planning and policy decisions. The human resources components of this database require varying degrees of development and maintenance to ensure its quality and currency.

Interest in health human resources planning has been extremely high in the past few years, primarily because of increasing concern about the effective use of public monies allocated to health services and because of legislative changes in professional regulation, issues that were highlighted in the British Columbia Royal Commission on Health Care and Costs. This report provides some of the health human resource data that are prerequisite to undertaking rational planning and implementing routine procedures of public accountability. Information about the province's health personnel groups is published in *ROLLCALL* in expectation that it will be used for health human resources planning by the principal recipients of the report -- the Health Human Resources Working Group of the Province of British Columbia and the professional associations and licensing or registration bodies in the province, as well as by those who are concerned with the public process of regionalisation of health services delivery.

*ROLLCALL 93* provides a snapshot picture of the distribution of health human resources in British Columbia in the last two years. It may contain statistics that do not readily reconcile with the British Columbia component of the national document *Health Personnel in Canada*, due to differences in dates of record and in research methods. That publication reviews provincial variations, using nationally consistent definitions and national data sources. *ROLLCALL* concentrates on examining the health human resources situation in British Columbia by Health Region, using official and consistently edited provincial data which have been assembled and analysed in conjunction with provincial licensing authorities and professional associations.

Readers who have used *ROLLCALL* in previous years will note the change in this edition to Health Regions rather than Regional Hospital Districts as the unit of analysis. Metropolitan vs. non-metropolitan comparisons have also been eliminated. Supplementary breakdowns of Health Region data by Local Health Area, by community, and by HHRU designated region are available on request. Because actual census figures are not yet available for British Columbia's health regions, population estimates made available by the Central Statistics Branch of the British Columbia Ministry of Government Services (see Appendix B) are the basis of many of the statistics that appear in *ROLLCALL 93*. All tables showing inter-temporal comparisons of personnel per 10,000 population distributions for 1991 and 1993 have been computed using the most recent estimates. The 1991

personnel to population ratios that appear in *ROLLCALL 93* may differ significantly from those reported in *ROLLCALL 91* and *ROLLCALL UPDATE 92* because they have been recalculated based on these more accurate estimates of population from Central Statistics.

While each new edition of *ROLLCALL* reflects improvements in accuracy and detail, there are still times when comparisons with the previous *ROLLCALL* reports will be meaningless. The use of membership as a proxy for stock, for instance, is still necessary for many groups where membership is not compulsory. While comparative data are provided for these groups if there have been no major changes in membership classification, inter-temporal inferences should be made with caution.

The main purpose of *ROLLCALL* is to enumerate and describe each of the thirty-four health human resources groups in British Columbia for which reliable data are available. There may be small or large health personnel groups for which we were unable to secure data because of the non-existence of a formal licensing body or professional association with a broad membership base, the absence of a membership list or, more generally, the unavailability of an accurate source of required information.

The 1993 edition of *ROLLCALL* is the first to make a concerted effort to use employment address to locate health personnel into health regions where employment address is available. The rule was to use employment address where employment address was available for members of a health human resources group who reported employment in that field. Home address was used where members were not employed in the field and/or where no employment address was available. Each chapter contains a specific description of the data available for that group. For all groups where they were available, the *ROLLCALL 91* data were processed based on employment address, using the same rules to ensure comparability between the two years of data.

In previous editions of *ROLLCALL*, determining which address should be used to locate personnel in what were then Regional Hospital Districts was thought to be of lesser importance due to the existence of the Greater Vancouver Regional Hospital District, which encompassed the entire lower mainland. Thus, people who lived in Richmond but worked in Vancouver would be counted in the same Regional Hospital District using either address. This is no longer the case, as the lower mainland has been divided into several health regions. The health region system is better suited to health resource planning, and makes the decision involving which address to use of much greater importance.

This introductory section is intended to present health human resources group data in a province-wide context by providing relative supply figures. The data are reviewed with the object of highlighting possible trends in the growth of certain groups. Caution is advised, however, in the interpretation and utilisation of some of these comparative data because the sources of data are varied and the degree of accuracy in some instances cannot be ascertained.

The analyses in this section do not provide conclusive information regarding health human resources imbalances. Regional inequalities in personnel distribution may or may not indicate deficiencies or excesses in service availability. While deficiencies or excesses may indeed exist in certain instances, the data provided in the following pages are not a sufficient base from which to draw such conclusions since many factors interact in determining optimal mix and numbers of health care personnel in any region. The demography and needs of the population, the service functions of institutions and professions within a region, the accessibility and availability of communication and transportation resources, the productivity of the respective professionals under study, and the potential for possible transfer of functions between members of the formal and informal health care provider groups may all influence health human resources needs. The personnel to population ratios in the

ensuing tables do not adjust for such factors and should be used only as a basis for informed discussion and further investigation.

## I. PROVINCIAL SUMMARY

Between 1991 and 1993 the overall population of British Columbia increased at an average annual rate of 2.7%, rising from an estimated total of 3,284,528 in 1991 to 3,461,887 in 1993 (see Appendix B). The growth in individual health regions ranged from a high in South Okanagan of 5.6% to a low in Peace River of 0.4% (average annual rates). There were no health regions during this time period that experienced a decline in population. Average annual population growth in both Vancouver and the Capital Regional District lagged behind the provincial average at 1.5% and 2.0% respectively.

Women make up just over 50% of the population of British Columbia, though the distribution of males and females among the age groups is not even (see Appendix B). Males outnumber females in the under 25 age group, as well as in the groups 45 to 54 years and 55 to 64 years. The most uneven distribution, however, is seen in the over 65 age group, of which 56.6% are women. Looking at the age distribution across health regions, three regions, Skeena, Peace River, and Northern Interior, showed both a high representation among the youngest age group and an extremely low percentage of population from the oldest age group. Specifically, the under-25 group comprises 33.18% of the provincial population, but 41.95%, 41.90% and 41.31% of the population of these health regions, respectively; and the 65+ age group makes up 13.00% of the provincial population, but only 5.39%, 6.31%, and 5.67% of the population of these health regions, respectively. The Vancouver health region shows the lowest representation of the youngest age group (27.26%), and the South Okanagan and Capital Regional District showed the highest representation of the over 65 age group (19.31% and 18.62%). These latter numbers reinforce the anecdotal information about these areas being "retirement communities". These two groups also represent the ages which use the highest proportion of health services, so their concentration in certain areas of the province will at least to some degree indicate a potential need for health human resources.

### (a) Health Personnel by Group Type and Employment Status

Table 1 presents the thirty-four health human resources groups and two sub-groups based on group type and employment status in an attempt to compare and contrast the types of data available for each of these groups. Table 1 classifies the health human resources groups into three categories based on licensing requirements: mandatory registration groups, where membership is strictly controlled and mandatory for employment in the field; voluntary membership groups, where membership may be controlled, but is not required in order to obtain employment in the field; and survey groups, where the HHRU compiles a list of employers and employees in the field. Employment status information is collected with varying degrees of completeness by the professional associations. For half of the groups in *ROLLCALL 93*, there is no specific information available about employment in the field. The type of employment information available as well as the type of professional group should be kept in mind when making comparisons about health human resources deployment across the health regions in the province.

There are two groups which appear as sub-groups in their respective chapters; first responders are found in Chapter 17 with emergency medical assistants, and licensed graduate nurses are found in Chapter 24 with registered nurses.



**Table 1**  
**Health Personnel in British Columbia**  
**by Group Type by Employment Status**  
**1993**

| <u>COMPULSORY REGISTRATION GROUPS</u>                                       | <u>EMPLOYED<br/>IN FIELD<sup>1</sup></u> | <u>NOT<br/>EMPLOYED<br/>IN FIELD<sup>2</sup></u> | <u>EMPLOYMENT<br/>STATUS<br/>UNKNOWN</u> | <u>TOTAL</u> |
|---|--|--|--|--------------|
| Certified Dental Assistants   | -  | -  | 4,067                                    | 4,067        |
| Dental Hygienists <sup>3</sup>  | 641                                      | 37   | 549                                      | 1,227        |
| Dental Technicians  | -  | 37   | 541                                      | 578          |
| Dentists  | -  | -  | 2,109                                    | 2,109        |
| Denturists  | -  | 17   | 216                                      | 233          |
| Public Health Inspectors  | 281                                      | -  | -  | 281          |
| Chiropractors   | -  | -  | 504                                      | 504          |
| Emergency Medical Assistants  | 2,832                                    | -  | -  | 2,832        |
| First Responders*   | -  | -  | 3,713                                    | 3,713        |
| Naturopathic Physicians   | -  | -  | 85                                       | 85           |
| Optometrists  | -  | -  | 266                                      | 266          |
| Pharmacists   | 2,270                                    | 297  | -  | 2,567        |
| Physicians  | -  | -  | 8,143                                    | 8,143        |
| Podiatrists   | -  | -  | 69                                       | 69           |
| Licensed Practical Nurses   | 4,750                                    | 1,152  | 41                                       | 5,943        |
| Registered Nurses   | 26,877                                   | 3,282  | 204                                      | 30,363       |
| Licensed Graduate Nurses  | 414                                      | 22   | 7  | 443          |
| Registered Psychiatric Nurses   | 2,282                                    | 393  | -  | 2,675        |
| Psychologists   | 716                                      | 67   | -  | 783          |
| Massage Practitioners   | 595                                      | 25   | 149                                      | 769          |
| Physiotherapists  | 1,659                                    | 119  | 209                                      | 1,987        |
| <u><b>VOLUNTARY MEMBERSHIP GROUPS</b></u>                                   |  |  |  |              |
| Health Record Personnel   | -  | 27   | 412                                      | 439          |
| Health Services Executives  | -  | -  | 497                                      | 497          |
| Cardiology Technologists  | 322                                      | -  | 47                                       | 369          |
| Cardiovascular Perfusionists**  | 25                                       | 4  | -  | 29           |
| Medical Laboratory Technologists  | -  | 419  | 2,951                                    | 3,370        |
| Medical Radiation Technologists   | 1,282                                    | -  | 172                                      | 1,454        |
| Respiratory Therapists  | 288                                      | -  | 47                                       | 335          |
| Dietitians and Nutritionists  | 583                                      | 116  | 6  | 705          |
| Food Service Supervisors  | -  | -  | 232                                      | 232          |
| Audiologists & Speech/Language Pathologists                                 | 344                                      | -  | 34                                       | 378          |
| Occupational Therapists   | 574                                      | 100  | 34                                       | 708          |
| Prosthetists and Orthotists   | -  | -  | 57                                       | 57           |
| <u><b>HHRU SURVEY GROUPS</b></u>  |  |  |  |              |
| Clinical Engineers and Biomedical Engineering Technologists and Technicians | 196                                      | 7  | 99                                       | 302          |
| Diagnostic Medical Sonographers   | 219                                      | 5  | 59                                       | 283          |
| Social Workers in Health Care   | 1,200                                    | -  | -  | 1,200        |

<sup>1</sup> Includes personnel who are known to be employed in the field as reported by the regulatory body, membership society, or on the HHRU survey.

<sup>2</sup> Includes personnel who have a membership or registration status which makes them ineligible for employment in the field, and those who are reported as "employed in another field", "unemployed" or "on leave" by the regulatory body, membership society, or on the HHRU survey.

<sup>3</sup> Employment information compiled from a HHRU mail survey (61% response rate).

\* Information is collected only for those known to be employed as first responders. However, acting as a first responder is not the primary duty of this employment group; most are firemen or policemen. See Chapter 17.

\*\*The total includes 4 cardiovascular perfusionists excluded from Table 1 in Chapter 10; 3 who are not employed in cardiovascular perfusion and 1 who is on leave of absence.

The usefulness of the data in estimating the number of personnel working in each health human resources area is limited by the completeness of the information available to the HHRU. Regulatory bodies, because membership is required in order to work in those fields, may tend to over-estimate the number of people actually employed in the profession; everyone working must be a member of the regulatory body, but those who are temporarily not working may retain membership in order to avoid the necessity of re-examination if they choose to return. This problem is eliminated for groups where the regulatory body asks about employment status, but this is done by only eight of the twenty-one regulatory bodies. (Some information is known about the dental hygienists because of a HHRU survey done in 1993. Data for public health inspectors and emergency medical assistants are collected only for those known to be employed in the field.)

In contrast, the voluntary membership groups may tend to under-represent the number of people working in those fields because they are voluntary; it is not necessary to become a member in order to be employed in the field, so varying percentages of the workforce will simply choose to avoid membership. For some groups the problem of obtaining a complete count of personnel is reduced by using more than one membership list if multiple associations exist (e.g. health services executives and food service supervisors). Under-representation may also be kept to a minimum in fields where, while membership is voluntary, it is strongly urged or even required by employers, such as with medical laboratory technologists. By its nature as voluntary membership, however, it is impossible to say what percentage of the workforce is represented for each group.

The HHRU survey groups, like the membership groups, may tend to under-estimate the number of health personnel in a group. The HHRU compiles a list of potential employers for each health human resources group that is surveyed, and contacts the employers in order to create an employee list. The employee list is then used as a database to generate the census surveys. While the HHRU attempts to reach all potential employers of these health personnel in the province, it is likely that some are missed. This is especially true for the clinical engineers and biomedical engineering technologists and technicians who are often employed by small service companies, and may increasingly become the case for the diagnostic medical sonographers as more ultrasound services are offered outside hospitals. Furthermore, response rates to the census surveys are less than perfect resulting in some uncertainty in the estimates for these groups. This method of data collection also prevents the HHRU from estimating the size of the potential work force - those trained in the field but currently for whatever reason, not employed in it. It is impossible, at this point, to assess the extent of the under- or over-representation in each of the health human resources groups.

#### **(b) Production Index**

The information reported in Table 2 is a combination of HHRU data available from several editions of both *ROLLCALL* and *PRODUCTION*. *PRODUCTION* is a biennial publication which shows the number of students graduating each year by the various health profession education programs in British Columbia.

The production index (PI) is the ratio of the number of personnel who are eligible for employment in each health human resources group to the number who graduated from B.C. institutions in the corresponding discipline in the academic year stated (1989/90, 1991/92, and 1993/94). The numbers of graduates for each academic year are provided by the various degree programs through a questionnaire designed and distributed by the HHRU. The numerator is determined as follows: for groups where there are multiple registration or membership categories, only those categories where there is a potential for employment in the field are included. For example, registered nurses may be registered with the

Registered Nurses Association of British Columbia (RNABC) as either "practising" or "non-practising". The PI would use only those in the "practising" category in the numerator, as those in the "non-practising" category by definition can not be employed in nursing. For groups where there is only one membership or registration category, such as certified dental assistants, the total number for the body is used. Exceptions to the rule are made for dental hygienists and dental technicians/denturists due to the absence of data for some of the registration categories in 1989. The same rules are applied to all years of data. This is a slightly different method of calculation than that used in previous editions of *ROLLCALL*, so the PI is not comparable to those published in previous editions.

The PI shows the number of trained personnel who have graduated from British Columbia institutions for selected occupations relative to existing supply. The information from this index must be carefully interpreted in combination with other information such as growth rates, surpluses and shortages, and/or possibilities for health human resources substitution in order to be used for educational program planning. The index does not account for inter-provincial migration or for immigration from other countries into these health professions, which is a substantial proportion of personnel supply for some health human resources groups. Without taking some of these other factors into careful consideration, it is impossible to interpret the changes in the PI to be indicative of surplus personnel in a particular field, or conversely, of over-production.

In the 1993/94 academic year, physicians showed the highest PI at 67.9. This is an increase from the previous two time periods when the PI was 62.8, and indicates that there was one (1) graduate from the UBC Faculty of Medicine for every 67.9 physicians registered with the College of Physicians and Surgeons of British Columbia (CPSBC). The UBC Faculty of Medicine is the only training program for physicians in the province, and its graduate levels have remained fairly constant over time, so the change in the PI is due solely to an increase in the number of physicians registered with the CPSBC (an increase in the numerator).

The net changes in PI between 1989/90 and 1993/94 was fairly small and positive for the majority of health personnel groups. The two groups with the largest changes are the physiotherapists and the registered psychiatric nurses (RPNs). The PI for the physiotherapists dropped significantly from 1989/90 to 1991/92, and then rebounded slightly between 1991/92 and 1992/93. The change between 1989/90 and 1991/92 seems to be primarily due to a substantial increase in the number of physiotherapists graduating in B.C. - a change in the denominator. The rebound between 1991/92 and 1993/94 can be attributed to a fairly large increase in the number of physiotherapists - an increase in the numerator. A similar dip and rebound occurs with the PI for the RPNs, though the rebound for this group is much more pronounced. The dip between 1989/90 and 1991/92 came because of an almost doubling of the number of B.C. graduates, and the rebound occurred between 1991/92 and 1993/94 as the number of graduates decreased, though not back to the 1989/90 level. The two other groups with a negative net change in PI are the dental hygienists, with increasing graduate numbers, and the licensed practical nurses (LPNs). There has been some change in the number of LPNs graduating from B.C. institutions, but in this case the change in PI results more from a decrease in personnel numbers. The LPNs are the only health personnel group in *ROLLCALL* 93 that decreased in size between 1991 and 1993.

Certified dental assistants have consistently had the lowest PI, indicating a high educational output in relation to those already in the field. There are several factors that could influence a group's PI, including the attrition rate from the profession (i.e. how many years are spent in the health occupation) and supply to the profession from other parts of Canada or other countries. Information of this sort is displayed in the "Analysis of Change Table" in each chapter (where relevant data are available).

**Table 2**  
**Production Index (PI)\***  
**for Selected Health Groups in British Columbia**  
**1989/90, 1991/92 and 1993/94**

| Health Personnel Group                        | 1989/90   |                  |      | 1991/92   |                  |      | 1993/94   |           |      |
|---|-----------|------------------|------|-----------|------------------|------|-----------|-----------|------|
|   | Personnel | Graduates        | PI   | Personnel | Graduates        | PI   | Personnel | Graduates | PI   |
| Certified Dental Assistants                   | 3,482     | 302              | 11.5 | 3,845     | 299 <sup>1</sup> | 12.9 | 4,067     | 309       | 13.2 |
| Dental Hygienists <sup>2</sup>                | 825       | 39               | 21.2 | 908       | 59               | 15.4 | 1,125     | 62        | 18.1 |
| Dental Technicians/Denturists <sup>3</sup>    | 601       | 26               | 23.1 | 614       | 30 <sup>4</sup>  | 20.5 | 647       | 25        | 25.9 |
| Dentists                                      | 1,905     | 38               | 50.1 | 1,997     | 38               | 52.6 | 2,109     | 39        | 54.1 |
| Pharmacists                                   | 2,285     | 122              | 18.7 | 2,439     | 111              | 22.0 | 2,567     | 107       | 24.0 |
| Physicians                                    | 7,093     | 113              | 62.8 | 7,596     | 121              | 62.8 | 8,143     | 120       | 67.9 |
| Occupational Therapists                       | 437       | 24               | 18.2 | 566       | 30               | 18.9 | 644       | 32        | 20.1 |
| Physiotherapists                              | 1,620     | 23               | 70.4 | 1,801     | 32               | 56.3 | 1,964     | 34        | 57.8 |
| Licensed Practical Nurses                     | 6,080     | 131 <sup>5</sup> | 46.4 | 6,143     | 116 <sup>6</sup> | 53.0 | 5,943     | 134       | 44.4 |
| Registered Nurses (Diploma and Baccalaureate) | 24,805    | 723 <sup>7</sup> | 34.3 | 26,669    | 690 <sup>8</sup> | 38.7 | 27,787    | 721       | 38.5 |
| Registered Psychiatric Nurses                 | 2,074     | 44               | 47.1 | 2,223     | 86               | 25.8 | 2,282     | 60        | 38.0 |

\* Production Index=Number of Personnel divided by Number of Graduates for specified academic years.

<sup>1</sup> The number of graduates for the Open Learning Agency is an estimate taken from PRODUCTION 91.

<sup>2</sup> Personnel numbers exclude the "On Permit" licence category, as numbers for this category were not available for the 1989 data.

<sup>3</sup> Personnel numbers are for only the "Registered" licence category, as numbers for the other categories were not available for the 1989 data.

<sup>4</sup> The number of graduates is an estimate taken from PRODUCTION 91.

<sup>5</sup> The number of graduates for Selkirk College is an estimate taken from PRODUCTION 89.

<sup>6</sup> The number of graduates for Selkirk College is an estimate taken from PRODUCTION 91.

<sup>7</sup> The number of graduates from Selkirk College, University College of the Cariboo, University College of the Fraser Valley and Vancouver General Hospital are estimates taken from PRODUCTION 89.

<sup>8</sup> The number of graduates from Malaspina University College is an estimate taken from PRODUCTION 91.

### (c) Age and Sex

Table 3 displays age and sex information for all groups for which such data were available. The total number of males and females in each health human resources group is organised according to standard age categories developed and used by Statistics Canada. Caution is advised when interpreting some of these figures, particularly with groups where the proportion of personnel with unknown information is substantial (e.g. certified dental assistants).

Figure 1 shows data from the "Subtotal" columns in Table 3 in graph form arranged in descending order of female concentration in the health human resources groups. Using both Table 3 and Figure 1 we can see males account for a little under one-quarter of the total health personnel in B.C. If registered nurses are excluded, (the largest health human resources group by far and predominantly female), the proportion of males and females changes a great deal; where gender is known, 40.3% are men and 59.7% are women. Overall, the highest concentrations of female personnel were among certified dental assistants, registered dietitians and nutritionists, registered nurses, dental hygienists and occupational therapists. For each of these groups, women comprised over 95 percent of the membership. Clinical engineers and biomedical engineering technologists and technicians (93.3%), dentists (86.2%), physicians (77.4%), and emergency medical assistants (73.8%) are predominantly men. The only two groups with fairly equal gender representation are pharmacists and psychologists.

For most groups, the highest proportions of personnel fall into the age category 35 - 44 years. The groups with higher proportions of personnel in younger age groups were clinical engineers and biomedical engineering technologists and technicians, certified dental assistants, dental hygienists and pharmacists. The "youngest" health human resources group is that of the certified dental assistants; 57.1% are in the age group 25 - 34 and a total of 81.6% are under age 35. Certified dental assistants, however, also have the largest proportion of people with unknown age and/or gender (41%). The groups with higher proportions of personnel in the older age categories were psychologists and registered psychiatric nurses; the "oldest" group, however, is that of physicians. Almost one-quarter of the physician population (23.4%) is over 54 years of age. Psychologists have the second highest proportion in that age category, with 19.7%. Licensed graduate nurses are the predominantly female group with the highest proportion in the two oldest age groups, at 14.5%.

### (d) Inter-Regional Distribution

Tables 4 through 6 illustrate in various ways the distribution of health human resources groups throughout the province. As noted earlier, the data presented in *ROLLCALL* should be used with caution when making this type of comparison. For instance, a region which contains a specialised facility that operates within a large catchment area and which is the principal employer for a particular group may show a high personnel to population ratio. The ratio for that region would not necessarily reflect a surplus of workers, just as lower ratios in the districts surrounding that catchment area need not imply shortages. For some groups, low rates per 10,000 population may be expressive of economies of scale, for others low rates might signify under-utilisation of human resources, and for still others it might mean a true lack of health human resources for the population.

#### (i) Average Annual Rate of Change

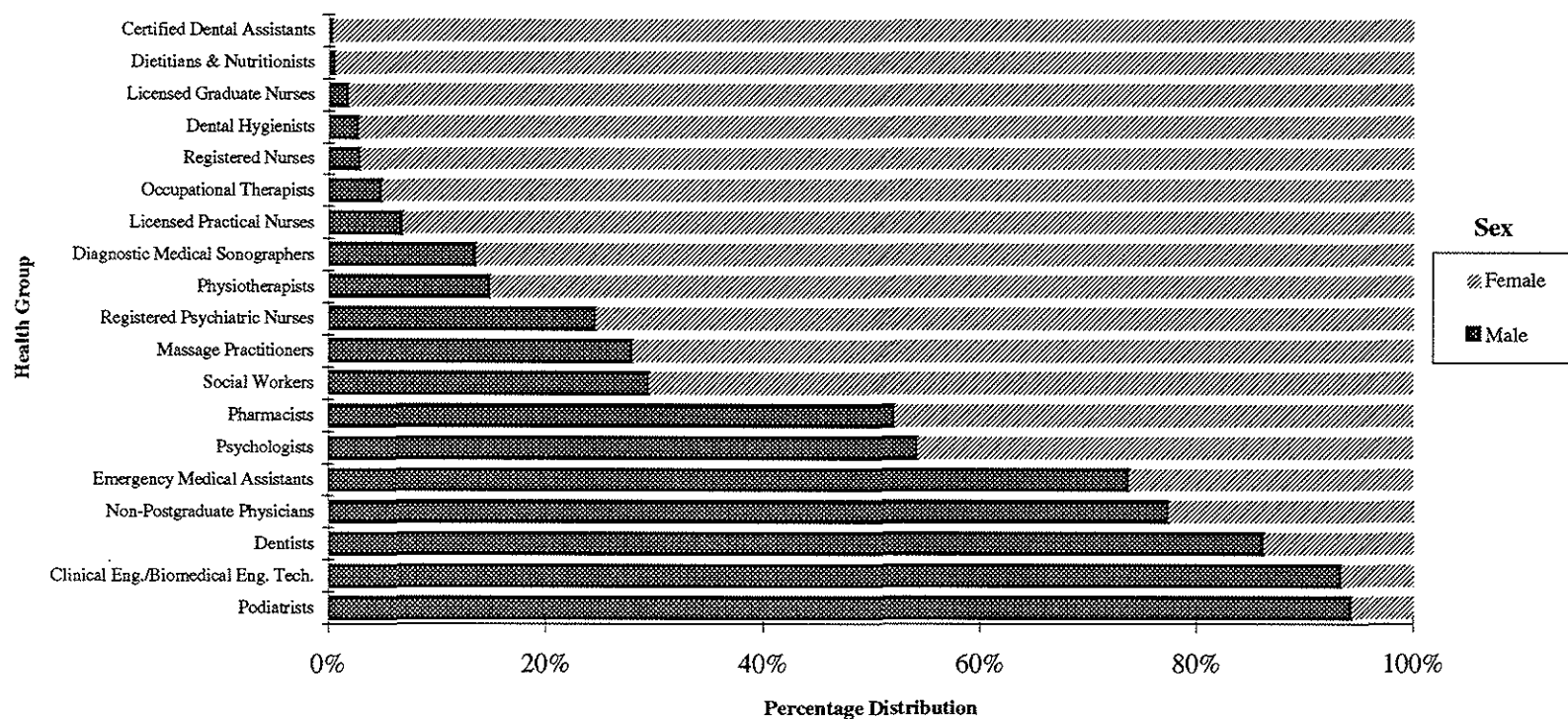
Table 4 ranks the twenty-eight health human resources groups for which average annual rates of change are computed. The eight groups for which average annual rates of change cannot be calculated are health service executives, cardiovascular perfusionists, clinical engineers and biomedical engineering

**Table 3**  
**Selected Health Groups<sup>1</sup> in British Columbia**  
**by Age and Sex**  
**1993**

| Health Personnel Group              | < 25       |              | 25-34        |               | 35-44        |               | 45-54        |               | 55-64        |              | 65 +       |            | Subtotal      |               | Unknown      | Total         |
|-------------------------------------|------------|--------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|--------------|------------|------------|---------------|---------------|--------------|---------------|
|                                     | M          | F            | M            | F             | M            | F             | M            | F             | M            | F            | M          | F          | M             | F             |              |               |
| Clinical Eng./Biomedical Eng. Tech. | 5          | 1            | 66           | 9             | 66           | 3             | 32           | 0             | 13           | 0            | 0          | 0          | 182           | 13            | 107          | 302           |
| Certified Dental Assistants         | 4          | 582          | 4            | 1,367         | 1            | 386           | 0            | 52            | 0            | 3            | 0          | 0          | 9             | 2,390         | 1,668        | 4,067         |
| Dental Hygienists                   | 1          | 82           | 13           | 530           | 7            | 361           | 6            | 88            | 2            | 4            | 1          | 2          | 30            | 1,067         | 130          | 1,227         |
| Dentists                            | 4          | 4            | 334          | 124           | 614          | 120           | 552          | 31            | 222          | 10           | 92         | 1          | 1,818         | 290           | 1            | 2,109         |
| Diagnostic Medical Sonographers     | 0          | 1            | 12           | 55            | 11           | 87            | 4            | 31            | 1            | 4            | 0          | 0          | 28            | 178           | 77           | 283           |
| Emergency Medical Assistants        | 167        | 98           | 740          | 271           | 770          | 264           | 330          | 84            | 70           | 20           | 2          | 0          | 2,079         | 737           | 16           | 2,832         |
| Licensed Graduate Nurses            | 0          | 0            | 2            | 38            | 4            | 175           | 2            | 156           | 0            | 60           | 0          | 4          | 8             | 433           | 2            | 443           |
| Licensed Practical Nurses           | 3          | 148          | 89           | 916           | 137          | 2,154         | 124          | 1,647         | 42           | 516          | 10         | 140        | 405           | 5,521         | 17           | 5,943         |
| Massage Practitioners               | 6          | 22           | 68           | 193           | 83           | 234           | 35           | 67            | 8            | 10           | 5          | 1          | 205           | 527           | 37           | 769           |
| Occupational Therapists             | 0          | 20           | 19           | 220           | 12           | 260           | 2            | 119           | 1            | 35           | 0          | 4          | 34            | 658           | 16           | 708           |
| Pharmacists                         | 51         | 76           | 350          | 507           | 413          | 408           | 235          | 160           | 191          | 41           | 72         | 13         | 1,312         | 1,205         | 50           | 2,567         |
| Non-Postgraduate Physicians         | 4          | 2            | 778          | 499           | 1,798        | 699           | 1,603        | 329           | 1,017        | 109          | 575        | 46         | 5,775         | 1,684         | 18           | 7,477         |
| Physiotherapists                    | 9          | 47           | 105          | 485           | 98           | 608           | 48           | 376           | 23           | 98           | 3          | 18         | 286           | 1,632         | 69           | 1,987         |
| Podiatrists                         | 0          | 0            | 11           | 2             | 16           | 1             | 17           | 0             | 1            | 0            | 5          | 0          | 50            | 3             | 16           | 69            |
| Psychologists                       | 0          | 0            | 8            | 23            | 90           | 100           | 237          | 171           | 70           | 47           | 20         | 17         | 425           | 358           | 0            | 783           |
| Dietitians & Nutritionists          | 0          | 12           | 2            | 232           | 2            | 252           | 0            | 108           | 0            | 44           | 0          | 2          | 4             | 650           | 51           | 705           |
| Registered Nurses                   | 18         | 724          | 252          | 6,673         | 347          | 10,256        | 226          | 8,074         | 47           | 3,347        | 2          | 366        | 892           | 29,440        | 31           | 30,363        |
| Registered Psychiatric Nurses       | 6          | 58           | 76           | 451           | 155          | 604           | 296          | 637           | 102          | 199          | 7          | 13         | 642           | 1,962         | 71           | 2,675         |
| Social Workers                      | 3          | 11           | 46           | 160           | 125          | 330           | 140          | 258           | 27           | 52           | 1          | 5          | 342           | 816           | 42           | 1,200         |
| <b>TOTAL</b>                        | <b>281</b> | <b>1,888</b> | <b>2,975</b> | <b>12,755</b> | <b>4,749</b> | <b>17,302</b> | <b>3,889</b> | <b>12,388</b> | <b>1,837</b> | <b>4,599</b> | <b>795</b> | <b>632</b> | <b>14,526</b> | <b>49,564</b> | <b>2,419</b> | <b>66,509</b> |

<sup>1</sup> Excludes health personnel in British Columbia for which age/sex information are not available.

**Figure 1**  
**Percentage Distribution of Selected Health Groups in British Columbia**  
**by Sex**  
**1993**





technologists and technicians, diagnostic medical sonographers, first responders, food service supervisors, social workers, and prosthetists and orthotists. The average annual rate of change in number reflects the average yearly percentage growth in number of personnel in a health profession. The average annual rate of change in ratio<sup>1</sup> reflects the average yearly percentage growth of personnel in a health profession relative to the growth in the overall population; this number tells us if the profession grew faster than the population (a positive number), at the same rate as the population (0), or more slowly than the population (a negative number). The calculation is made based on total membership of each of the groups, so several factors should be kept in mind when looking at these numbers. First, since the numbers used are the totals, the average annual rate of change may represent a growth in membership in the inactive or non-practising categories, and therefore not reflect growth in the number of personnel available for employment in the field (effective supply). Second, for membership groups (see Table 1 for a definition of membership groups), it is possible the average annual rate of change reflects growth in the percentage of people working in the field who are members, rather than actual growth in employment in the field. Respiratory therapists, the highest ranked group, are a good example of this second phenomenon. Since *ROLLCALL 91* was published, the British Columbia Society of Respiratory Therapists (BCSRT) has undertaken a major membership drive related to its filing for designation as a self-governing health profession. A good portion of the growth of this group, then, may be a result of increasing the breadth of membership without a concomitant increase in the number of respiratory therapists working in the province.

Following respiratory therapists, dental hygienists, massage practitioners and naturopathic physicians (all of which are groups with mandatory registration) show the greatest average annual rates of change in both number and ratio. This would indicate these are the fastest growing health professions in British Columbia at this time. The rise in general interest in alternative medicine makes the increase in naturopathic physicians and massage practitioners no surprise. The rise in the number of dental hygienists is somewhat less obvious, especially since dentists have had very flat growth, with an average annual rate of change in ratio of 0.11%. Of the twenty-eight health human resources groups in Table 4, ten showed a negative average annual rate of change in ratio. This reflects a growth in the profession that lagged behind the overall growth in population for the province. Of these ten, only two groups, licensed practical nurses and licensed graduate nurses, showed an actual decrease in numbers, and one group, podiatrists, had an unchanged number of registered members.

## (ii) Coefficient of Variation Across Health Regions

Table 5 is concerned with the relative supply of personnel across the health regions. Groups for which the 1991 and 1993 data are not comparable are indicated with an asterisk. For each group in Table 5, the cross-regional standard deviation of personnel to population ratios is divided by the mean

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<sup>1</sup> Average annual rates of change in the number of personnel are computed as follows:

$$[(\text{Personnel } 1993 / \text{Personnel } 1991)^{12/n} - 1] \times 100,$$

where n=number of months separating the 1991 and 1993 data based on the dates of record listed for each group.

Average annual rates of change (in percent) in the number of personnel relative to the change in population are computed as follows:

$$[(\text{Personnel } 1993 / \text{Personnel } 1991) \times (\text{Population } 1991 / \text{Population } 1993)]^{12/n} - 1] \times 100,$$

where n=number of months separating the two sets of data.

**Table 4**  
**Average Annual Rate of Change, Number and Number per 10,000 Population**  
**for Selected Health Groups<sup>1</sup> in British Columbia**  
**1991 to 1993**

| Health Personnel Group                      | Average Annual Rate of Change |                    | Number |        | Number per 10,000 Population |       |
|---|-------------------------------|--------------------|--------|--------|------------------------------|-------|
|   | Number <sup>2</sup>           | Ratio <sup>3</sup> | 1991   | 1993   | 1991                         | 1993  |
| Respiratory Therapists                      | 19.41                         | 16.03              | 242    | 335    | 0.74                         | 0.97  |
| Dental Hygienists                           | 13.38                         | 10.02              | 985    | 1,227  | 3.00                         | 3.54  |
| Massage Practitioners                       | 11.80                         | 8.90               | 612    | 765    | 1.86                         | 2.21  |
| Naturopathic Physicians                     | 11.80                         | 8.90               | 68     | 85     | 0.21                         | 0.25  |
| Occupational Therapists                     | 6.67                          | 3.90               | 566    | 644    | 1.72                         | 1.86  |
| Dietitians & Nutritionists                  | 6.49                          | 3.72               | 545    | 618    | 1.66                         | 1.79  |
| Public Health Inspectors                    | 6.24                          | 3.87               | 244    | 281    | 0.74                         | 0.81  |
| Cardiology Technologists                    | 5.07                          | 2.10               | 337    | 369    | 1.03                         | 1.07  |
| Optometrists                                | 4.84                          | 2.12               | 242    | 266    | 0.74                         | 0.77  |
| Physiotherapists                            | 4.43                          | 1.72               | 1,801  | 1,964  | 5.48                         | 5.67  |
| Medical Radiation Technologists             | 4.36                          | 1.65               | 1,335  | 1,454  | 4.06                         | 4.20  |
| Physicians                                  | 4.26                          | 1.02               | 7,596  | 8,143  | 23.13                        | 23.52 |
| Chiropractors                               | 4.09                          | 1.77               | 459    | 504    | 1.40                         | 1.46  |
| Dental Technicians                          | 3.36                          | 0.67               | 425    | 454    | 1.29                         | 1.31  |
| Certified Dental Assistants                 | 3.26                          | 0.20               | 3,845  | 4,067  | 11.71                        | 11.75 |
| Dentists                                    | 3.17                          | 0.11               | 1,997  | 2,109  | 6.08                         | 6.09  |
| Psychologists                               | 3.07                          | 0.40               | 737    | 783    | 2.24                         | 2.26  |
| Pharmacists                                 | 2.97                          | -0.08              | 2,439  | 2,567  | 7.43                         | 7.42  |
| Emergency Medical Assistants                | 2.87                          | 0.20               | 2,676  | 2,832  | 8.15                         | 8.18  |
| Registered Nurses                           | 2.07                          | -0.57              | 26,669 | 27,787 | 81.20                        | 80.27 |
| Registered Psychiatric Nurses               | 1.32                          | -1.31              | 2,223  | 2,282  | 6.77                         | 6.59  |
| Denturists                                  | 1.05                          | -1.57              | 189    | 193    | 0.58                         | 0.56  |
| Medical Laboratory Technologists            | 0.96                          | -1.66              | 2,843  | 2,898  | 8.66                         | 8.37  |
| Audiologists & Speech/Language Pathologists | 0.88                          | -1.98              | 372    | 378    | 1.13                         | 1.09  |
| Health Record Personnel                     | 0.13                          | -2.27              | 360    | 361    | 1.10                         | 1.04  |
| Podiatrists                                 | 0.00                          | -2.60              | 69     | 69     | 0.21                         | 0.20  |
| Licensed Practical Nurses                   | -1.64                         | -4.19              | 6,143  | 5,943  | 18.70                        | 17.17 |
| Licensed Graduate Nurses                    | -4.70                         | -7.18              | 468    | 425    | 1.42                         | 1.23  |

<sup>1</sup> Excludes 8 health groups for which average annual rate of change is not calculated. Average annual rate of change is not calculated for Cardiovascular Perfusionists, Clinical Engineers/Biomedical Technologists & Technicians, Diagnostic Medical Sonographers, First Responders, Food Service Supervisors, Health Services Executives, Prosthetists and Orthotists, and Social Workers because 1991 data and 1993 data are not comparable. Health groups are ranked on average annual rate of change in the number in descending order.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

personnel to population ratio of that group to generate the coefficient of variation ((standard deviation/mean) \* 100). These coefficients yield a sense of the relative degrees of dispersion across health regions for the various health human resources groups. If all health regions had identical personnel to population ratios for a given health personnel group, the coefficient of variation would have a value of zero. The larger the coefficient, the less evenly distributed are the personnel.

These coefficients of variation are not comparable to those published in *ROLLCALL 91* for several reasons. One is the change in reporting area from Regional Hospital District to Health Region. This change affected all areas of the province, though with a most pronounced effect in the lower mainland. (For maps of the province divided into the old Regional Hospital Districts and the new Health Regions, please refer to Appendix A.) A second change affecting the coefficient of variation is the switch from home address to employment address, where data were available, when locating personnel in health regions. Registered psychiatric nurses (RPNs), with the largest coefficient of variation, are a good example of the effect of this change. The Simon Fraser health region is a large catchment area for RPNs because it is the location of a few substantial psychiatric facilities. When the data are run for RPNs using home address, the number residing in Simon Fraser is 598. The switch to employment address increases this count to 1,018, out of a total of 2,282 practising RPNs in the province. This increase in the number of RPNs in the Simon Fraser health region is accompanied by a decrease in RPNs located in the surrounding health regions, and will clearly have a strong effect on the magnitude of the coefficient of variation. All 1991 coefficients of variation have been re-calculated using health regions, employment address where available, and updated 1991 population estimates (see Appendix B). The coefficients of variation presented in *ROLLCALL 93* also differ from those published in *ROLLCALL 91* in that the 1991 values were calculated using only data from the non-metropolitan category regional hospital districts. In *ROLLCALL 93*, the coefficients of variation describe total provincial relative distribution.

For the twenty-six groups with comparable data, eighteen saw a decrease in the coefficient of variation from 1991 to 1993. The largest decrease was for naturopathic physicians, where the figure dropped by 13.4 points. This indicates a more even distribution of naturopathic physicians across the health regions in 1993. The change might be due to new entrants tending to start practices in areas that were not well-served before, or may indicate that established naturopathic physicians are moving their practices to under-represented areas. In either case, at this point the trend is small, and should be monitored over time.

The only other group which showed a change in the coefficient of variation of greater than ten points was the RPNs, where the coefficient decreased from 188.7 in 1991 to 175.9 in 1993. RPNs have experienced relatively low growth in numbers during this time, but looking at Table 1a from Chapter 25, fifteen health regions out of twenty-one show an increase in RPNs. This may relate to some degree to the move toward more community-based psychiatric care.

Overall, not looking at the direction of change, the magnitude was less than five points for seventeen of the groups, and less than ten for twenty-four. The group that showed the largest increase in the coefficient of variation was the cardiology technologists, which went from 52.3 to 61.3. This is not surprising, as this profession is generally employed in larger hospitals. The group with the most even distribution, certified dental assistants, is still reported in *ROLLCALL 93* based on home address. It is impossible to say how this distribution would change, if at all, if the data were available by employment address.

**Table 5**  
**Coefficient of Variation<sup>1</sup>**  
**for Health Groups in British Columbia**  
**1991 and 1993**

| Health Personnel Group                      | 1991<br>Coefficient of Variation <sup>2</sup> | 1993<br>Coefficient of Variation |
|---|---|----------------------------------|
| Cardiovascular Perfusionists                | *   | 250.2                            |
| Registered Psychiatric Nurses               | 188.7   | 175.9                            |
| Prosthetists & Orthotists                   | *   | 124.8                            |
| Clinical Eng./Biomedical Eng. Tech.         | *   | 109.3                            |
| Licensed Graduate Nurses                    | 93.3  | 101.7                            |
| Podiatrists                                 | 104.8   | 95.7                             |
| Respiratory Therapists                      | 85.7  | 84.9                             |
| Dental Technicians                          | *   | 83.5                             |
| Psychologists                               | 77.8  | 77.6                             |
| Occupational Therapists                     | 82.9  | 75.3                             |
| Naturopathic Physicians                     | 85.1  | 71.7                             |
| Emergency Medical Assistants                | 65.9  | 69.3                             |
| Massage Practitioners                       | 75.4  | 69.3                             |
| Cardiology Technologists                    | 52.3  | 61.3                             |
| Dietitians & Nutritionists                  | 63.2  | 58.6                             |
| Physicians                                  | 56.4  | 54.5                             |
| Food Service Supervisors                    | *   | 45.6                             |
| First Responders                            | *   | 42.3                             |
| Diagnostic Medical Sonographers             | *   | 42.2                             |
| Health Record Personnel                     | 34.9  | 41.6                             |
| Health Services Executives                  | *   | 40.2                             |
| Audiologists & Speech/Language Pathologists | 41.5  | 39.0                             |
| Social Workers                              | *   | 38.9                             |
| Licensed Practical Nurses                   | 37.2  | 37.8                             |
| Physiotherapists                            | 40.7  | 37.3                             |
| Registered Nurses                           | 36.0  | 35.1                             |
| Dental Hygienists                           | 38.0  | 33.5                             |
| Medical Radiation Technologists             | *   | 32.3                             |
| Dentists                                    | 33.3  | 31.9                             |
| Denturists                                  | 37.4  | 30.9                             |
| Optometrists                                | 34.3  | 30.1                             |
| Pharmacists                                 | 28.8  | 28.6                             |
| Chiropractors                               | 25.4  | 27.5                             |
| Medical Laboratory Technologists            | 24.9  | 26.6                             |
| Public Health Inspectors                    | 27.6  | 25.3                             |
| Certified Dental Assistants                 | 18.0  | 20.2                             |

<sup>1</sup> Coefficient of variation = ( standard deviation / mean ) x 100. Calculations are based on personnel per 10,000 population in each Health Region. Health groups are ranked on the 1993 coefficient of variation in descending order.

<sup>2</sup> These coefficients differ from 1991 coefficients appearing in ROLLCALL 91 because the method of calculation is different. The methods of calculation used in ROLLCALL 93 and ROLLCALL 91 are not comparable.

\* Indicates that data were unavailable for 1991 or that comparison with 1993 figures would be of limited value due to varying methods of data collection.

### (iii) Personnel and Provincial Population Distribution

Tables 6a and 6b illustrate the percent distribution of all the health human resources groups in relation to the percent distribution of the population for 1991 and 1993 in each of the province's health regions. There are ten groups for which the data from 1991 and 1993 are not comparable because of differences in the method of data collection. These groups are health services executives, dental technicians, cardiovascular perfusionists, clinical engineers and biomedical engineering technologists and technicians, diagnostic medical sonographers, medical radiation technologists, first responders, food service supervisors, social workers, and prosthetists and orthotists. Groups without comparable data are excluded from Table 6a.

According to Table 6b, the Vancouver health region accounted for 14.22 percent of the provincial population in 1993, and for 38.20 percent of the province's occupational therapists, 36.55 percent of the province's physicians, 34.36 percent of the province's psychologists, and 33.82 percent of the province's registered dietitians and nutritionists. In contrast, the Vancouver health region accounted for only 6.85 percent of the province's emergency medical assistants and 8.88 percent of the province's certified dental assistants. All of these groups remained at a fairly stable percentage distribution relative to the population in the Vancouver health region from 1991 to 1993.

A quick look at the Northern Interior health region shows a very different picture. This health region represents 3.34% of the provincial population and 1.71% of the province's occupational therapists, 2.08% of the province's physicians, 1.15% of the province's psychologists and 1.46% of the province's registered dietitians and nutritionists. In contrast, the Northern Interior health region holds 4.60% of the province's certified dental assistants, and 6.29% of the province's emergency medical assistants.

There are several health human resources groups which are fairly well-represented in the more sparsely populated health regions. Health record personnel, public health inspectors, diagnostic medical sonographers, emergency medical assistants, optometrists, and licensed practical nurses all show percentages higher than those of the provincial population for several of the ten least-populated health regions.

Again, it is difficult to make generalisations about what this truly means, though this evidence does point out areas requiring further investigation. When determining the relative importance of these figures, it must be kept in mind that it is the urban centres which provide tertiary care facilities and thus require higher levels of health human resources; a certain amount of disparity, especially in the hospital-based employee groups, is to be expected. In addition, it is possible these economies of scale particularly affect some of these groups, so that areas with larger population concentrations might require fewer personnel to fully meet health needs. It is also feasible that some of the work these groups do in less populated areas is done by other health professionals in higher population regions, or that more task-sharing is done in denser areas. Regardless of the data limitations, these tables give a quick indication of health human resources distributions that might bear further investigation.

**Table 6a**  
**Percentage Distribution of B.C. Population and Health Personnel<sup>1</sup> in British Columbia**  
**by Health Region**  
**1991**

| Health Region                | B.C.<br>Population <sup>2</sup> | Administrative<br>Services    | Dental Services                   |                      |          | Health<br>Standards |                             |
|------------------------------|---------------------------------|-------------------------------|-----------------------------------|----------------------|----------|---------------------|-----------------------------|
|                              |                                 | Health<br>Record<br>Personnel | Certified<br>Dental<br>Assistants | Dental<br>Hygienists | Dentists | Denturists          | Public Health<br>Inspectors |
| 1 East Kootenay              | 2.12                            | 2.22                          | 2.24                              | 1.52                 | 1.45     | 1.06                | 2.46                        |
| 2 Central Kootenay           | 2.19                            | 2.22                          | 2.44                              | 0.71                 | 1.80     | 2.12                | 2.87                        |
| 4 North Okanagan             | 2.94                            | 1.94                          | 2.96                              | 2.54                 | 2.15     | 2.65                | 3.28                        |
| 5 South Okanagan             | 5.44                            | 4.17                          | 6.09                              | 5.89                 | 4.51     | 8.99                | 4.51                        |
| 6 South Central              | 3.31                            | 3.89                          | 3.20                              | 3.25                 | 2.35     | 2.12                | 2.87                        |
| 7 Upper Fraser Valley        | 4.75                            | 4.17                          | 5.41                              | 3.15                 | 3.36     | 4.23                | 3.69                        |
| 8 Central Fraser Valley      | 5.37                            | 3.89                          | 6.06                              | 4.06                 | 3.66     | 3.70                | 4.92                        |
| 9 Boundary                   | 10.70                           | 10.28                         | 10.74                             | 9.95                 | 9.06     | 11.11               | 4.10                        |
| 10 Simon Fraser              | 5.59                            | 9.72                          | 6.87                              | 4.97                 | 5.91     | 4.76                | 4.51                        |
| 11 Coast Garibaldi           | 1.82                            | 2.50                          | 1.64                              | 1.73                 | 1.45     | 1.59                | 2.05                        |
| 13 Central Vancouver Island  | 5.91                            | 4.44                          | 8.22                              | 4.57                 | 4.51     | 6.88                | 4.10                        |
| 14 Upper Island              | 2.95                            | 2.78                          | 3.67                              | 2.23                 | 2.25     | 3.17                | 3.28                        |
| 15 Cariboo                   | 1.97                            | 0.83                          | 1.85                              | 1.62                 | 1.20     | 1.06                | 2.46                        |
| 16 Skeena                    | 2.53                            | 2.78                          | 1.95                              | 1.52                 | 1.65     | 0.53                | 3.28                        |
| 17 Peace River               | 1.78                            | 1.67                          | 1.22                              | 0.61                 | 0.80     | 1.06                | 2.46                        |
| 18 Northern Interior         | 3.47                            | 3.89                          | 4.14                              | 3.15                 | 2.35     | 2.12                | 3.69                        |
| 20 Vancouver                 | 14.55                           | 15.00                         | 9.26                              | 19.29                | 26.24    | 17.99               | 17.21                       |
| 30 Burnaby                   | 4.84                            | 9.72                          | 4.14                              | 3.45                 | 5.21     | 6.35                | 7.79                        |
| 40 North Shore               | 4.82                            | 4.44                          | 4.21                              | 9.24                 | 6.46     | 4.76                | 3.69                        |
| 50 Richmond                  | 3.86                            | 3.33                          | 3.85                              | 4.77                 | 3.76     | 2.12                | 3.28                        |
| 60 Capital Regional District | 9.13                            | 6.11                          | 9.86                              | 11.78                | 9.86     | 11.64               | 13.52                       |
| TOTAL N                      | 3,284,528                       | 360                           | 3,845                             | 985                  | 1,997    | 189                 | 244                         |

*...continued*

<sup>1</sup> Ten health groups which do not have comparable 1991 and 1993 data are excluded from this table. These groups are Cardiovascular Perfusionists, Clinical Engineers/Biomedical Engineering Technologists & Technicians, Dental Technicians, Diagnostic Medical Sonographers, First Responders, Food Service Supervisors, Health Services Executives, Medical Radiation Technologists, Prosthetists and Orthotists, and Social Workers.

<sup>2</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6a (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel<sup>1</sup> in British Columbia**  
**by Health Region**  
**1991**

| Health Region                | B.C.<br>Population <sup>2</sup> | Laboratory and Therapeutic Technological Services |  |                           |
|------------------------------|---------------------------------|---|--|---------------------------|
|                              |                                 | Cardiology<br>Technologists                       | Medical<br>Laboratory<br>Technologists | Respiratory<br>Therapists |
| 1 East Kootenay              | 2.12                            | 0.89  | 1.93                                   | 0.83                      |
| 2 Central Kootenay           | 2.19                            | 1.19  | 2.50                                   | 0.41                      |
| 4 North Okanagan             | 2.94                            | 1.48  | 2.29                                   | 2.89                      |
| 5 South Okanagan             | 5.44                            | 5.64  | 4.85                                   | 8.68                      |
| 6 South Central              | 3.31                            | 2.37  | 3.80                                   | 9.92                      |
| 7 Upper Fraser Valley        | 4.75                            | 4.45  | 3.10                                   | 0.83                      |
| 8 Central Fraser Valley      | 5.37                            | 6.53  | 4.68                                   | 4.13                      |
| 9 Boundary                   | 10.70                           | 12.17   | 10.45                                  | 10.33                     |
| 10 Simon Fraser              | 5.59                            | 9.50  | 7.35                                   | 6.20                      |
| 11 Coast Garibaldi           | 1.82                            | 1.48  | 1.30                                   | 0.41                      |
| 13 Central Vancouver Island  | 5.91                            | 6.23  | 4.64                                   | 4.13                      |
| 14 Upper Island              | 2.95                            | 3.56  | 2.53                                   | 0.83                      |
| 15 Cariboo                   | 1.97                            | 0.30  | 1.13                                   | 0.41                      |
| 16 Skeena                    | 2.53                            | 0.30  | 2.00                                   | 0.41                      |
| 17 Peace River               | 1.78                            | 0.00  | 1.23                                   | 0.83                      |
| 18 Northern Interior         | 3.47                            | 1.48  | 2.74                                   | 2.07                      |
| 20 Vancouver                 | 14.55                           | 17.51   | 16.67                                  | 17.77                     |
| 30 Burnaby                   | 4.84                            | 6.53  | 5.59                                   | 5.37                      |
| 40 North Shore               | 4.82                            | 5.34  | 5.98                                   | 0.83                      |
| 50 Richmond                  | 3.86                            | 2.97  | 5.84                                   | 3.31                      |
| 60 Capital Regional District | 9.13                            | 10.09   | 9.39                                   | 19.42                     |
| <b>TOTAL N</b>               | <b>3,284,528</b>                | <b>337</b>  | <b>2,843</b>                           | <b>242</b>                |

*...continued*

- <sup>1</sup> Ten health groups which do not have comparable 1991 and 1993 data are excluded from this table.  
These groups are Cardiovascular Perfusionists, Clinical Engineers/Biomedical Engineering Technologists & Technicians, Dental Technicians, Diagnostic Medical Sonographers, First Responders, Food Service Supervisors, Health Services Executives, Medical Radiation Technologists, Prosthetists and Orthotists, and Social Workers.
- <sup>2</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.



**Table 6a (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel<sup>1</sup> in British Columbia**  
**by Health Region**  
**1991**

| Health Region                | B.C.<br>Population <sup>2</sup> | Medical and Treatment Services |                                    |                            |              |              |              |             |
|------------------------------|---------------------------------|--------------------------------|------------------------------------|----------------------------|--------------|--------------|--------------|-------------|
|                              |                                 | Chiropractors                  | Emergency<br>Medical<br>Assistants | Naturopathic<br>Physicians | Optometrists | Pharmacists  | Physicians   | Podiatrists |
| 1 East Kootenay              | 2.12                            | 1.96                           | 5.38                               | 0.00                       | 3.31         | 1.39         | 1.45         | 0.00        |
| 2 Central Kootenay           | 2.19                            | 2.18                           | 5.94                               | 2.94                       | 4.13         | 1.85         | 1.78         | 0.00        |
| 4 North Okanagan             | 2.94                            | 3.27                           | 4.82                               | 1.47                       | 4.13         | 2.42         | 1.79         | 1.45        |
| 5 South Okanagan             | 5.44                            | 6.75                           | 5.57                               | 8.82                       | 4.96         | 4.63         | 4.25         | 4.35        |
| 6 South Central              | 3.31                            | 2.40                           | 6.69                               | 4.41                       | 5.79         | 3.20         | 2.42         | 2.90        |
| 7 Upper Fraser Valley        | 4.75                            | 4.58                           | 3.10                               | 2.94                       | 3.31         | 3.90         | 2.99         | 2.90        |
| 8 Central Fraser Valley      | 5.37                            | 4.58                           | 2.09                               | 10.29                      | 3.31         | 3.65         | 2.76         | 1.45        |
| 9 Boundary                   | 10.70                           | 9.59                           | 3.25                               | 11.76                      | 8.26         | 8.16         | 5.60         | 8.70        |
| 10 Simon Fraser              | 5.59                            | 6.54                           | 2.28                               | 5.88                       | 5.79         | 6.56         | 5.52         | 4.35        |
| 11 Coast Garibaldi           | 1.82                            | 2.18                           | 4.82                               | 0.00                       | 1.24         | 1.80         | 1.07         | 0.00        |
| 13 Central Vancouver Island  | 5.91                            | 5.45                           | 7.77                               | 4.41                       | 5.37         | 5.17         | 4.29         | 2.90        |
| 14 Upper Island              | 2.95                            | 3.05                           | 7.92                               | 1.47                       | 3.31         | 2.09         | 1.76         | 0.00        |
| 15 Cariboo                   | 1.97                            | 1.96                           | 3.70                               | 0.00                       | 1.65         | 1.23         | 1.09         | 0.00        |
| 16 Skeena                    | 2.53                            | 1.53                           | 6.54                               | 0.00                       | 2.48         | 1.97         | 1.46         | 0.00        |
| 17 Peace River               | 1.78                            | 1.09                           | 3.74                               | 0.00                       | 2.07         | 1.11         | 0.72         | 0.00        |
| 18 Northern Interior         | 3.47                            | 1.53                           | 6.17                               | 1.47                       | 4.13         | 2.09         | 1.99         | 1.45        |
| 20 Vancouver                 | 14.55                           | 17.86                          | 7.88                               | 17.65                      | 15.70        | 25.79        | 37.48        | 33.33       |
| 30 Burnaby                   | 4.84                            | 4.79                           | 0.41                               | 0.00                       | 2.89         | 4.63         | 2.76         | 4.35        |
| 40 North Shore               | 4.82                            | 5.23                           | 2.17                               | 7.35                       | 4.13         | 5.58         | 4.70         | 8.70        |
| 50 Richmond                  | 3.86                            | 1.96                           | 1.53                               | 1.47                       | 2.48         | 3.57         | 3.01         | 8.70        |
| 60 Capital Regional District | 9.13                            | 11.55                          | 8.22                               | 17.65                      | 11.57        | 9.23         | 11.10        | 14.49       |
| <b>TOTAL N</b>               | <b>3,284,528</b>                | <b>459</b>                     | <b>2,676</b>                       | <b>68</b>                  | <b>242</b>   | <b>2,439</b> | <b>7,596</b> | <b>69</b>   |

...continued

<sup>1</sup> Ten health groups which do not have comparable 1991 and 1993 data are excluded from this table. These groups are Cardiovascular Perfusionists, Clinical Engineers/Biomedical Engineering Technologists & Technicians, Dental Technicians, Diagnostic Medical Sonographers, First Responders, Food Service Supervisors, Health Services Executives, Medical Radiation Technologists, Prosthetists and Orthotists, and Social Workers.

<sup>2</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6a (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel<sup>1</sup> in British Columbia**  
**by Health Region**  
**1991**

| Health Region                | B.C.<br>Population <sup>2</sup> | Nursing Services               |                                 |                      |                                     | Nutrition and<br>Dietary Services |
|------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------|-------------------------------------|-----------------------------------|
|                              |                                 | Licensed<br>Graduate<br>Nurses | Licensed<br>Practical<br>Nurses | Registered<br>Nurses | Registered<br>Psychiatric<br>Nurses | Dietitians &<br>Nutritionists     |
| 1 East Kootenay              | 2.12                            | 0.00                           | 2.82                            | 1.65                 | 0.40                                | 1.28                              |
| 2 Central Kootenay           | 2.19                            | 2.78                           | 4.82                            | 2.35                 | 0.85                                | 1.65                              |
| 4 North Okanagan             | 2.94                            | 0.00                           | 3.86                            | 2.54                 | 2.61                                | 2.20                              |
| 5 South Okanagan             | 5.44                            | 1.71                           | 7.80                            | 5.37                 | 2.79                                | 3.67                              |
| 6 South Central              | 3.31                            | 0.00                           | 4.15                            | 3.39                 | 2.25                                | 2.39                              |
| 7 Upper Fraser Valley        | 4.75                            | 1.28                           | 3.94                            | 3.50                 | 3.78                                | 2.57                              |
| 8 Central Fraser Valley      | 5.37                            | 3.42                           | 5.06                            | 3.27                 | 2.88                                | 2.57                              |
| 9 Boundary                   | 10.70                           | 11.32                          | 6.06                            | 6.07                 | 4.45                                | 5.69                              |
| 10 Simon Fraser              | 5.59                            | 3.42                           | 4.79                            | 7.39                 | 46.15                               | 7.52                              |
| 11 Coast Garibaldi           | 1.82                            | 1.07                           | 1.73                            | 1.26                 | 0.67                                | 0.55                              |
| 13 Central Vancouver Island  | 5.91                            | 2.35                           | 8.46                            | 4.29                 | 1.53                                | 3.12                              |
| 14 Upper Island              | 2.95                            | 1.71                           | 3.50                            | 2.27                 | 0.63                                | 1.47                              |
| 15 Cariboo                   | 1.97                            | 0.21                           | 2.10                            | 1.21                 | 0.76                                | 0.73                              |
| 16 Skeena                    | 2.53                            | 1.92                           | 2.43                            | 1.86                 | 1.08                                | 1.10                              |
| 17 Peace River               | 1.78                            | 0.64                           | 1.90                            | 1.08                 | 0.81                                | 0.55                              |
| 18 Northern Interior         | 3.47                            | 1.07                           | 3.24                            | 2.97                 | 0.85                                | 1.65                              |
| 20 Vancouver                 | 14.55                           | 37.18                          | 15.99                           | 26.96                | 11.07                               | 35.05                             |
| 30 Burnaby                   | 4.84                            | 9.62                           | 1.89                            | 3.49                 | 6.52                                | 4.04                              |
| 40 North Shore               | 4.82                            | 10.04                          | 2.36                            | 4.18                 | 1.80                                | 5.87                              |
| 50 Richmond                  | 3.86                            | 4.27                           | 2.13                            | 2.03                 | 1.30                                | 2.94                              |
| 60 Capital Regional District | 9.13                            | 5.98                           | 10.99                           | 12.86                | 6.79                                | 13.39                             |
| <b>TOTAL N</b>               | <b>3,284,528</b>                | <b>468</b>                     | <b>6,143</b>                    | <b>26,669</b>        | <b>2,223</b>                        | <b>545</b>                        |

...continued

<sup>1</sup> Ten health groups which do not have comparable 1991 and 1993 data are excluded from this table. These groups are Cardiovascular Perfusionists, Clinical Engineers/Biomedical Engineering Technologists & Technicians, Dental Technicians, Diagnostic Medical Sonographers, First Responders, Food Service Supervisors, Health Services Executives, Medical Radiation Technologists, Prosthetists and Orthotists, and Social Workers.

<sup>2</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6a (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel<sup>1</sup> in British Columbia**  
**by Health Region**  
**1991**

| Health Region                | B.C.<br>Population <sup>2</sup> | Psychological<br>Services | Rehabilitation Services                           |                          |                            |                  |
|------------------------------|---------------------------------|---------------------------|---|--------------------------|----------------------------|------------------|
|                              |                                 | Psychologists             | Audiologists &<br>Speech/Language<br>Pathologists | Massage<br>Practitioners | Occupational<br>Therapists | Physiotherapists |
| 1 East Kootenay              | 2.12                            | 0.81                      | 1.88  | 1.96                     | 0.53                       | 1.55             |
| 2 Central Kootenay           | 2.19                            | 1.49                      | 0.81  | 3.27                     | 1.24                       | 2.39             |
| 4 North Okanagan             | 2.94                            | 0.95                      | 3.23  | 2.29                     | 0.71                       | 2.67             |
| 5 South Okanagan             | 5.44                            | 2.31                      | 4.57  | 5.39                     | 5.30                       | 5.44             |
| 6 South Central              | 3.31                            | 1.22                      | 2.42  | 2.12                     | 2.30                       | 2.50             |
| 7 Upper Fraser Valley        | 4.75                            | 3.26                      | 3.76  | 2.12                     | 1.77                       | 2.33             |
| 8 Central Fraser Valley      | 5.37                            | 2.44                      | 5.11  | 2.12                     | 2.83                       | 3.22             |
| 9 Boundary                   | 10.70                           | 6.51                      | 9.68  | 5.72                     | 4.59                       | 5.89             |
| 10 Simon Fraser              | 5.59                            | 5.16                      | 5.38  | 1.80                     | 6.18                       | 5.33             |
| 11 Coast Garibaldi           | 1.82                            | 0.95                      | 0.54  | 5.07                     | 0.53                       | 2.17             |
| 13 Central Vancouver Island  | 5.91                            | 3.26                      | 5.91  | 3.43                     | 4.59                       | 4.83             |
| 14 Upper Island              | 2.95                            | 1.49                      | 1.88  | 2.94                     | 1.06                       | 2.11             |
| 15 Cariboo                   | 1.97                            | 0.54                      | 0.54  | 1.14                     | 0.35                       | 1.22             |
| 16 Skeena                    | 2.53                            | 0.68                      | 2.69  | 0.65                     | 1.41                       | 1.11             |
| 17 Peace River               | 1.78                            | 0.41                      | 1.34  | 0.49                     | 0.00                       | 1.11             |
| 18 Northern Interior         | 3.47                            | 0.95                      | 2.15  | 0.82                     | 1.41                       | 1.83             |
| 20 Vancouver                 | 14.55                           | 35.82                     | 23.66   | 31.70                    | 39.93                      | 28.65            |
| 30 Burnaby                   | 4.84                            | 6.24                      | 1.34  | 3.59                     | 3.36                       | 3.33             |
| 40 North Shore               | 4.82                            | 4.88                      | 5.91  | 6.70                     | 5.12                       | 5.50             |
| 50 Richmond                  | 3.86                            | 3.12                      | 4.84  | 1.14                     | 3.53                       | 5.22             |
| 60 Capital Regional District | 9.13                            | 17.50                     | 12.37   | 15.52                    | 13.25                      | 11.60            |
| <b>TOTAL N</b>               | <b>3,284,528</b>                | <b>737</b>                | <b>372</b>  | <b>612</b>               | <b>566</b>                 | <b>1,801</b>     |

<sup>1</sup> Ten health groups which do not have comparable 1991 and 1993 data are excluded from this table. These groups are Cardiovascular Perfusionists, Clinical Engineers/Biomedical Engineering Technologists & Technicians, Dental Technicians, Diagnostic Medical Sonographers, First Responders, Food Service Supervisors, Health Services Executives, Medical Radiation Technologists, Prosthetists and Orthotists, and Social Workers.

<sup>2</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6b**  
**Percentage Distribution of B.C. Population and Health Personnel in British Columbia**  
**by Health Region**  
**1993**

| Health Region                | B.C.<br>Population <sup>1</sup> | Administrative Services       |                                  | Dental Services                   |                      |                       |              |            | Health<br>Standards         |
|------------------------------|---------------------------------|-------------------------------|----------------------------------|-----------------------------------|----------------------|-----------------------|--------------|------------|-----------------------------|
|                              |                                 | Health<br>Record<br>Personnel | Health<br>Services<br>Executives | Certified<br>Dental<br>Assistants | Dental<br>Hygienists | Dental<br>Technicians | Dentists     | Denturists | Public Health<br>Inspectors |
| 1 East Kootenay              | 2.04                            | 2.49                          | 2.62                             | 1.99                              | 1.55                 | 0.44                  | 1.52         | 1.55       | 2.49                        |
| 2 Central Kootenay           | 2.15                            | 3.05                          | 3.22                             | 2.63                              | 1.14                 | 0.22                  | 1.75         | 2.07       | 2.85                        |
| 4 North Okanagan             | 3.02                            | 3.60                          | 2.21                             | 2.95                              | 2.77                 | 0.66                  | 2.13         | 2.59       | 3.20                        |
| 5 South Okanagan             | 5.75                            | 4.71                          | 3.82                             | 6.71                              | 6.36                 | 4.85                  | 4.93         | 8.81       | 4.63                        |
| 6 South Central              | 3.29                            | 4.71                          | 3.22                             | 3.34                              | 3.59                 | 2.20                  | 2.32         | 2.07       | 3.56                        |
| 7 Upper Fraser Valley        | 4.92                            | 2.22                          | 3.42                             | 5.80                              | 4.07                 | 3.74                  | 3.37         | 4.15       | 4.63                        |
| 8 Central Fraser Valley      | 5.49                            | 3.60                          | 2.21                             | 6.22                              | 3.91                 | 2.86                  | 3.89         | 5.70       | 5.34                        |
| 9 Boundary                   | 10.89                           | 8.86                          | 4.83                             | 10.79                             | 8.96                 | 5.51                  | 9.44         | 10.88      | 5.34                        |
| 10 Simon Fraser              | 5.72                            | 11.91                         | 5.03                             | 7.08                              | 5.22                 | 5.73                  | 6.02         | 5.70       | 4.63                        |
| 11 Coast Garibaldi           | 1.83                            | 2.77                          | 1.61                             | 1.57                              | 1.87                 | 0.88                  | 1.52         | 2.07       | 2.49                        |
| 13 Central Vancouver Island  | 5.97                            | 4.71                          | 5.03                             | 7.75                              | 4.32                 | 2.42                  | 4.65         | 6.22       | 4.63                        |
| 14 Upper Island              | 2.95                            | 1.66                          | 3.42                             | 3.91                              | 2.61                 | 1.98                  | 2.23         | 3.11       | 3.56                        |
| 15 Cariboo                   | 1.90                            | 1.11                          | 1.41                             | 1.89                              | 1.63                 | 0.22                  | 1.28         | 1.04       | 2.85                        |
| 16 Skeena                    | 2.44                            | 2.77                          | 2.82                             | 1.84                              | 1.30                 | 1.10                  | 1.75         | 1.04       | 3.56                        |
| 17 Peace River               | 1.70                            | 1.11                          | 2.62                             | 1.18                              | 0.73                 | 0.22                  | 0.66         | 1.04       | 1.78                        |
| 18 Northern Interior         | 3.34                            | 4.16                          | 2.41                             | 4.60                              | 3.59                 | 1.32                  | 2.47         | 1.55       | 3.56                        |
| 20 Vancouver                 | 14.22                           | 13.02                         | 26.36                            | 8.88                              | 17.20                | 39.87                 | 24.75        | 18.13      | 15.30                       |
| 30 Burnaby                   | 4.79                            | 9.42                          | 3.82                             | 3.81                              | 4.07                 | 4.41                  | 5.03         | 4.66       | 7.83                        |
| 40 North Shore               | 4.76                            | 4.16                          | 3.82                             | 4.08                              | 9.21                 | 6.17                  | 6.54         | 4.66       | 3.91                        |
| 50 Richmond                  | 3.82                            | 3.60                          | 2.01                             | 3.57                              | 4.40                 | 5.51                  | 4.22         | 2.07       | 3.20                        |
| 60 Capital Regional District | 9.00                            | 6.37                          | 14.08                            | 9.39                              | 11.49                | 9.69                  | 9.53         | 10.88      | 10.68                       |
| <b>TOTAL N</b>               | <b>3,461,887</b>                | <b>361</b>                    | <b>497</b>                       | <b>4,067</b>                      | <b>1,227</b>         | <b>454</b>            | <b>2,109</b> | <b>193</b> | <b>281</b>                  |

...continued

<sup>1</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6b (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel in British Columbia**  
**by Health Region**  
**1993**

| Health Region                | B.C.<br>Population <sup>1</sup> | Laboratory and Therapeutic Technological Services |                                 |   |                                       |  |                                       |                           |
|------------------------------|---------------------------------|---|---------------------------------|---|---------------------------------------|--|---------------------------------------|---------------------------|
|                              |                                 | Cardiology<br>Technologists                       | Cardiovascular<br>Perfusionists | Clinical Eng./<br>Biomedical<br>Eng. Techs. | Diagnostic<br>Medical<br>Sonographers | Medical<br>Laboratory<br>Technologists | Medical<br>Radiation<br>Technologists | Respiratory<br>Therapists |
| 1 East Kootenay              | 2.04                            | 0.54  | 0.00                            | 0.33  | 1.77                                  | 1.79                                   | 2.06                                  | 0.60                      |
| 2 Central Kootenay           | 2.15                            | 1.08  | 0.00                            | 1.66  | 2.83                                  | 2.83                                   | 2.06                                  | 0.30                      |
| 4 North Okanagan             | 3.02                            | 1.36  | 0.00                            | 0.99  | 3.18                                  | 2.31                                   | 2.68                                  | 2.69                      |
| 5 South Okanagan             | 5.75                            | 4.88  | 0.00                            | 5.30  | 4.24                                  | 5.21                                   | 4.95                                  | 7.16                      |
| 6 South Central              | 3.29                            | 1.90  | 0.00                            | 1.99  | 1.41                                  | 3.62                                   | 3.44                                  | 10.75                     |
| 7 Upper Fraser Valley        | 4.92                            | 4.88  | 0.00                            | 0.99  | 3.18                                  | 3.00                                   | 3.16                                  | 1.79                      |
| 8 Central Fraser Valley      | 5.49                            | 8.40  | 0.00                            | 0.33  | 4.24                                  | 5.07                                   | 3.65                                  | 4.48                      |
| 9 Boundary                   | 10.89                           | 17.62   | 0.00                            | 8.28  | 7.07                                  | 10.46                                  | 5.50                                  | 10.45                     |
| 10 Simon Fraser              | 5.72                            | 10.57   | 8.00                            | 7.28  | 4.95                                  | 8.45                                   | 6.12                                  | 5.07                      |
| 11 Coast Garibaldi           | 1.83                            | 1.08  | 0.00                            | 0.33  | 1.77                                  | 1.28                                   | 1.58                                  | 0.30                      |
| 13 Central Vancouver Island  | 5.97                            | 6.23  | 0.00                            | 1.32  | 5.30                                  | 5.42                                   | 4.88                                  | 3.58                      |
| 14 Upper Island              | 2.95                            | 3.25  | 0.00                            | 1.66  | 3.18                                  | 2.45                                   | 2.54                                  | 0.90                      |
| 15 Cariboo                   | 1.90                            | 0.54  | 0.00                            | 0.00  | 0.71                                  | 1.14                                   | 1.72                                  | 0.30                      |
| 16 Skeena                    | 2.44                            | 0.27  | 0.00                            | 0.66  | 2.83                                  | 1.79                                   | 2.41                                  | 0.30                      |
| 17 Peace River               | 1.70                            | 0.00  | 0.00                            | 0.33  | 2.47                                  | 1.21                                   | 1.44                                  | 0.90                      |
| 18 Northern Interior         | 3.34                            | 1.08  | 0.00                            | 1.32  | 2.12                                  | 2.42                                   | 2.48                                  | 2.09                      |
| 20 Vancouver                 | 14.22                           | 12.74   | 68.00                           | 29.80                                       | 31.10                                 | 15.73                                  | 28.13                                 | 19.40                     |
| 30 Burnaby                   | 4.79                            | 7.59  | 0.00                            | 17.22                                       | 3.18                                  | 5.90                                   | 4.95                                  | 8.36                      |
| 40 North Shore               | 4.76                            | 3.79  | 0.00                            | 3.64  | 3.89                                  | 5.87                                   | 3.37                                  | 2.99                      |
| 50 Richmond                  | 3.82                            | 4.07  | 4.00                            | 8.28  | 2.83                                  | 5.45                                   | 2.06                                  | 3.88                      |
| 60 Capital Regional District | 9.00                            | 8.13  | 20.00                           | 8.28  | 7.77                                  | 8.59                                   | 10.80                                 | 13.73                     |
| <b>TOTAL N</b>               | <b>3,461,887</b>                | <b>369</b>  | <b>25</b>                       | <b>302</b>                                  | <b>283</b>                            | <b>2,898</b>                           | <b>1,454</b>                          | <b>335</b>                |

*...continued*

<sup>1</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6b (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel in British Columbia**  
**by Health Region**  
**1993**

| Health Region                | B.C.<br>Population <sup>1</sup> | Medical and Treatment Services |                                    |                     |                            |              |             |            |             |
|------------------------------|---------------------------------|--------------------------------|------------------------------------|---------------------|----------------------------|--------------|-------------|------------|-------------|
|                              |                                 | Chiropractors                  | Emergency<br>Medical<br>Assistants | First<br>Responders | Naturopathic<br>Physicians | Optometrists | Pharmacists | Physicians | Podiatrists |
| 1 East Kootenay              | 2.04                            | 1.98                           | 5.47                               | 1.67                | 0.00                       | 3.01         | 1.44        | 1.51       | 0.00        |
| 2 Central Kootenay           | 2.15                            | 2.38                           | 6.78                               | 2.42                | 3.53                       | 3.76         | 1.91        | 1.85       | 0.00        |
| 4 North Okanagan             | 3.02                            | 3.57                           | 4.03                               | 0.54                | 4.71                       | 3.76         | 2.61        | 1.90       | 1.45        |
| 5 South Okanagan             | 5.75                            | 7.94                           | 5.40                               | 4.36                | 8.24                       | 6.77         | 5.26        | 4.24       | 5.80        |
| 6 South Central              | 3.29                            | 2.58                           | 6.60                               | 3.34                | 3.53                       | 6.02         | 3.08        | 2.44       | 1.45        |
| 7 Upper Fraser Valley        | 4.92                            | 4.37                           | 3.92                               | 2.13                | 2.35                       | 3.76         | 4.13        | 3.01       | 2.90        |
| 8 Central Fraser Valley      | 5.49                            | 5.16                           | 2.01                               | 9.56                | 8.24                       | 4.14         | 3.62        | 2.84       | 1.45        |
| 9 Boundary                   | 10.89                           | 8.93                           | 3.07                               | 10.88               | 10.59                      | 9.77         | 8.80        | 5.86       | 13.04       |
| 10 Simon Fraser              | 5.72                            | 5.75                           | 2.37                               | 6.01                | 4.71                       | 4.89         | 6.43        | 5.40       | 5.80        |
| 11 Coast Garibaldi           | 1.83                            | 1.59                           | 5.01                               | 2.07                | 1.18                       | 2.26         | 1.75        | 1.25       | 0.00        |
| 13 Central Vancouver Island  | 5.97                            | 6.35                           | 8.33                               | 4.96                | 2.35                       | 4.51         | 4.71        | 4.42       | 5.80        |
| 14 Upper Island              | 2.95                            | 3.37                           | 8.37                               | 1.00                | 2.35                       | 3.01         | 1.99        | 1.85       | 0.00        |
| 15 Cariboo                   | 1.90                            | 1.59                           | 3.60                               | 0.54                | 1.18                       | 1.50         | 1.13        | 1.03       | 0.00        |
| 16 Skeena                    | 2.44                            | 1.39                           | 6.39                               | 2.72                | 0.00                       | 2.63         | 2.10        | 1.45       | 0.00        |
| 17 Peace River               | 1.70                            | 1.19                           | 3.78                               | 1.21                | 0.00                       | 2.26         | 0.90        | 0.72       | 0.00        |
| 18 Northern Interior         | 3.34                            | 1.39                           | 6.29                               | 2.94                | 1.18                       | 4.14         | 1.99        | 2.08       | 1.45        |
| 20 Vancouver                 | 14.22                           | 16.87                          | 6.85                               | 12.44               | 23.53                      | 12.41        | 24.70       | 36.55      | 28.99       |
| 30 Burnaby                   | 4.79                            | 4.17                           | 0.42                               | 5.47                | 0.00                       | 2.63         | 5.30        | 2.89       | 4.35        |
| 40 North Shore               | 4.76                            | 4.96                           | 1.98                               | 6.95                | 5.88                       | 4.89         | 5.06        | 4.56       | 7.25        |
| 50 Richmond                  | 3.82                            | 1.79                           | 1.41                               | 4.71                | 1.18                       | 3.01         | 4.05        | 3.11       | 7.25        |
| 60 Capital Regional District | 9.00                            | 12.70                          | 7.91                               | 14.09               | 15.29                      | 10.90        | 9.04        | 11.04      | 13.04       |
| TOTAL N                      | 3,461,887                       | 504                            | 2,832                              | 3,713               | 85                         | 266          | 2,567       | 8,143      | 69          |

*...continued*

<sup>1</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 6b (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel in British Columbia**  
**by Health Region**  
**1993**

| Health Region                | B.C.<br>Population <sup>1</sup> | Nursing Services               |                                 |                      |                                     | Nutrition and Dietary Services |                               |
|------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------|-------------------------------------|--------------------------------|-------------------------------|
|                              |                                 | Licensed<br>Graduate<br>Nurses | Licensed<br>Practical<br>Nurses | Registered<br>Nurses | Registered<br>Psychiatric<br>Nurses | Food Service<br>Supervisors    | Dietitians &<br>Nutritionists |
| 1 East Kootenay              | 2.04                            | 0.00                           | 2.73                            | 1.62                 | 0.48                                | 1.72                           | 1.62                          |
| 2 Central Kootenay           | 2.15                            | 3.06                           | 4.58                            | 2.34                 | 0.79                                | 3.45                           | 1.94                          |
| 4 North Okanagan             | 3.02                            | 0.00                           | 3.94                            | 2.54                 | 2.80                                | 3.02                           | 1.94                          |
| 5 South Okanagan             | 5.75                            | 1.65                           | 8.70                            | 5.56                 | 3.42                                | 6.47                           | 4.05                          |
| 6 South Central              | 3.29                            | 0.00                           | 4.19                            | 3.34                 | 2.06                                | 1.72                           | 2.43                          |
| 7 Upper Fraser Valley        | 4.92                            | 1.41                           | 3.92                            | 3.76                 | 3.90                                | 5.60                           | 2.75                          |
| 8 Central Fraser Valley      | 5.49                            | 2.82                           | 5.12                            | 3.34                 | 3.33                                | 5.60                           | 2.91                          |
| 9 Boundary                   | 10.89                           | 9.65                           | 5.74                            | 6.38                 | 5.00                                | 10.78                          | 6.15                          |
| 10 Simon Fraser              | 5.72                            | 3.76                           | 4.78                            | 7.48                 | 44.39                               | 6.90                           | 7.77                          |
| 11 Coast Garibaldi           | 1.83                            | 0.94                           | 1.75                            | 1.21                 | 0.66                                | 1.29                           | 0.65                          |
| 13 Central Vancouver Island  | 5.97                            | 2.35                           | 8.51                            | 4.40                 | 2.15                                | 6.47                           | 3.72                          |
| 14 Upper Island              | 2.95                            | 1.65                           | 3.70                            | 2.38                 | 0.96                                | 1.29                           | 1.62                          |
| 15 Cariboo                   | 1.90                            | 0.24                           | 1.97                            | 1.22                 | 0.92                                | 0.00                           | 0.81                          |
| 16 Skeena                    | 2.44                            | 1.41                           | 2.37                            | 1.83                 | 1.10                                | 0.43                           | 1.13                          |
| 17 Peace River               | 1.70                            | 0.71                           | 1.87                            | 1.14                 | 0.83                                | 1.72                           | 0.81                          |
| 18 Northern Interior         | 3.34                            | 0.71                           | 2.88                            | 2.97                 | 0.92                                | 1.29                           | 1.46                          |
| 20 Vancouver                 | 14.22                           | 38.35                          | 16.71                           | 26.32                | 10.52                               | 15.09                          | 33.82                         |
| 30 Burnaby                   | 4.79                            | 10.59                          | 1.80                            | 3.54                 | 6.70                                | 7.76                           | 4.21                          |
| 40 North Shore               | 4.76                            | 11.06                          | 2.29                            | 3.94                 | 2.10                                | 7.33                           | 5.18                          |
| 50 Richmond                  | 3.82                            | 3.76                           | 2.00                            | 1.98                 | 0.96                                | 3.88                           | 1.94                          |
| 60 Capital Regional District | 9.00                            | 5.88                           | 10.47                           | 12.70                | 6.00                                | 8.19                           | 13.11                         |
| <b>TOTAL N</b>               | <b>3,461,887</b>                | <b>425</b>                     | <b>5,943</b>                    | <b>27,787</b>        | <b>2,282</b>                        | <b>232</b>                     | <b>618</b>                    |

...continued

<sup>1</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.



**Table 6b (continued)**  
**Percentage Distribution of B.C. Population and Health Personnel in British Columbia**  
**by Health Region**  
**1993**

| Health Region                | B.C.<br>Population <sup>1</sup> | Psychological Services |                | Rehabilitation Services                           |                          |                            |                  |                              |
|------------------------------|---------------------------------|------------------------|----------------|---|--------------------------|----------------------------|------------------|------------------------------|
|                              |                                 | Psychologists          | Social Workers | Audiologists &<br>Speech/Language<br>Pathologists | Massage<br>Practitioners | Occupational<br>Therapists | Physiotherapists | Prosthetists &<br>Orthotists |
| 1 East Kootenay              | 2.04                            | 1.02                   | 1.83           | 1.85  | 1.44                     | 0.47                       | 1.53             | 0.00                         |
| 2 Central Kootenay           | 2.15                            | 1.40                   | 2.67           | 1.06  | 3.53                     | 0.78                       | 2.44             | 0.00                         |
| 4 North Okanagan             | 3.02                            | 0.89                   | 2.75           | 3.17  | 2.61                     | 1.24                       | 2.85             | 0.00                         |
| 5 South Okanagan             | 5.75                            | 2.55                   | 4.50           | 5.56  | 6.27                     | 5.43                       | 5.91             | 10.53                        |
| 6 South Central              | 3.29                            | 1.15                   | 3.33           | 2.91  | 2.61                     | 2.48                       | 2.44             | 7.02                         |
| 7 Upper Fraser Valley        | 4.92                            | 3.19                   | 3.08           | 3.97  | 2.22                     | 2.17                       | 2.75             | 0.00                         |
| 8 Central Fraser Valley      | 5.49                            | 2.55                   | 4.25           | 4.23  | 1.83                     | 2.64                       | 3.21             | 0.00                         |
| 9 Boundary                   | 10.89                           | 6.90                   | 5.42           | 9.52  | 5.10                     | 5.12                       | 5.19             | 10.53                        |
| 10 Simon Fraser              | 5.72                            | 5.24                   | 7.08           | 3.70  | 2.61                     | 5.90                       | 4.84             | 5.26                         |
| 11 Coast Garibaldi           | 1.83                            | 0.89                   | 1.08           | 1.06  | 5.23                     | 0.62                       | 2.19             | 0.00                         |
| 13 Central Vancouver Island  | 5.97                            | 3.32                   | 4.50           | 5.29  | 3.79                     | 4.81                       | 4.68             | 1.75                         |
| 14 Upper Island              | 2.95                            | 1.40                   | 2.83           | 2.65  | 3.14                     | 1.55                       | 2.49             | 0.00                         |
| 15 Cariboo                   | 1.90                            | 0.38                   | 2.33           | 0.79  | 1.05                     | 0.47                       | 1.27             | 0.00                         |
| 16 Skeena                    | 2.44                            | 0.77                   | 1.50           | 1.59  | 1.18                     | 1.55                       | 1.43             | 0.00                         |
| 17 Peace River               | 1.70                            | 0.26                   | 0.92           | 1.06  | 0.65                     | 0.16                       | 1.07             | 0.00                         |
| 18 Northern Interior         | 3.34                            | 1.15                   | 3.42           | 1.85  | 0.78                     | 1.71                       | 2.49             | 3.51                         |
| 20 Vancouver                 | 14.22                           | 34.36                  | 26.75          | 26.98   | 29.15                    | 38.20                      | 27.44            | 31.58                        |
| 30 Burnaby                   | 4.79                            | 6.51                   | 4.67           | 2.12  | 3.92                     | 3.11                       | 3.67             | 3.51                         |
| 40 North Shore               | 4.76                            | 4.98                   | 2.33           | 4.76  | 6.14                     | 5.28                       | 5.14             | 0.00                         |
| 50 Richmond                  | 3.82                            | 3.45                   | 1.75           | 3.44  | 2.22                     | 4.97                       | 5.35             | 7.02                         |
| 60 Capital Regional District | 9.00                            | 17.62                  | 13.00          | 12.43   | 14.51                    | 11.34                      | 11.61            | 19.30                        |
| <b>TOTAL N</b>               | <b>3,461,887</b>                | <b>783</b>             | <b>1,200</b>   | <b>378</b>  | <b>765</b>               | <b>644</b>                 | <b>1,964</b>     | <b>57</b>                    |

<sup>1</sup> Population estimates supplied by Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

## II. CHAPTER SUMMARY

In Part I of this Introduction we discussed the provincial distribution of health personnel according to various methods of comparison. In Part II, we wish to examine more closely the particular information recorded in the chapters for selected groupings of health personnel. This is a new type of analysis for *ROLLCALL*; in previous editions, we have concentrated upon province-wide data for all groups and upon "metro/non-metro" comparisons, leaving consideration of chapter contents to the reader. In this edition, we are taking up the health occupations groupings, in recognition of the current importance of a careful study of regional distributions for health services re-organisation and health human resources planning. We include in our discussions references to the "average annual rates of change relative to population" which are identical to the "average annual rates of change in ratio" referred to in Part I of this Introduction (see section (d)). Proportions based on figures from the "Age and Sex" and "Analysis of Change" tables in the chapters are calculated with the unknown numbers excluded.

### (a) Dental Personnel

The numbers of dentists, certified dental assistants (CDAs), and dental hygienists all grew relative to the growth in population between 1991 and 1993, but the average annual rates of change in ratio for the province as a whole were much higher for hygienists (10.02%) than for CDAs (0.20%) or dentists (0.11%). While eleven of twenty-one regions experienced negative average annual rates of change in ratio for CDAs (five of the eleven were in the Lower Mainland), and ten regions around the province showed negative average annual rates of change in ratio for dentists (of which three were in the Lower Mainland), all regions in the province experienced positive average annual rates of change in ratio for dental hygienists. It is interesting that the number of dental hygienists did not appear to be so closely linked to the number of dentists or CDAs between 1991 and 1993.

Age distributions among dental personnel reveal a pattern that is not unexpected; CDAs and hygienists tend to be young and female, while dentists tend to be older and male. Detailed comparisons are difficult because of the absence of birthdate information for about 41% of CDAs, but looking at the available data, it appears that 81.46% of CDAs and 57.06% of dental hygienists are under thirty-five, while only 22.10% of dentists are in that age group. In contrast, about 15.42% of dentists 55 or older, but less than one percent of hygienists and a tenth of one percent (0.10%) of CDAs with known birthdates are of the same age grouping.

Figure 2  
Percentage Distribution of New Registrants by Place of Graduation  
for Selected Dental Professions in British Columbia  
1993

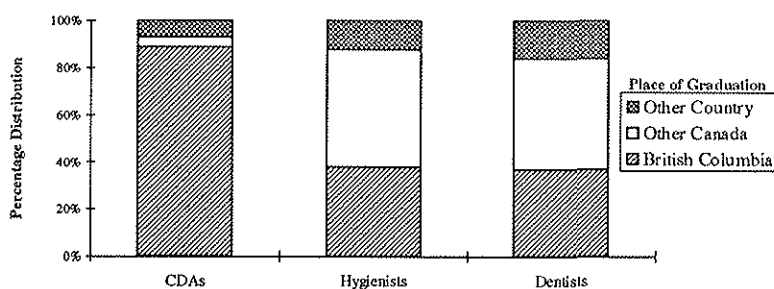


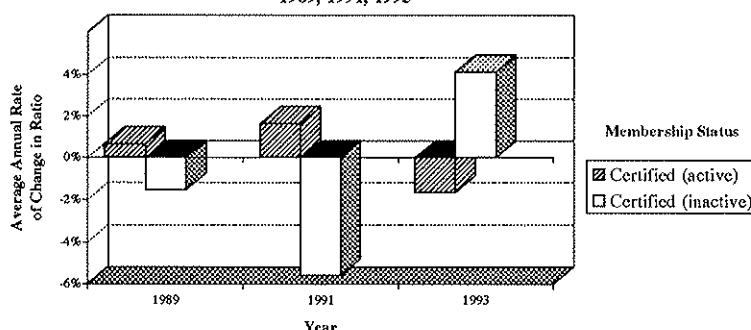
Figure 2 combines information presented in the "Analysis of Change" tables from the chapters about CDAs, dental hygienists and dentists. This is the first edition of *ROLLCALL* in which we have included an "Analysis of Change" table for CDAs (see Table 3, p.23). B.C. was the place of graduation for 89.46% of new registrant CDAs while 3.64% graduated from other provinces in Canada, and 6.88% came from outside the country. These distributions contrast with those for hygienists and dentists; roughly 37% of new registrants to both these groups graduated in B.C., while 50.32% of hygienists and 47.37% of dentists came from other provinces in Canada, and another 12.01% of hygienists and 15.79% of dentists came from outside Canada. Thus dentists and dental hygienists had similar sources of new personnel between 1991 and 1993, while new registrant CDAs are much more likely to have been educated in B.C.

### (b) Laboratory and Therapeutic Technological Personnel

Medical laboratory technologists (MLTs), cardiology technologists (CTs), medical radiation technologists (MRTs), and respiratory therapists (RTs) are the groups within this category for which we have the most complete information. All of these are membership associations, not regulatory bodies, so none has mandatory registration, and thus comparisons of numbers across time may reflect changes in membership (the "popularity" of the association) as much as changes in the actual supply of personnel. Despite this limitation, we have estimated average annual rates of change for the above groups. Across the province, average annual rates of change relative to population were positive for the RTs (16.03%), the CTs (2.10%), and the MRTs (1.65%), and negative for the MLTs (-1.31%).

Among the MLTs, the number of certified (active) members, i.e. those eligible for employment, decreased even more rapidly than for the total membership; certified (active) members showed an average annual rate of change in ratio of -1.66%, while the certified (inactive) membership increased rapidly (4.11%). The average annual rate of change in number for certified (active) MLTs is positive (0.96%), which means this segment did grow, but at a slower rate than population growth. This is a change from the numbers seen in *ROLLCALL 91* and *ROLLCALL 89*, which showed positive average annual rates of change in ratio for certified (active) MLTs, and negative ratios for certified (inactive). Average annual rates of change in ratio for the MLT registration groups in 1989, 1991 and 1993 are shown in Figure 3. The trend pictured suggests the profession may be approaching a zero-growth state, keeping in mind that this is a voluntary membership society (though it is claimed that the Canadian Society for Laboratory Technologists represents a large proportion of MLTs).

Figure 3  
Average Annual Rate of Change in Ratio for MLTs in British Columbia  
by Membership Status  
1989, 1991, 1993



For MRTs, the differences in average annual rates of change between the three disciplines were also interesting. Diagnostic radiographers showed an average annual rate of change of 1.57% over that of the provincial population, while the number of radiation therapists increased by 9.20% relative to population growth, and the number of nuclear medicine technologists dropped in relation to the population by -1.90%. This is a change from *ROLLCALL 91*, where nuclear medicine technologists showed the largest average annual rate of change in ratio at 15.50%. Diagnostic radiographers and radiation therapists also showed positive, though smaller, changes in rates (4.88% and 5.45% respectively). The very high average annual rates of change in ratio for RTs may be in part an artefact of their recent membership drive - in other words, the total for 1993 may more closely approximate the real number of RTs in the province than the total presented in *ROLLCALL 91*.

Clinical engineers and biomedical engineering technologists and technicians (CE/BET) and diagnostic medical sonographers (DMS) are laboratory personnel surveyed on a regular basis by the HHRU. They are survey groups because there is no mandatory registration, and there are no membership organisations which represent a large proportion of either group. Both of these groups have a large component of employment in the hospitals, but the CE/BETs are slightly more difficult to locate because a substantial proportion is employed by a variety of equipment manufacturers and/or service organisations. The response rate to the 1993 survey was slightly lower for both groups; 78% of DMS personnel responded, as compared to 81% in 1991, and 67% of CE/BETs responded, as compared to 69% in 1991.

While compiling an employer list of DMS personnel, the HHRU identified a number of ophthalmology offices performing ultrasound services. It was decided to include these personnel in the survey in order to determine if they should be enumerated in the DMS chapter in *ROLLCALL*. A total of fourteen employees in ophthalmology offices were identified as performing ultrasound services (this does not include any physicians who may be doing their own ultrasound). Of the fourteen, ten returned surveys to the HHRU. The survey responses indicated that all respondents were trained as ophthalmic assistants or a similar discipline; none reported formal training in ultrasound. Most reported working in ultrasound only part of the work week - from 1 to 10 hours per week. None reported performing any sort of ultrasound service other than ophthalmic.

Following a brief telephone follow-up it was apparent that these technicians were not performing ultrasound as their main work duty, and most receive their training in this field from their employer (a physician) over a short period of time (a few hours). In addition, from what the HHRU could determine, these technicians are only performing A-scans which provide measurements of the eye, as opposed to B-scans which are a diagnostic tool and provide a "picture" of the eye rather than just measurements of it. One purpose of an ophthalmic ultrasound A-scan is to measure the depth of the eye before a lens implant to determine the strength and size of the implant required.<sup>2</sup> Based on these findings, it seemed appropriate to exclude this group of DMS personnel from the DMS chapter in *ROLLCALL 93*. They do, however, represent a new category of health personnel which is deployed by physicians, and may warrant further separate study for future editions of *ROLLCALL*.

### c) Medical and Treatment Personnel

The groups in this category can be considered under two headings: those for which substantial information is available and those for which little information is available, despite the fact that all

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<sup>2</sup> Personal communication with instructor in DMS program at the British Columbia Institute of Technology, March 1994.

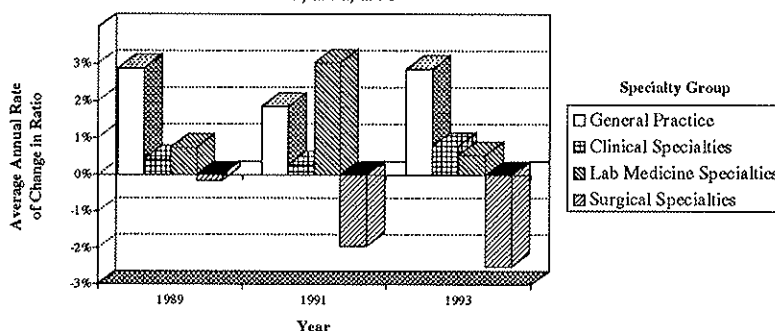
require licensure. The latter includes chiropractors, emergency medical assistants (EMAs), naturopaths, optometrists, and podiatrists. The former includes pharmacists and the physicians.

Chiropractors, EMAs, naturopaths, and optometrists all enjoyed positive average annual rates of change in ratio, even taking into account the growth in population between 1991 and 1993. Naturopaths grew most rapidly with an average annual rate of change in ratio of 8.90%, followed by optometrists (2.12%), chiropractors (1.77%), with EMAs far behind at 0.20%. Podiatrist numbers declined relative to the population at an average annual rate of -2.60%, after experiencing a rate of increase of 9.16% between 1989 and 1991 (see *ROLLCALL 91*). Unfortunately, we have never been able to obtain place of graduation information from the naturopaths, optometrists, chiropractors or podiatrists, so accounting for the sources of these increasing (or decreasing) numbers is impossible.

As noted above, with physicians and pharmacists, a great deal more is known. The number of pharmacists decreased relative to the population between 1991 and 1993 at an average annual rate of -0.08%, after increasing modestly at an average annual rate of 0.45% between 1989 and 1991 (see *ROLLCALL 91*). The average annual rates of change in ratio were negative in thirteen of twenty-one health regions. The most recent average annual rate of change should be compared with the average annual rate of change in ratio for community pharmacies (-2.34%), found in Appendix D of this report. As with pharmacists, although the absolute number of pharmacies increased, the increase did not keep pace with the rate of population increase. In fact, the number of pharmacists grew at a faster rate than the number of community pharmacies. However, in 1993, a substantial proportion of pharmacists were not employed in pharmacy (11.6%).

Pharmacists are rare among health occupations groups in having an almost demographically appropriate distribution of male and female practitioners; among the total of those pharmacists whose gender is recorded, some 52.13% are male and 47.87% are female. Indeed, female pharmacists outnumber male practitioners in the two youngest age groups, and are found in almost equal numbers among those who are 35 to 44 years old. The sex distribution is reversed among pharmacists aged 55 and older, but they now account for only 12.59% of those licensed to practise. Practitioners under age 35 account for 39.10% of the total of licensed pharmacists.

Figure 4  
Average Annual Rate of Change in Ratio for Physicians in British Columbia  
by Specialty Group  
1989, 1991, 1993



In contrast to pharmacists, the number of directory active physicians grew more rapidly than the provincial population for yet another *ROLLCALL* period (the average annual rate of change in ratio was 0.89% for the 1989-1991 period, and 1.81% for the 1987-89 period). The most recent average annual rate of change in ratio was 1.02% for all directory active physicians in the province, and 1.51% for non-postgraduate doctors, but -4.05% for postgraduate physicians (this translates into a decrease of eleven

individuals between January 1992 and September 1993). Of the increasing numbers of non-postgraduate physicians, general practitioners increased with an average annual rate of change in ratio of 2.87%, while those in clinical specialties grew more modestly with a ratio of 0.78%, and those in laboratory medicine even more modestly with a ratio of 0.54%. Only those in surgical specialties underwent a decrease in the average annual rate of growth relative to population (-2.50%). Average annual rates of change in ratio for the physician specialty groups in 1989, 1991 and 1993 are shown in Figure 4. The negative ratio for the surgical specialties in 1993 appears to be part of a general downward trend in that category of physicians. The laboratory medicine specialties showed a sharp peak in 1991 (reflecting high growth between 1989 and 1991), but otherwise, growth for non-postgraduates has remained fairly steady, and positive.

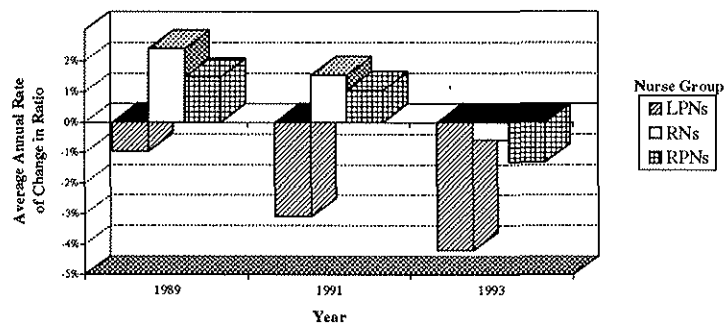
The age and sex distributions of physicians are different from those of pharmacists as well. In 1993, only 22.58% of directory active non-postgraduate physicians were female, and of that proportion, 29.75% were younger than 35. (There are only 18 directory active physicians whose age is unknown; they are excluded from these calculations.) Sex distribution was calculated further by specialty group; women accounted for 27.57% of general practitioners, 19.30% of those in the clinical specialties, 21.90% of those in laboratory medicine, and only 7.01% of those in the surgical specialties. For the non-postgraduate physicians as a whole, some 23.42% were older than 55, another 8.33% were past retirement age (over 65), while 17.20% were younger than 35.

Newly registered non-postgraduate physicians are much more likely to have graduated in another province or in another country than to have graduated in B.C. Only 19.08% of the new registrants between January 1992 and September 1993 were B.C. graduates, while 48.01% graduated elsewhere in Canada and 32.91% graduated outside this country. This pattern contrasts with that of the pharmacists, 73% of whom graduated in B.C., and with other groups such as the registered nurses (51% are B.C. graduates) and massage practitioners (73% are B.C. graduates).

#### **(d) Nursing personnel**

For all three groups, the registered nurses (RNs), the licensed practical nurses (LPNs), and the registered psychiatric nurses (RPNs), the average annual rates of change in number relative to change in population were negative. The absolute number of LPNs actually decreased from 6143 in 1991 to 5943 in 1993, resulting in an average annual rate of change in ratio of -4.19%. The number of RNs did increase, but not as fast as the provincial population, so that the average annual rate of change in ratio was -0.52%, with less growth among the practising RNs (-0.57%) than among the non-practising RNs (0.08%). As with the RNs, the absolute number of RPNs did grow, but even more slowly relative to the population than did the RNs, so that the average annual rate of change in ratio was -1.33%; a lesser increase occurred among the non-practising members (-1.46%). Between 1989 and 1991, only the RNs showed a positive rate of change in ratio, at 0.82%. The RPNs and LPNs both grew in total number, but had negative rates of change relative to population growth (-0.64% and -3.09% respectively), albeit changes smaller than the 1991-1993 figures. Between 1987 and 1989, the number of RNs grew at 1.65% relative to the provincial population, while the RPNs increased at a slightly lesser rate than the population for a ratio of -0.12%, and the LPNs once again trailed with a rate of change in ratio of -0.95%. Thus, the change to a negative rate of change for RNs is a new phenomenon, as is the acceleration in the negative rate shown for the RPNs and LPNs. Looking at Figure 5, it is clear that while the rates of change in ratio for the nursing groups are different, the pattern of change - a decline in the rate of growth - is very similar.

Figure 5  
Average Annual Rate of Change in Ratio  
for Nursing Groups in British Columbia  
1989, 1991, 1993



Sex distributions differ among the nursing groups but age distributions tend to be similar. While 6.83% of LPNs are men, of whom 56.54% are under the age of 45, only 2.94% of RNs are men, and 69.17% of them are younger than 45. However, a full 24.65% of RPNs are male, and only 36.92% of them are under the age of 45. Of the total number of LPNs, 11.95% are older than 55, and 2.53% are 65 or more, while 19.51% are younger than 35. For RNs, 12.40% are over the age of 55, but only 1.21% are older than 65, and 25.28% are younger than 35. RPNs resemble the RNs in that 22.70% are under 35, and 12.33% over 55. It should be noted that 62.32% of RNs, 64.98% of RPNs, and 68.55% of LPNs are between the ages of 35 and 54.

It is important to note that numbers for new registrants and reactivations are greater than those for attrition for RNs and RPNs, but not LPNs, who show greater attrition between 1991 and 1993 than new registrations and reactivations combined. In addition, the number of newly registered RNs has decreased from 3165 between 1989 and 1991 to 2766 in the more recent period, while reactivations also decreased (1531 for 1989-91; 1227 for 1991-93) and attrition increased (2661 for 1989-91; 2875 for 1991-93). Similar patterns can be seen with the RPNs and the LPNs. Fewer nurses are entering as new registrants into any of the three nursing bodies, fewer are reactivating from non-practising status, and more are either leaving their regulatory organisations entirely or at least dropping their practising status.

The sources of new supply (taken from the "Place of Graduation" columns in the "Analysis of Change" tables) also appear to be similar across nursing groups. B.C. graduates account for 50.94% of RN, 59.51% of LPN, and 61.61% of RPN new registrants, while other provinces in Canada provide 33.39% of newly registered LPNs, 34.42% of newly registered RNs, and 34.12% of newly registered RPNs. The only group for which this pattern has changed over time is the RPNs; between 1989 and 1991, only 41% of new registrants had graduated in B.C. and a mere 12.6% were from other Canadian provinces, while 46% came from outside Canada.

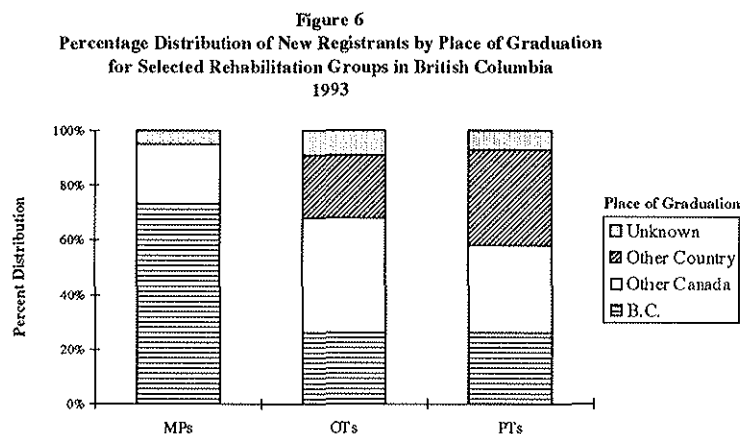
#### (e) Rehabilitation personnel

More or less comprehensive data exist for the massage practitioners (MPs), the occupational therapists (OTs) and the physiotherapists (PTs). Less is known about the audiologists and speech/language pathologists, and still less about the prosthetists and orthotists. For audiologists and speech/language pathologists, the average annual rate of change in ratio (-1.98%) reveals that the number of audiologists and speech/language pathologists increased more slowly than did the provincial population between 1991 and 1993. The opposite was true for the other three major rehabilitation therapy groups (MPs, OTs and PTs). This figure was impossible to calculate for the prosthetists and orthotists due to a difference in the sources of data for the two years of data collection.

MPs showed the largest average annual rate of change in ratio at 8.48% for the group as a whole, and 8.90% for the full and temporary registrant members, the only categories that can be employed. The number of OTs increased at an average annual rate of 3.90% relative to the provincial population, while non-practising membership decreased with an average annual rate of change in ratio of -4.08%. The average annual rate of change in ratio for PTs was 1.22% and 1.72% for full and temporary registrants. It should be kept in mind that the MPs and PTs are mandatory registration groups, while the OTs are part of a voluntary membership group, though it is believed the British Columbia Society of Occupational Therapists (BCSOT) represents a large proportion of OTs working in the province (see Chapter 32).

As with nurses, most rehabilitation personnel are female (information on sex is not available for the prosthetists and orthotists). The proportion of male registrants is highest among the MPs (28.00%), of whom 57.56% are between the ages of 35 and 54. Physiotherapists have the next largest group of males (14.91%), of whom 51.05% are between 35 and 54. OTs trail with 4.91% male membership, of whom 41.18% are between 35 and 54 years of age. The proportions of OTs, PTs, and MPs older than 55 are small; only 3.28% of MPs, 5.78% of OTs, and 7.40% of PTs, while those under 35 account for 33.68% of PTs, 37.43% of OTs, and 39.48% of MPs.

Given the relatively large average annual rates of change in ratio for the three largest rehabilitation groups, it is interesting to note that new registrants among two of these three groups are more likely to have graduated from schools out of the province or out of the country than from schools in B.C. Information about new registrants is shown in Figure 6. Only 28.10% of newly registered OTs graduated in B.C., while 46.07% came from other Canadian provinces and 25.84% from outside the country. Among PTs, the relevant proportions are 27.97% for B.C. graduates, 34.48% for other Canadian centres, and 37.57% for outside Canada. In contrast, 77.27% of the MPs are B.C. graduates, and another 22.73% come from other provinces. No MPs are reported as having graduated from other countries.



Registered prosthetists and orthotists were added to *ROLLCALL 93*. They represent a previously uncounted sector of the prosthetists and orthotists group. Their duties are different from those who are certified in that they are technicians; they manufacture the prosthetic or orthotic equipment to specifications set out by certified prosthetists and orthotists, and have limited if any contact with clients. In British Columbia, many certified prosthetists and orthotists do their own technician work, but registered prosthetists and orthotists are not qualified by registration or training to see and fit patients with devices. However, this is a fairly unregulated profession in B.C., so the number and precise function of people practising in the field who are not Board certified (by the Canadian Board for



Certification of Prosthetists and Orthotists) or Registered (by the Canadian Association of Prosthetists and Orthotists) can not be determined.

**(f) Hospital Bed Capacity**

Table 7 combines information from Appendices B and C, and shows the twenty-one health regions from most to least populated and ranked in terms of rated hospital bed capacity. The Vancouver health region is consistently highest in population and all hospital bed types, and the Capital Regional District is ranked second in all except bassinets, where it is third. Beyond these top two, however, the bed rankings do not seem to clearly coincide with population order. For instance, Peace River, the least populated health region, does not rank last for any of the hospital bed figures, and is in fact thirteenth for number of bassinets. Richmond, the tenth most populated health region, is twentieth for acute care beds, and South Central health region, thirteenth in population, shows up seventh for beds. These numbers, of course, cannot be examined further without reference to other factors which may affect rated hospital bed capacity, such as proximity to other health regions with more extensive human and institutional resources, geographical isolation, and the demographic mix of the regional population, among others.

**Table 7**  
**Health Regions in British Columbia**  
**Ranked by Population and by Rated Hospital Bed Capacity**  
**1993**

| Health Region                | Rank in<br>Population | Rank in<br>Hospital Bed Capacity |                       |           |       |
|------------------------------|-----------------------|----------------------------------|-----------------------|-----------|-------|
|                              |                       | Acute Care<br>Beds               | Extended Care<br>Beds | Bassinets | Total |
| 20 Vancouver                 | 1                     | 1                                | 1                     | 1         | 1     |
| 9 Boundary                   | 2                     | 5                                | 3                     | 6 *       | 4     |
| 60 Capital Regional District | 3                     | 2                                | 2                     | 3         | 2     |
| 13 Central Vancouver Island  | 4                     | 6                                | 8                     | 2         | 6     |
| 5 South Okanagan             | 5                     | 4                                | 4                     | 6 *       | 3     |
| 10 Simon Fraser              | 6                     | 3                                | 7                     | 10 *      | 5     |
| 8 Central Fraser Valley      | 7                     | 10                               | 9                     | 5         | 9     |
| 7 Upper Fraser Valley        | 8                     | 8                                | 6                     | 21        | 8     |
| 30 Burnaby                   | 9                     | 11                               | 5                     | 15        | 7     |
| 40 North Shore               | 10                    | 9                                | 11                    | 19        | 10    |
| 50 Richmond                  | 11                    | 20                               | 14 *                  | 18        | 19    |
| 18 Northern Interior         | 12                    | 12                               | 21                    | 14        | 15    |
| 6 South Central              | 13                    | 7                                | 13                    | 4         | 11    |
| 4 North Okanagan             | 14                    | 16                               | 10                    | 16 *      | 12    |
| 14 Upper Island              | 15                    | 17                               | 14 *                  | 16 *      | 17    |
| 16 Skeena                    | 16                    | 13                               | 20                    | 12        | 14    |
| 2 Central Kootenay           | 17                    | 14                               | 12                    | 10 *      | 13    |
| 1 East Kootenay              | 18                    | 15                               | 17                    | 9         | 16    |
| 15 Cariboo                   | 19                    | 19                               | 18                    | 8         | 20    |
| 11 Coast Garibaldi           | 20                    | 21                               | 16                    | 20        | 21    |
| 17 Peace River               | 21                    | 18                               | 19                    | 13        | 18    |

\* Indicates a tie in the number of rated hospital beds.

## INTRODUCTION TO THE CHAPTERS

The remainder of the report is partitioned into health personnel group-specific chapters. All statistics within each chapter pertain to the specified date of record. Contained in most chapters, along with the figures which have been summarised in the Introduction, is a 3-dimensional map of the Health Regions which reflects the actual worker/population ratios. The background grid on each map includes shadows of the 3-dimensional bars for each of the regions in the foreground. The bars are labelled with the Health Region number and the axes reveal the worker/population ratios. These should permit the reader to gain a rapid visual impression of the human resources distribution across Health Regions.

Following the thirty-four personnel chapters are a number of appendices which provide provincial data on population, hospital bed supply and the number of retail pharmacies.



# **I. ADMINISTRATIVE SERVICES**

## HEALTH RECORD PERSONNEL

**Definition:** Health record personnel

...include Health Record Administrators (HRA), Health Data Technologists (HDT) and Health Record Technicians (HRT) who work in a variety of health care facilities such as acute, specialised and long term hospitals, community health centres, industrial clinics, and provincial or federal health care agencies, as well as the health care research field. They contribute to the health information team by: planning information acquisition, maintaining utilisation systems, analysing and technically evaluating health information, and compiling and applying administrative and health statistics.<sup>1</sup>

**Governing Statute:** None

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the Health Record Association of British Columbia (HRABC) is voluntary.

**Date of Record:** November 1991 and January 1994.

**Source of Data:** The Health Record Association of British Columbia (HRABC).

### Preparation and Updating:

The tables, derived solely from the membership list provided by the HRABC, include Active, Affiliate, and Inactive members who reported a British Columbia address at the date of record. Affiliate members have been added to *ROLLCALL 93*. Data presented in the tables are based on home address for the majority of health record personnel. Precise percentages of home vs. employment or other address are not known.

### Definition of Terms:

HRABC membership may be *Active*, *Affiliate*, *Inactive*, or *Honorary*.

The Executive Committee may admit to *Active* membership any person who makes application thereto and who establishes to the satisfaction of the Executive Committee that she has successfully completed a health record program that is recognised by the Canadian Health Record Association (CHRA).

The Executive Committee may admit to *Affiliate* membership any person (excluding a person who qualifies for Active membership) who makes application thereto and who establishes to the satisfaction of the Executive Committee an interest in the objects of the Society and their advancement. To qualify for Affiliate membership, the person must be:

- (i) engaged in the record department in a hospital or other allied field satisfactory to the Executive Committee; or
- (ii) a student enrolled in a health record program that is recognised by the CHRA.

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<sup>1</sup>Adapted from information received from the Health Record Association of B.C.

The Executive Committee may grant *Inactive* membership to those persons who so request it, in writing, and who are no longer engaged in active work in the health care field in British Columbia. If a member who has been granted inactive status resumes work, this status will no longer apply.

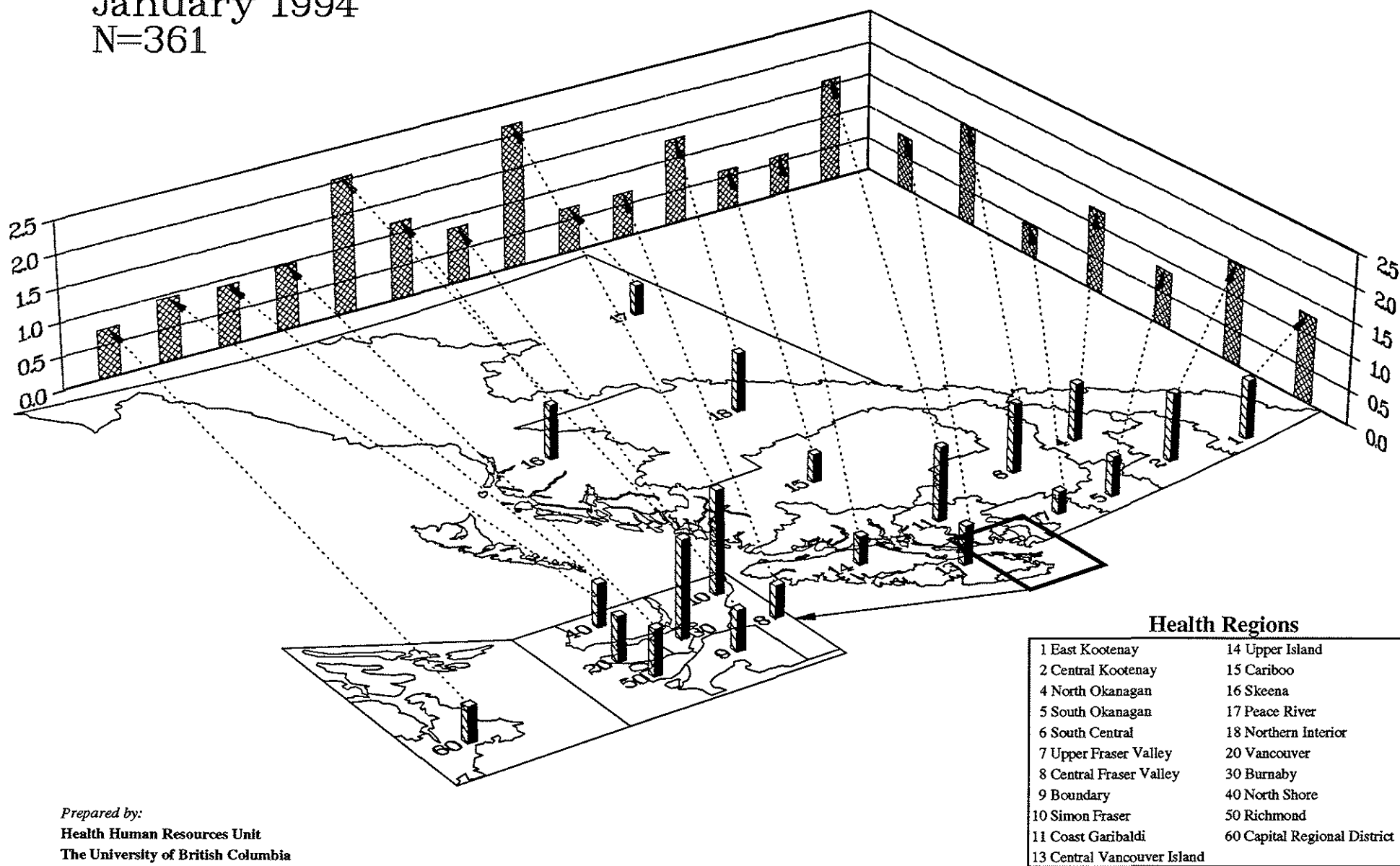
The Executive Committee may admit anyone as an *Honorary* member of the Society who has rendered exceptional services to the HRABC.<sup>2</sup> Honorary members are excluded from the tables. There were 5 honorary members at the date of record in 1994.

Tables 1a and 1b present the number and number per 10,000 population of health record personnel in British Columbia at the date of record. Table 1c shows the average annual rates of change in these numbers.

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<sup>2</sup>From the bylaws of the Health Record Association of B.C.

# Active Health Record Personnel (HRABC Members) per 10,000 Population by Health Region January 1994 N=361



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1a**  
**Health Record Personnel (HRABC Members)<sup>1</sup> in British Columbia**  
**by Health Region by Membership Status**  
**November 1991 and January 1994**

| Health Region                | Active            |            | Affiliate |           | Inactive  |           | Total      |            |
|------------------------------|-------------------|------------|-----------|-----------|-----------|-----------|------------|------------|
|                              | 1991 <sup>2</sup> | 1994       | 1991      | 1994      | 1991      | 1994      | 1991       | 1994       |
| 1 East Kootenay              | 8                 | 9          | 1         | 0         | 1         | 0         | 10         | 9          |
| 2 Central Kootenay           | 8                 | 11         | 0         | 0         | 2         | 1         | 10         | 12         |
| 4 North Okanagan             | 7                 | 13         | 0         | 0         | 1         | 0         | 8          | 13         |
| 5 South Okanagan             | 15                | 17         | 0         | 1         | 0         | 0         | 15         | 18         |
| 6 South Central              | 14                | 17         | 1         | 1         | 1         | 1         | 16         | 19         |
| 7 Upper Fraser Valley        | 15                | 8          | 1         | 1         | 0         | 2         | 16         | 11         |
| 8 Central Fraser Valley      | 14                | 13         | 2         | 5         | 3         | 0         | 19         | 18         |
| 9 Boundary                   | 37                | 32         | 6         | 11        | 0         | 1         | 43         | 44         |
| 10 Simon Fraser              | 35                | 43         | 8         | 21        | 1         | 2         | 44         | 66         |
| 11 Coast Garibaldi           | 9                 | 10         | 1         | 0         | 2         | 1         | 12         | 11         |
| 13 Central Vancouver Island  | 16                | 17         | 1         | 1         | 0         | 0         | 17         | 18         |
| 14 Upper Island              | 10                | 6          | 0         | 1         | 1         | 1         | 11         | 8          |
| 15 Cariboo                   | 3                 | 4          | 0         | 0         | 0         | 0         | 3          | 4          |
| 16 Skeena                    | 10                | 10         | 0         | 0         | 0         | 0         | 10         | 10         |
| 17 Peace River               | 6                 | 4          | 0         | 0         | 1         | 0         | 7          | 4          |
| 18 Northern Interior         | 14                | 15         | 0         | 0         | 1         | 3         | 15         | 18         |
| 20 Vancouver                 | 54                | 47         | 8         | 4         | 3         | 2         | 65         | 53         |
| 30 Burnaby                   | 35                | 34         | 8         | 2         | 1         | 6         | 44         | 42         |
| 40 North Shore               | 16                | 15         | 4         | 3         | 4         | 2         | 24         | 20         |
| 50 Richmond                  | 12                | 13         | 0         | 0         | 2         | 2         | 14         | 15         |
| 60 Capital Regional District | 22                | 23         | 1         | 0         | 4         | 3         | 27         | 26         |
| <b>TOTAL</b>                 | <b>360</b>        | <b>361</b> | <b>42</b> | <b>51</b> | <b>28</b> | <b>27</b> | <b>430</b> | <b>439</b> |

<sup>1</sup> Membership in the Health Record Association of B.C. (HRABC) is voluntary.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used in ROLLCALL 91.

**Table 1b**  
**Health Record Personnel (HRABC Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Membership Status**  
**November 1991 and January 1994**

| Health Region                | Active      |             | Affiliate   |             | Inactive    |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        |
| 1 East Kootenay              | 1.15        | 1.28        | 0.14        | 0.00        | 0.14        | 0.00        | 1.44        | 1.28        |
| 2 Central Kootenay           | 1.11        | 1.48        | 0.00        | 0.00        | 0.28        | 0.13        | 1.39        | 1.61        |
| 4 North Okanagan             | 0.72        | 1.24        | 0.00        | 0.00        | 0.10        | 0.00        | 0.83        | 1.24        |
| 5 South Okanagan             | 0.84        | 0.85        | 0.00        | 0.05        | 0.00        | 0.00        | 0.84        | 0.90        |
| 6 South Central              | 1.29        | 1.49        | 0.09        | 0.09        | 0.09        | 0.09        | 1.47        | 1.67        |
| 7 Upper Fraser Valley        | 0.96        | 0.47        | 0.06        | 0.06        | 0.00        | 0.12        | 1.03        | 0.65        |
| 8 Central Fraser Valley      | 0.79        | 0.68        | 0.11        | 0.26        | 0.17        | 0.00        | 1.08        | 0.95        |
| 9 Boundary                   | 1.05        | 0.85        | 0.17        | 0.29        | 0.00        | 0.03        | 1.22        | 1.17        |
| 10 Simon Fraser              | 1.91        | 2.17        | 0.44        | 1.06        | 0.05        | 0.10        | 2.40        | 3.33        |
| 11 Coast Garibaldi           | 1.51        | 1.58        | 0.17        | 0.00        | 0.34        | 0.16        | 2.01        | 1.74        |
| 13 Central Vancouver Island  | 0.82        | 0.82        | 0.05        | 0.05        | 0.00        | 0.00        | 0.88        | 0.87        |
| 14 Upper Island              | 1.03        | 0.59        | 0.00        | 0.10        | 0.10        | 0.10        | 1.14        | 0.78        |
| 15 Cariboo                   | 0.46        | 0.61        | 0.00        | 0.00        | 0.00        | 0.00        | 0.46        | 0.61        |
| 16 Skeena                    | 1.20        | 1.18        | 0.00        | 0.00        | 0.00        | 0.00        | 1.20        | 1.18        |
| 17 Peace River               | 1.03        | 0.68        | 0.00        | 0.00        | 0.17        | 0.00        | 1.20        | 0.68        |
| 18 Northern Interior         | 1.23        | 1.30        | 0.00        | 0.00        | 0.09        | 0.26        | 1.32        | 1.56        |
| 20 Vancouver                 | 1.13        | 0.95        | 0.17        | 0.08        | 0.06        | 0.04        | 1.36        | 1.08        |
| 30 Burnaby                   | 2.20        | 2.05        | 0.50        | 0.12        | 0.06        | 0.36        | 2.77        | 2.53        |
| 40 North Shore               | 1.01        | 0.91        | 0.25        | 0.18        | 0.25        | 0.12        | 1.52        | 1.21        |
| 50 Richmond                  | 0.95        | 0.98        | 0.00        | 0.00        | 0.16        | 0.15        | 1.11        | 1.13        |
| 60 Capital Regional District | 0.73        | 0.74        | 0.03        | 0.00        | 0.13        | 0.10        | 0.90        | 0.83        |
| <b>TOTAL</b>                 | <b>1.10</b> | <b>1.04</b> | <b>0.13</b> | <b>0.15</b> | <b>0.09</b> | <b>0.08</b> | <b>1.31</b> | <b>1.27</b> |

<sup>1</sup> Membership in the Health Record Association of B.C. (HRABC) is voluntary.

**Table 1c**  
**Average Annual Rate of Change: Health Record Personnel (HRABC Members)<sup>1</sup>**  
**in British Columbia by Health Region by Membership Status**  
**November 1991 to January 1994**

| Health Region                | Active              |                    | Affiliate           |                    | Inactive            |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | *                   | *                  | *                   | *                  | *                   | *                  | -4.75               | -5.38              |
| 2 Central Kootenay           | *                   | *                  | *                   | *                  | *                   | *                  | 8.78                | 7.02               |
| 4 North Okanagan             | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 5 South Okanagan             | 5.95                | 0.77               | *                   | *                  | *                   | *                  | 8.78                | 3.46               |
| 6 South Central              | 9.37                | 7.11               | *                   | *                  | *                   | *                  | 8.25                | 6.01               |
| 7 Upper Fraser Valley        | -25.18              | -28.16             | *                   | *                  | *                   | *                  | -15.88              | -19.23             |
| 8 Central Fraser Valley      | -3.36               | -6.62              | *                   | *                  | *                   | *                  | -2.46               | -5.75              |
| 9 Boundary                   | -6.48               | -9.49              | *                   | *                  | *                   | *                  | 1.07                | -2.19              |
| 10 Simon Fraser              | 9.97                | 6.15               | *                   | *                  | *                   | *                  | 20.58               | 16.39              |
| 11 Coast Garibaldi           | *                   | *                  | *                   | *                  | *                   | *                  | -3.94               | -6.45              |
| 13 Central Vancouver Island  | 2.84                | -0.17              | *                   | *                  | *                   | *                  | 2.67                | -0.33              |
| 14 Upper Island              | -21.00              | -22.95             | *                   | *                  | *                   | *                  | -13.67              | -15.80             |
| 15 Cariboo                   | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 16 Skeena                    | 0.00                | -0.87              | *                   | *                  | *                   | *                  | 0.00                | -0.87              |
| 17 Peace River               | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | 3.24                | 2.47               | *                   | *                  | *                   | *                  | 8.78                | 7.97               |
| 20 Vancouver                 | -6.21               | -7.50              | *                   | *                  | *                   | *                  | -8.99               | -10.24             |
| 30 Burnaby                   | -1.33               | -3.23              | *                   | *                  | *                   | *                  | -2.12               | -4.01              |
| 40 North Shore               | -2.93               | -4.67              | *                   | *                  | *                   | *                  | -8.07               | -9.71              |
| 50 Richmond                  | 3.76                | 1.67               | *                   | *                  | *                   | *                  | 3.24                | 1.15               |
| 60 Capital Regional District | 2.07                | 0.27               | *                   | *                  | *                   | *                  | -1.73               | -3.47              |
| <b>TOTAL</b>                 | <b>0.13</b>         | <b>-2.27</b>       | <b>9.37</b>         | <b>6.75</b>        | <b>-1.66</b>        | <b>-4.02</b>       | <b>0.96</b>         | <b>-1.46</b>       |

<sup>1</sup> Membership in the Health Record Association of B.C. (HRABC) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.



## HEALTH SERVICES EXECUTIVES

**Definition:** A health services executive

...plans, organises, directs and controls, through middle managers, institutions or organisations that deliver health or community services.

Health services executives perform some or all of the following duties:

- (a) establish objectives for the institution and formulate or approve policies and programs;
- (b) authorise and organise the establishment of major departments and associated senior staff positions;
- (c) allocate funds to implement an organisation's policies and programs; establish financial and administrative controls; formulate and approve promotion campaigns; and approve overall personnel planning;
- (d) select or approve the selection of middle managers, directors or other executive staff;
- (e) co-ordinate the work of regions, divisions or departments;
- (f) represent the institution or delegate representatives to act on behalf of the institution in negotiations or other official functions.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the Canadian College of Health Service Executives, the Health Administrators' Association of British Columbia, and the American College of Healthcare Executives is voluntary.

**Date of Record:** November 1993.

**Sources of Data:** The Canadian College of Health Service Executives (CCHSE), the Health Administrators' Association of British Columbia (HAABC), the American College of Healthcare Executives (ACHE) and the Ministry of Health. It is possible to have membership in more than one of the professional groups, so the lists were merged and edited to avoid double counting.

### Preparation and Updating:

Only one table is presented, derived from the membership lists supplied by the CCHSE, the HAABC and the ACHE, and from a designated administrator list supplied by the Ministry of Health. Table 1 includes health services executives who reported a British Columbia address at the date of record. Data presented are based on employment address for the majority of health services executives. Precise percentages of home vs. employment or other address are not known. Comparison with 1991 figures is of limited value and has not been presented.

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 00, No. 0014, Ottawa: Employment and Immigration Canada.

The members in the categories defined on the following pages have been included in the table. Excluded from the table are student, retired, life and other members of the CCHSE, HAABC, or ACHE who are not considered to be part of the work force.

### Definition of Terms:

#### 1. Executive and Candidate Membership in CCHSE<sup>2</sup>

##### (a) *Executive*

The *Executive Category* is open to individuals in all health services sectors who are employed in:

- (i) an executive level position with senior management responsibilities;
- (ii) a full-time faculty position in a program of health administration; or
- (iii) a non-institutional position possessing either senior management or the equivalent of project leader responsibilities.

Executive members may elect with one year's tenure to take the College's Certification Exam, and if successful are eligible to apply for Fellowship.

##### (b) *Candidate*

The *Candidate* category is open to individuals in all health services sectors who:

- (i) hold a position with either departmental, consultant, or senior staff level responsibilities; or
- (ii) hold either a baccalaureate degree, an accountancy designation, or an approved certificate in health services administration.

Candidate members fulfilling tenure requirements may elect to take the College's Certification Exam, and if successful become eligible Certified Members of the College.

#### 2. Active, Associate and Provisional Membership in the HAABC<sup>3</sup>

##### (a) *Active*

An *Active* member must be a graduate of an approved course in health or business administration or a combination of an approved course and appropriate experience, and must hold either a position of senior administrative responsibility in a health care organisation or a consultative position in health care administration.

##### (b) *Associate*

An *Associate* member is a person who meets all the *Active* membership criteria except either the appropriate educational qualifications or a position of senior administrative responsibility, or is a person who has been an *Active* member of the Association and has resigned while in good standing, who is no longer engaged in the field of health administration in this province.

##### (c) *Provisional*

A *Provisional* member must be actively engaged in the field of health administration as well as working toward the educational qualifications necessary to become an *Active* member.

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<sup>2</sup>From information provided by the CCHSE.

<sup>3</sup>From information provided by the HAABC.

### 3. Associate, Diplomat and Fellowship Membership in ACHE<sup>4</sup>

#### (a) *Associate*

Applicants are admitted to the College as *Associates* and remain in that category for an indefinite period. To advance to *Diplomat* status, *Associates* must meet criteria which include:

- (i) participation and leadership in health care affairs;
- (ii) personal program of continuing professional education;
- (iii) successful completion of a Board of Governors' Examination.

#### (b) *Diplomat*

*Diplomat* status is approved provided the *Associate* has an appropriate combination of post-secondary education and employment experience in an eligible health services administrative, management or education position, and passes both a written and an oral examination.

#### (c) *Fellowship*

Following five years in *Diplomat*, an affiliate may advance to *Fellowship* after meeting criteria which include:

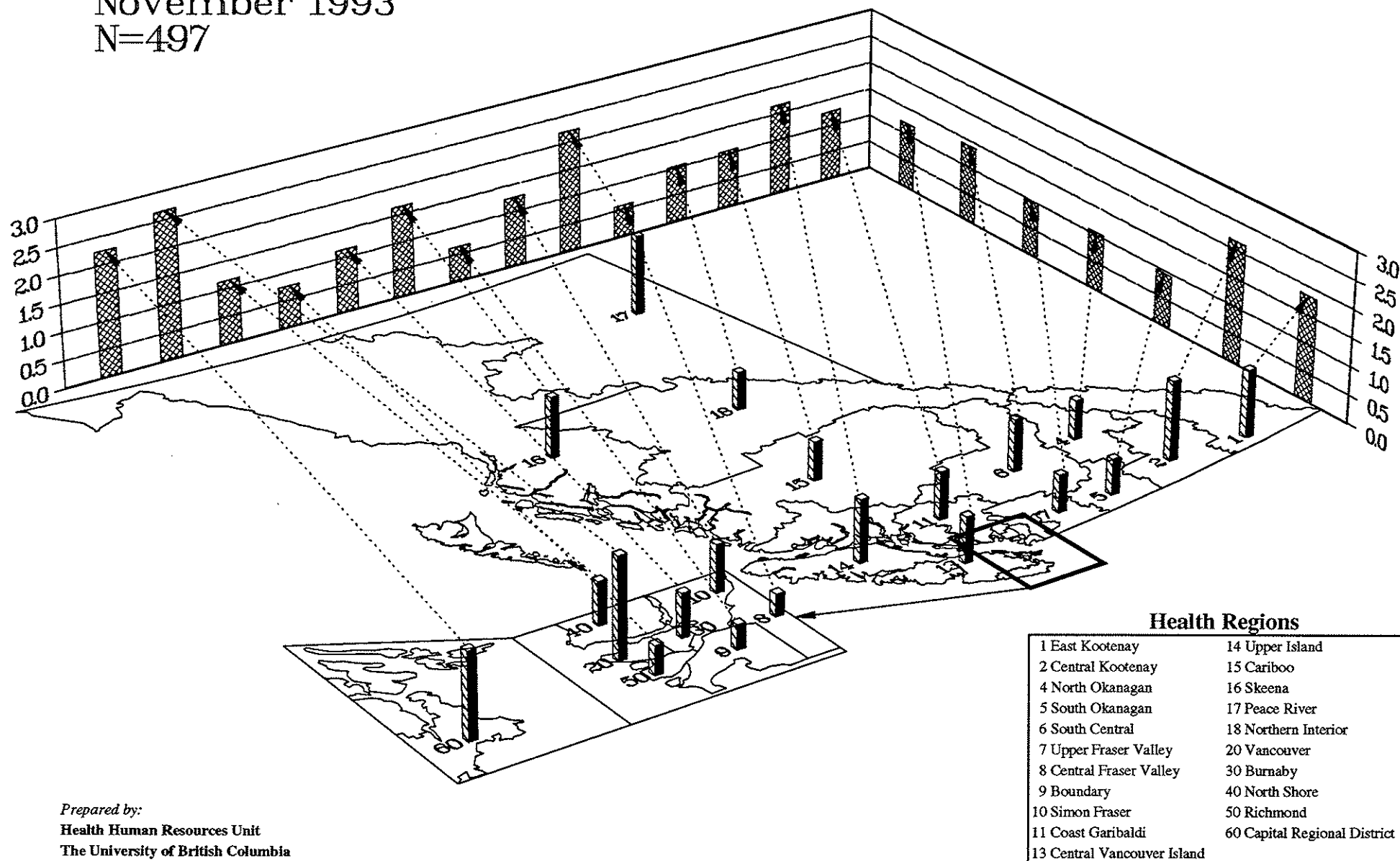
- (i) employment in an eligible health care management position;
- (ii) participation and leadership in health care and in the community;
- (iii) an approved level of continuing education;
- (iv) completion of a Fellowship project.

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<sup>4</sup>From information provided by the ACHE.

# Health Services Executives (Members) per 10,000 Population by Health Region November 1993 N=497

12



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Health Services Executives (Members)<sup>1</sup> in British Columbia**  
**by Health Region**  
**November 1993**

| Health Region                | Number <sup>2</sup> | Number per<br>10,000 Population |
|------------------------------|---------------------|---------------------------------|
| 1 East Kootenay              | 13                  | 1.84                            |
| 2 Central Kootenay           | 16                  | 2.15                            |
| 4 North Okanagan             | 11                  | 1.05                            |
| 5 South Okanagan             | 19                  | 0.95                            |
| 6 South Central              | 16                  | 1.40                            |
| 7 Upper Fraser Valley        | 17                  | 1.00                            |
| 8 Central Fraser Valley      | 11                  | 0.58                            |
| 9 Boundary                   | 24                  | 0.64                            |
| 10 Simon Fraser              | 25                  | 1.26                            |
| 11 Coast Garibaldi           | 8                   | 1.27                            |
| 13 Central Vancouver Island  | 25                  | 1.21                            |
| 14 Upper Island              | 17                  | 1.66                            |
| 15 Cariboo                   | 7                   | 1.06                            |
| 16 Skeena                    | 14                  | 1.65                            |
| 17 Peace River               | 13                  | 2.21                            |
| 18 Northern Interior         | 12                  | 1.04                            |
| 20 Vancouver                 | 131                 | 2.66                            |
| 30 Burnaby                   | 19                  | 1.15                            |
| 40 North Shore               | 19                  | 1.15                            |
| 50 Richmond                  | 10                  | 0.76                            |
| 60 Capital Regional District | 70                  | 2.25                            |
| <b>TOTAL</b>                 | <b>497</b>          | <b>1.44</b>                     |

<sup>1</sup> Data for this table are derived from membership lists supplied by the Canadian College of Health Service Executives (CCHSE), the Health Administrators' Association of B.C. (HAABC), the American College of Healthcare Executives (ACHE) and a designated health administrators list supplied by the Ministry of Health. Membership in the CCHSE, HAABC and ACHE is voluntary.

<sup>2</sup> Excludes 8 health services executives with unknown address.



## **II. DENTAL SERVICES**



## CERTIFIED DENTAL ASSISTANTS

**Definition:** A certified dental assistant (dental auxiliary - level II)

...may be delegated the following duties and procedures under the personal supervision of a duly licensed member of the College of Dental Surgeons of British Columbia:

- (a) those duties or procedures which a dental assistant (dental auxiliary - level I) may perform;<sup>1</sup>
- (b) polishing clinical crowns of teeth with rubber cup or brush and polishing pastes;
- (c) applying topical anticariogenic agents;
- (d) taking study model impressions;
- (e) applying fissure sealants;
- (f) evaluating dietary habits and providing nutritional counselling as it pertains to dentistry;
- (g) providing instruction in the use and maintenance of partial and complete dentures and other appliances;
- (h) removing sutures;
- (i) placing and removing matrices and wedges;
- (j) performing first aid procedures;
- (k) applying desensitising agents;
- (l) removing periodontal dressings;
- (m) performing pulp vitality tests using electric pulp tester and thermal pulp tester;
- (n) taking simple face-bow transfer;
- (o) acid etching prepared cavities;
- (p) applying non-invasive identification discs.<sup>2</sup>

On successful completion of the specific orthodontic training module concerned, a certified dental assistant may also be delegated the following duties and procedures under the personal supervision of a licensed member:

- (a) instructing in the placement and care of removable orthodontic appliances;
- (b) tying-in arch wires that a dentist has fitted;
- (c) removing orthodontic arch wire;
- (d) removing excess cement or bonding material by means of hand instruments or ultrasonic hand instruments following banding/bonding and debanding/debonding procedures;
- (e) fitting orthodontic bands prior to assessment by a member;
- (f) taking impressions for the fabrication of orthodontic appliances;
- (g) fitting space maintainers prior to assessment by a member;
- (h) removing orthodontic bands and bonded attachments by means of hand instruments;
- (i) preparing teeth for direct bonding of attachments;
- (j) applying wax or other material to offending components or removing offending components;
- (k) placing and removing orthodontic separators; and
- (l) fitting headgear prior to assessment by a member.<sup>3</sup>

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<sup>1</sup> *Regulations of The College of Dental Surgeons of British Columbia*, Auxiliary Bodies, revised June 1988, Article 10.16. See also *National Occupational Classification 1992*, Major Group 34, No. 3411, Ottawa: Employment and Immigration Canada.

<sup>2</sup> *Ibid.*, Article 10.17.

<sup>3</sup> *Regulations*, op. cit., Article 10.19.

|                          |  |
|--------------------------|--|
| <b>Enabling Statute:</b> | Dentists Act, Revised Statutes of British Columbia, 1979, Chapter 92, administered by the Ministry of Health.  |
| <b>Governing Body:</b>   | The College of Dental Surgeons of British Columbia (CDSBC). In order to practise as a certified dental assistant in British Columbia, it is necessary to be registered by the CDSBC and to hold a valid licence. |
| <b>Date of Record:</b>   | December 1991 and October 1993.  |
| <b>Source of Data:</b>   | The College of Dental Surgeons of British Columbia (CDSBC).  |

### **Preparation and Updating:**

The tables, prepared from registration data maintained by the CDSBC, include certified dental assistants who were British Columbia residents at the date of record. Data presented in the tables are based on home address for the majority of certified dental assistants. Precise percentages of home vs. employment or other address are not known.

### **Definition of Terms:**

#### **1. Certified Dental Assistants**

Table 1 reports the number of certified dental assistants, the number of certified dental assistants per 10,000 population in British Columbia, and the average annual rates of change in these figures.

#### **2. Age and Sex**

Age and sex information on certified dental assistants, derived from CDSBC registration information, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada. There were 10 male certified dental assistants at the date of record.

#### **3. Analysis of Change**

Table 3 illustrates the sources of change which affected the stock of certified dental assistants from December 1991 to October 1993.

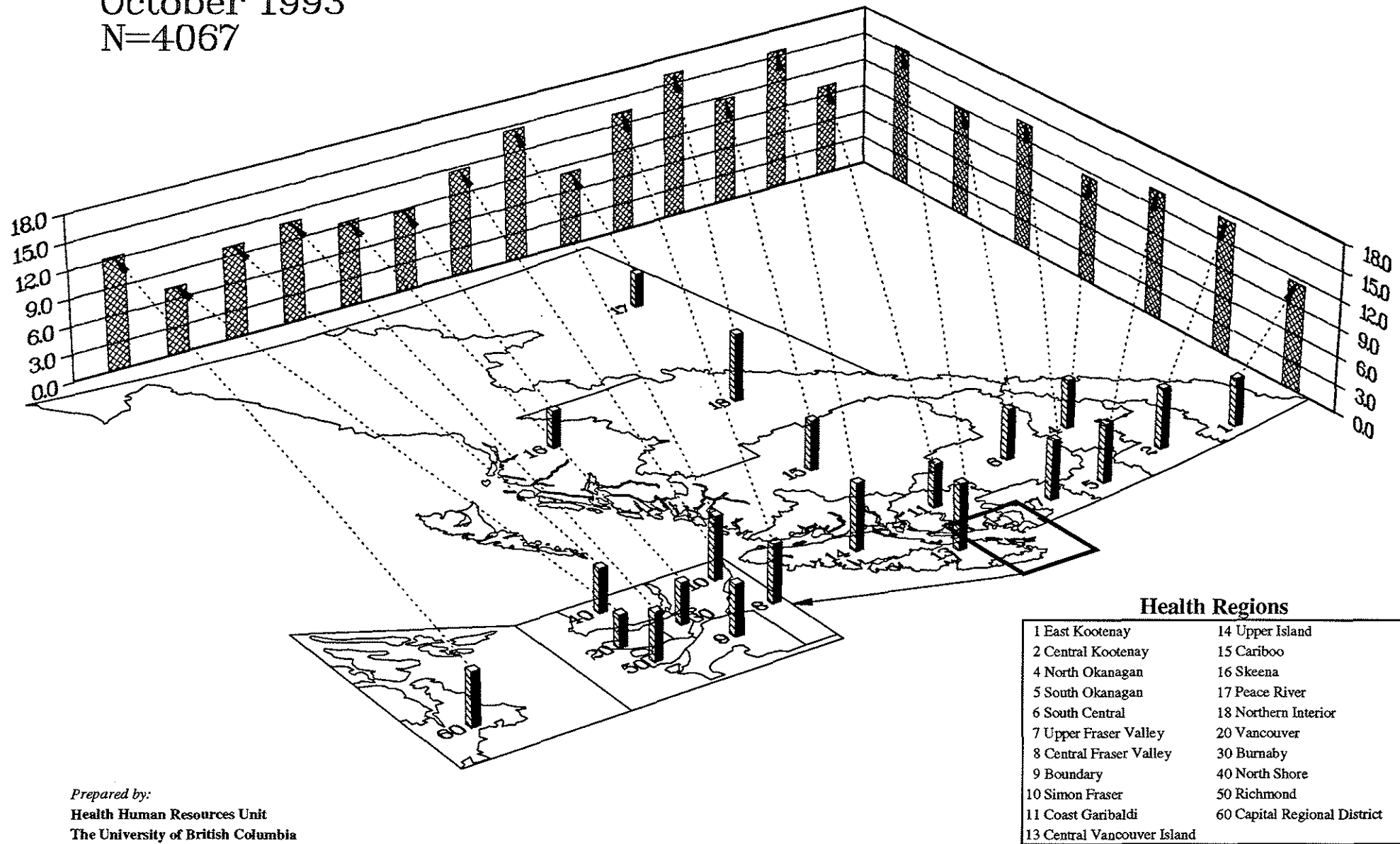
*New registrants* are certified dental assistants included in the October 1993 stock who registered with the CDSBC *for the first time* subsequent to December 1991. They are reported in the table according to their place of graduation: i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent certified dental assistants who were not licensed in British Columbia in December 1991, but were licensed in the province in October 1993, and whose date of initial registration was before December 1991. Also included as reactivations are licensed certified dental assistants who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in October 1993.

*Attrition* describes certified dental assistants who were included in the December 1991 stock but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of licence, were not included in the October 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of certified dental assistants between different Health Regions. The net migration total is therefore zero.

Certified Dental Assistants  
per 10,000 Population  
by Health Region  
October 1993  
N=4067



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Certified Dental Assistants in British Columbia**  
**by Health Region**  
**December 1991<sup>1</sup> and October 1993**

| Health Region                | Number <sup>2</sup> |              | Number per<br>10,000 Population |              | Average Annual<br>Rate of Change <sup>3</sup> |             |
|------------------------------|---------------------|--------------|---------------------------------|--------------|---|-------------|
|                              | 1991                | 1993         | 1991                            | 1993         | Number  | Ratio       |
| 1 East Kootenay              | 86                  | 81           | 12.37                           | 11.48        | -3.36   | -4.16       |
| 2 Central Kootenay           | 94                  | 107          | 13.07                           | 14.36        | 7.68  | 5.53        |
| 4 North Okanagan             | 114                 | 120          | 11.81                           | 11.49        | 2.97  | -1.54       |
| 5 South Okanagan             | 234                 | 273          | 13.11                           | 13.72        | 9.21  | 2.64        |
| 6 South Central              | 123                 | 136          | 11.30                           | 11.94        | 5.91  | 3.20        |
| 7 Upper Fraser Valley        | 208                 | 236          | 13.33                           | 13.85        | 7.48  | 2.21        |
| 8 Central Fraser Valley      | 233                 | 253          | 13.22                           | 13.32        | 4.82  | 0.46        |
| 9 Boundary                   | 413                 | 439          | 11.76                           | 11.64        | 3.55  | -0.56       |
| 10 Simon Fraser              | 264                 | 288          | 14.39                           | 14.54        | 5.10  | 0.60        |
| 11 Coast Garibaldi           | 63                  | 64           | 10.56                           | 10.13        | 0.90  | -2.35       |
| 13 Central Vancouver Island  | 316                 | 315          | 16.29                           | 15.23        | -0.18   | -3.78       |
| 14 Upper Island              | 141                 | 159          | 14.57                           | 15.56        | 7.11  | 3.85        |
| 15 Cariboo                   | 71                  | 77           | 10.96                           | 11.70        | 4.74  | 3.81        |
| 16 Skeena                    | 75                  | 75           | 9.03                            | 8.86         | 0.00  | -1.07       |
| 17 Peace River               | 47                  | 48           | 8.04                            | 8.14         | 1.21  | 0.76        |
| 18 Northern Interior         | 159                 | 187          | 13.96                           | 16.16        | 9.71  | 8.70        |
| 20 Vancouver                 | 356                 | 361          | 7.45                            | 7.33         | 0.80  | -0.91       |
| 30 Burnaby                   | 159                 | 155          | 10.01                           | 9.35         | -1.45   | -3.80       |
| 40 North Shore               | 162                 | 166          | 10.23                           | 10.08        | 1.40  | -0.83       |
| 50 Richmond                  | 148                 | 145          | 11.69                           | 10.96        | -1.16   | -3.63       |
| 60 Capital Regional District | 379                 | 382          | 12.64                           | 12.26        | 0.45  | -1.75       |
| <b>TOTAL</b>                 | <b>3,845</b>        | <b>4,067</b> | <b>11.71</b>                    | <b>11.75</b> | <b>3.26</b>                                   | <b>0.20</b> |

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

<sup>2</sup> Excludes 40 certified dental assistants with unknown address in 1993 and 11 certified dental assistants with unknown address in 1991.

<sup>3</sup> Rate of change (in percent) in the number and in the number per 10,000 population.

**Table 2**  
**Certified Dental Assistants in British Columbia**  
**by Health Region by Age<sup>1</sup>**  
**October 1993**

| Health Region                | < 25       | 25-34        | 35-44      | 45-54     | 55-64    | Subtotal     | Unknown      | Total        |
|------------------------------|------------|--------------|------------|-----------|----------|--------------|--------------|--------------|
| 1 East Kootenay              | 16         | 34           | 6          | 1         | 0        | 57           | 24           | 81           |
| 2 Central Kootenay           | 20         | 38           | 9          | 1         | 0        | 68           | 39           | 107          |
| 4 North Okanagan             | 11         | 37           | 16         | 4         | 0        | 68           | 52           | 120          |
| 5 South Okanagan             | 50         | 91           | 38         | 1         | 0        | 180          | 93           | 273          |
| 6 South Central              | 17         | 50           | 16         | 1         | 0        | 84           | 52           | 136          |
| 7 Upper Fraser Valley        | 48         | 88           | 26         | 1         | 0        | 163          | 73           | 236          |
| 8 Central Fraser Valley      | 32         | 79           | 24         | 1         | 0        | 136          | 117          | 253          |
| 9 Boundary                   | 63         | 138          | 40         | 5         | 0        | 246          | 193          | 439          |
| 10 Simon Fraser              | 39         | 90           | 26         | 7         | 0        | 162          | 126          | 288          |
| 11 Coast Garibaldi           | 3          | 18           | 7          | 2         | 0        | 30           | 34           | 64           |
| 13 Central Vancouver Island  | 34         | 99           | 33         | 4         | 2        | 172          | 143          | 315          |
| 14 Upper Island              | 20         | 44           | 13         | 2         | 0        | 79           | 80           | 159          |
| 15 Cariboo                   | 12         | 33           | 5          | 1         | 0        | 51           | 26           | 77           |
| 16 Skeena                    | 5          | 22           | 10         | 3         | 0        | 40           | 35           | 75           |
| 17 Peace River               | 7          | 16           | 5          | 0         | 0        | 28           | 20           | 48           |
| 18 Northern Interior         | 27         | 52           | 23         | 1         | 0        | 103          | 84           | 187          |
| 20 Vancouver                 | 54         | 143          | 30         | 5         | 0        | 232          | 129          | 361          |
| 30 Burnaby                   | 27         | 58           | 11         | 1         | 0        | 97           | 58           | 155          |
| 40 North Shore               | 17         | 52           | 12         | 3         | 0        | 84           | 82           | 166          |
| 50 Richmond                  | 15         | 53           | 12         | 3         | 1        | 84           | 61           | 145          |
| 60 Capital Regional District | 69         | 138          | 29         | 5         | 0        | 241          | 141          | 382          |
| <b>TOTAL</b>                 | <b>586</b> | <b>1,373</b> | <b>391</b> | <b>52</b> | <b>3</b> | <b>2,405</b> | <b>1,662</b> | <b>4,067</b> |

<sup>1</sup> At the date of record, registration included 4045 females, 10 males and 12 certified dental assistants with no gender information.

**Table 3**  
**Analysis of Change in the Number of Certified Dental Assistants**  
**in British Columbia by Health Region**  
**December 1991 to October 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |          |            | Reactivation <sup>3</sup> | Attrition* | Net Intra-provincial Migration | October 1993 |
|------------------------------|----------------------------|---|--------------|---------------|----------|------------|---------------------------|------------|--------------------------------|--------------|
|                              |                            | B.C.  | Other Canada | Other Country | Unknown  | Subtotal   |                           |            |                                |              |
| 1 East Kootenay              | 86                         | 9   | 0            | 0             | 0        | 9          | 2                         | 18         | 2                              | 81           |
| 2 Central Kootenay           | 94                         | 13  | 2            | 2             | 0        | 17         | 6                         | 14         | 4                              | 107          |
| 4 North Okanagan             | 114                        | 12  | 2            | 1             | 0        | 15         | 2                         | 11         | 0                              | 120          |
| 5 South Okanagan             | 234                        | 48  | 2            | 4             | 0        | 54         | 15                        | 28         | -2                             | 273          |
| 6 South Central              | 123                        | 14  | 0            | 0             | 0        | 14         | 2                         | 14         | 11                             | 136          |
| 7 Upper Fraser Valley        | 208                        | 33  | 1            | 4             | 0        | 38         | 11                        | 27         | 6                              | 236          |
| 8 Central Fraser Valley      | 233                        | 17  | 1            | 7             | 0        | 25         | 11                        | 29         | 13                             | 253          |
| 9 Boundary                   | 413                        | 43  | 3            | 8             | 0        | 54         | 17                        | 47         | 2                              | 439          |
| 10 Simon Fraser              | 264                        | 34  | 2            | 1             | 0        | 37         | 11                        | 31         | 7                              | 288          |
| 11 Coast Garibaldi           | 63                         | 3   | 0            | 0             | 0        | 3          | 2                         | 5          | 1                              | 64           |
| 13 Central Vancouver Island  | 316                        | 27  | 0            | 0             | 0        | 27         | 8                         | 50         | 14                             | 315          |
| 14 Upper Island              | 141                        | 15  | 1            | 0             | 0        | 16         | 9                         | 16         | 9                              | 159          |
| 15 Cariboo                   | 71                         | 9   | 1            | 0             | 0        | 10         | 1                         | 8          | 3                              | 77           |
| 16 Skeena                    | 75                         | 7   | 0            | 0             | 0        | 7          | 4                         | 5          | -6                             | 75           |
| 17 Peace River               | 47                         | 6   | 1            | 0             | 0        | 7          | 1                         | 6          | -1                             | 48           |
| 18 Northern Interior         | 159                        | 32  | 0            | 0             | 0        | 32         | 10                        | 11         | -3                             | 187          |
| 20 Vancouver                 | 356                        | 45  | 1            | 7             | 1        | 54         | 17                        | 32         | -34                            | 361          |
| 30 Burnaby                   | 159                        | 13  | 0            | 0             | 0        | 13         | 7                         | 24         | 0                              | 155          |
| 40 North Shore               | 162                        | 10  | 1            | 0             | 0        | 11         | 8                         | 15         | 0                              | 166          |
| 50 Richmond                  | 148                        | 16  | 0            | 1             | 0        | 17         | 7                         | 13         | -14                            | 145          |
| 60 Capital Regional District | 379                        | 61  | 1            | 1             | 0        | 63         | 7                         | 55         | -12                            | 382          |
| <b>TOTAL</b>                 | <b>3,845</b>               | <b>467</b>  | <b>19</b>    | <b>36</b>     | <b>1</b> | <b>523</b> | <b>158</b>                | <b>459</b> | <b>0</b>                       | <b>4,067</b> |

<sup>1</sup> Certified dental assistants who reported B.C. addresses and were registered in October 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

<sup>3</sup> Certified dental assistants who reported B.C. addresses and were registered in October 1993 but not in December 1991 and who were registered for the first time before December 1991.

\* Certified dental assistants who reported B.C. addresses and were registered in December 1991 but not in October 1993.



## DENTAL HYGIENISTS

**Definition:** A dental hygienist (dental auxiliary - level III)

... in addition to those duties and procedures which a certified dental assistant (dental auxiliary - level II) may perform<sup>1</sup>, may be delegated the following duties and procedures under the direction of a duly licensed member of the College of Dental Surgeons of British Columbia:

- (a) examining the head and neck as it pertains to dentistry;
- (b) examining the intra-oral structures;
- (c) placing and removing temporary restorations;
- (d) applying periodontal dressings;
- (e) removing supra and subgingival calculus;
- (f) root planing;
- (g) recontouring existing restorations;
- (h) desensitising hypersensitive teeth;
- (i) administering local anaesthetics but only after the completion of approved training to the satisfaction of the general examination committee, and only while a duly licensed member is present and immediately available in the office.<sup>2</sup>

**Enabling Statute:** Dentists Act, Revised Statutes of British Columbia, 1979, Chapter 92; Health Statutes Amendment Act, 1990, Chapter 51, Sections 4-5; administered by the Ministry of Health.

**Governing Body:** The College of Dental Surgeons of British Columbia (CDSBC). In order to practise as a dental hygienist in British Columbia, it is necessary to be registered by the CDSBC and to hold a valid licence or permit.

**Date of Record:** December 1991 and October 1993.

**Source of Data:** The College of Dental Surgeons of British Columbia (CDSBC) and the Health Human Resources Unit (HHRU) survey.

### Preparation and Updating:

The tables were prepared from registration data maintained by the CDSBC and from a mail survey conducted by HHRU. They include dental hygienists who reported a British Columbia address at the date of record. The overall response rate to the HHRU survey was 61 percent. Data presented in the tables are based on home address for the majority of dental hygienists. Precise percentages of home vs. employment or other address are not known.

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<sup>1</sup> *Regulations of The College of Dental Surgeons of British Columbia, Auxiliary Bodies*, revised June 1988, Articles 10.16, 10.17 and 10.19. See also *National Occupational Classification 1992*, Major Group 32, No. 3222, Ottawa; Employment and Immigration Canada.

<sup>2</sup> *Ibid.*, Article 10.20.

## **Definition of Terms:**

### **1. Dental Hygienists**

Tables 1a and 1b report the number and number per 10,000 population of dental hygienists who are licensed to practise or who have permits to practise as dental hygienists in British Columbia. Table 1c reports the average annual rates of change in these figures. The On-Permit category in the tables includes dental public health hygienists and conditionally registered hygienists who are qualified to practise as dental hygienists, except that they are not authorised to administer local anaesthesia. All information presented in Tables 1a, 1b, and 1c derive from CDSBC data.

### **2. Age and Sex**

Age and sex information for dental hygienists are derived from data maintained by the CDSBC and from the HHRU survey where CDSBC data were missing and are shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### **3. Employment Status**

Employment information on dental hygienists is derived from a survey by the HHRU and is provided in Table 3. The categories shown in the table are:

- (a) Employed in dental hygiene only;
- (b) Employed in dental hygiene and in other field;
- (c) On leave from dental hygiene;
- (d) Employed in other field;
- (e) Not employed.

### **4. Principal Employer**

Information on type of principal employer is derived from a survey by the HHRU and is reported in Table 4. The categories shown in the table are:

- (a) Solo Practice;
  - (i) General Dentist
  - (ii) Specialist
- (b) Group Practice;
  - (i) General Dentist
  - (ii) Specialist
  - (iii) General Dentist/Specialist
- (c) Community health agency;
- (d) Post-secondary educational institution;
- (e) Other.

### **5. Principal Area of Responsibility**

Information on area of responsibility for dental hygienists' principal employment position is derived from a survey by the HHRU and is reported in Table 5. The categories used in the table are:

- (a) Clinical service;
- (b) Community dental health;
- (c) Instruction in dental hygiene;
- (d) Instruction in dental assisting;
- (e) Administration;
- (f) Consulting services;
- (g) Other.

## 6. Analysis of Change

Table 6 illustrates the sources of change which affected the stock of dental hygienists from 1991 to 1993, using data from the CDSBC.

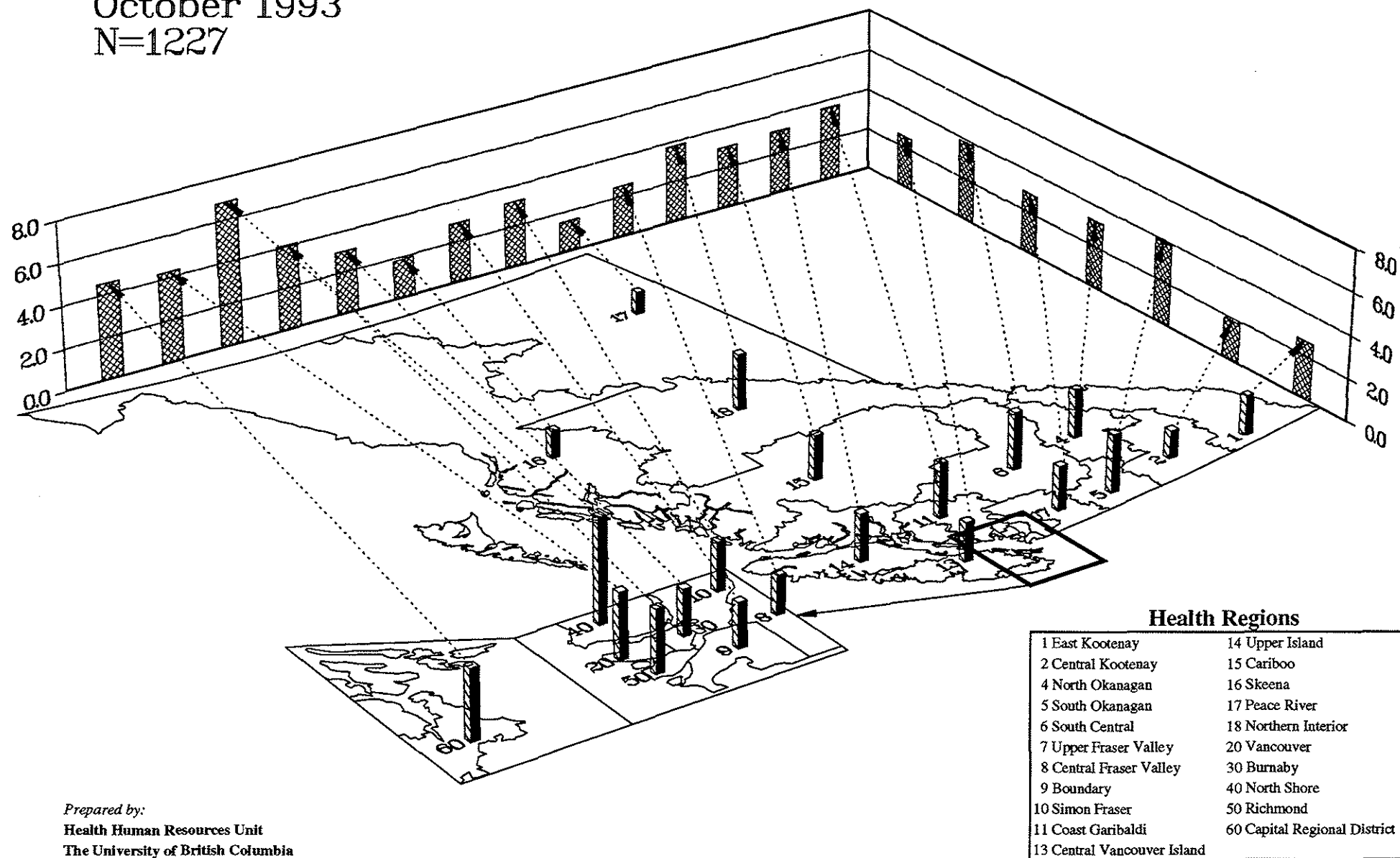
*New registrants* are dental hygienists included in the October 1993 stock who registered with the CDSBC *for the first time* subsequent to December 1991. They are reported in the table according to their place of graduation: i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent dental hygienists who were not licensed or on-permit in British Columbia in December 1991, but were licensed or on-permit in the province in October 1993, and whose date of initial registration was before December 1991. Also included as reactivations are licensed or on-permit dental hygienists who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in October 1993.

*Attrition* describes dental hygienists who were included in the December 1991 stock but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of licence or permit, were not included in the October 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of dental hygienists between different Health Regions. The net migration total is therefore zero.

# Dental Hygienists per 10,000 Population by Health Region October 1993 N=1227



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1a**  
**Dental Hygienists in British Columbia**  
**by Health Region by Registration Category**  
**December 1991 and October 1993<sup>1</sup>**

| Health Region                | Licensed          |              | On Permit |            | Total      |              |
|------------------------------|-------------------|--------------|-----------|------------|------------|--------------|
|                              | 1991 <sup>2</sup> | 1993         | 1991      | 1993       | 1991       | 1993         |
| 1 East Kootenay              | 13                | 16           | 2         | 3          | 15         | 19           |
| 2 Central Kootenay           | 7                 | 10           | 0         | 4          | 7          | 14           |
| 4 North Okanagan             | 22                | 29           | 3         | 5          | 25         | 34           |
| 5 South Okanagan             | 55                | 75           | 3         | 3          | 58         | 78           |
| 6 South Central              | 32                | 40           | 0         | 4          | 32         | 44           |
| 7 Upper Fraser Valley        | 28                | 42           | 3         | 8          | 31         | 50           |
| 8 Central Fraser Valley      | 36                | 46           | 4         | 2          | 40         | 48           |
| 9 Boundary                   | 89                | 105          | 9         | 5          | 98         | 110          |
| 10 Simon Fraser              | 47                | 54           | 2         | 10         | 49         | 64           |
| 11 Coast Garibaldi           | 17                | 22           | 0         | 1          | 17         | 23           |
| 13 Central Vancouver Island  | 43                | 49           | 2         | 4          | 45         | 53           |
| 14 Upper Island              | 21                | 29           | 1         | 3          | 22         | 32           |
| 15 Cariboo                   | 15                | 18           | 1         | 2          | 16         | 20           |
| 16 Skeena                    | 13                | 14           | 2         | 2          | 15         | 16           |
| 17 Peace River               | 6                 | 8            | 0         | 1          | 6          | 9            |
| 18 Northern Interior         | 31                | 44           | 0         | 0          | 31         | 44           |
| 20 Vancouver                 | 169               | 188          | 21        | 23         | 190        | 211          |
| 30 Burnaby                   | 30                | 41           | 4         | 9          | 34         | 50           |
| 40 North Shore               | 87                | 112          | 4         | 1          | 91         | 113          |
| 50 Richmond                  | 44                | 50           | 3         | 4          | 47         | 54           |
| 60 Capital Regional District | 103               | 133          | 13        | 8          | 116        | 141          |
| <b>TOTAL</b>                 | <b>908</b>        | <b>1,125</b> | <b>77</b> | <b>102</b> | <b>985</b> | <b>1,227</b> |

<sup>1</sup> Excludes 8 dental hygienists with unknown address.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

**Table 1b**  
**Dental Hygienists in British Columbia**  
**per 10,000 Population by Health Region by Registration Category**  
**December 1991 and October 1993<sup>1</sup>**

| Health Region                | Licensed    |             | On Permit   |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              | 1991        | 1993        | 1991        | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 1.87        | 2.27        | 0.29        | 0.43        | 2.16        | 2.69        |
| 2 Central Kootenay           | 0.97        | 1.34        | 0.00        | 0.54        | 0.97        | 1.88        |
| 4 North Okanagan             | 2.28        | 2.78        | 0.31        | 0.48        | 2.59        | 3.26        |
| 5 South Okanagan             | 3.08        | 3.77        | 0.17        | 0.15        | 3.25        | 3.92        |
| 6 South Central              | 2.94        | 3.51        | 0.00        | 0.35        | 2.94        | 3.86        |
| 7 Upper Fraser Valley        | 1.79        | 2.46        | 0.19        | 0.47        | 1.99        | 2.93        |
| 8 Central Fraser Valley      | 2.04        | 2.42        | 0.23        | 0.11        | 2.27        | 2.53        |
| 9 Boundary                   | 2.53        | 2.78        | 0.26        | 0.13        | 2.79        | 2.92        |
| 10 Simon Fraser              | 2.56        | 2.73        | 0.11        | 0.50        | 2.67        | 3.23        |
| 11 Coast Garibaldi           | 2.85        | 3.48        | 0.00        | 0.16        | 2.85        | 3.64        |
| 13 Central Vancouver Island  | 2.22        | 2.37        | 0.10        | 0.19        | 2.32        | 2.56        |
| 14 Upper Island              | 2.17        | 2.84        | 0.10        | 0.29        | 2.27        | 3.13        |
| 15 Cariboo                   | 2.32        | 2.73        | 0.15        | 0.30        | 2.47        | 3.04        |
| 16 Skeena                    | 1.57        | 1.65        | 0.24        | 0.24        | 1.81        | 1.89        |
| 17 Peace River               | 1.03        | 1.36        | 0.00        | 0.17        | 1.03        | 1.53        |
| 18 Northern Interior         | 2.72        | 3.80        | 0.00        | 0.00        | 2.72        | 3.80        |
| 20 Vancouver                 | 3.54        | 3.82        | 0.44        | 0.47        | 3.98        | 4.29        |
| 30 Burnaby                   | 1.89        | 2.47        | 0.25        | 0.54        | 2.14        | 3.02        |
| 40 North Shore               | 5.49        | 6.80        | 0.25        | 0.06        | 5.75        | 6.86        |
| 50 Richmond                  | 3.47        | 3.78        | 0.24        | 0.30        | 3.71        | 4.08        |
| 60 Capital Regional District | 3.44        | 4.27        | 0.43        | 0.26        | 3.87        | 4.53        |
| <b>TOTAL</b>                 | <b>2.76</b> | <b>3.25</b> | <b>0.23</b> | <b>0.29</b> | <b>3.00</b> | <b>3.54</b> |

<sup>1</sup> Excludes 8 dental hygienists with unknown address.

**Table 1c**  
**Average Annual Rate of Change: Dental Hygienists in British Columbia**  
**by Health Region by Registration Category**  
**December 1991 to October 1993**

| Health Region                | Licensed            |                    | On Permit           |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | 12.60               | 11.67              | *                   | *                  | 14.46               | 13.52              |
| 2 Central Kootenay           | *                   | *                  | *                   | *                  | *                   | *                  |
| 4 North Okanagan             | 17.10               | 11.96              | *                   | *                  | 19.21               | 13.98              |
| 5 South Okanagan             | 19.39               | 12.21              | *                   | *                  | 18.45               | 11.32              |
| 6 South Central              | 13.60               | 10.69              | *                   | *                  | 19.96               | 16.89              |
| 7 Upper Fraser Valley        | 26.07               | 19.89              | *                   | *                  | 31.41               | 24.97              |
| 8 Central Fraser Valley      | 15.04               | 10.25              | *                   | *                  | 10.98               | 6.37               |
| 9 Boundary                   | 9.91                | 5.55               | *                   | *                  | 6.82                | 2.58               |
| 10 Simon Fraser              | 8.26                | 3.62               | *                   | *                  | 16.49               | 11.50              |
| 11 Coast Garibaldi           | 15.87               | 12.14              | *                   | *                  | 18.85               | 15.02              |
| 13 Central Vancouver Island  | 7.75                | 3.87               | *                   | *                  | 9.80                | 5.84               |
| 14 Upper Island              | 20.25               | 16.60              | *                   | *                  | 23.88               | 20.11              |
| 15 Cariboo                   | 10.98               | 9.98               | *                   | *                  | 13.60               | 12.58              |
| 16 Skeena                    | 4.33                | 3.20               | *                   | *                  | 3.76                | 2.64               |
| 17 Peace River               | *                   | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | 22.15               | 21.03              | *                   | *                  | 22.15               | 21.03              |
| 20 Vancouver                 | 6.28                | 4.47               | 5.34                | 3.54               | 6.17                | 4.37               |
| 30 Burnaby                   | 19.54               | 16.69              | *                   | *                  | 24.65               | 21.68              |
| 40 North Shore               | 15.53               | 12.98              | *                   | *                  | 13.17               | 10.68              |
| 50 Richmond                  | 7.58                | 4.89               | *                   | *                  | 8.26                | 5.56               |
| 60 Capital Regional District | 15.73               | 13.20              | -24.23              | -25.88             | 11.80               | 9.35               |
| <b>TOTAL</b>                 | <b>13.03</b>        | <b>9.68</b>        | <b>17.43</b>        | <b>13.95</b>       | <b>13.38</b>        | <b>10.02</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Dental Hygienists in British Columbia**  
**by Health Region by Age and Sex**  
**October 1993**

| Health Region                | < 25     |           | 25-34     |            | 35-44    |            | 45-54    |           | 55-64    |          | 65 +     |          | Subtotal  |              | Unknown    | Total        |
|------------------------------|----------|-----------|-----------|------------|----------|------------|----------|-----------|----------|----------|----------|----------|-----------|--------------|------------|--------------|
|                              | M        | F         | M         | F          | M        | F          | M        | F         | M        | F        | M        | F        | M         | F            |            |              |
| 1 East Kootenay              | 0        | 3         | 0         | 7          | 2        | 5          | 0        | 2         | 0        | 0        | 0        | 0        | 2         | 17           | 0          | 19           |
| 2 Central Kootenay           | 0        | 0         | 0         | 4          | 0        | 8          | 0        | 1         | 0        | 0        | 0        | 0        | 0         | 13           | 1          | 14           |
| 4 North Okanagan             | 0        | 2         | 0         | 18         | 0        | 9          | 0        | 4         | 0        | 0        | 0        | 0        | 0         | 33           | 1          | 34           |
| 5 South Okanagan             | 0        | 4         | 2         | 34         | 1        | 22         | 1        | 7         | 1        | 0        | 0        | 0        | 5         | 67           | 6          | 78           |
| 6 South Central              | 0        | 3         | 2         | 21         | 0        | 13         | 0        | 2         | 0        | 0        | 0        | 0        | 2         | 39           | 3          | 44           |
| 7 Upper Fraser Valley        | 0        | 4         | 1         | 22         | 1        | 9          | 0        | 2         | 0        | 0        | 0        | 0        | 2         | 37           | 11         | 50           |
| 8 Central Fraser Valley      | 0        | 4         | 0         | 17         | 1        | 20         | 0        | 1         | 0        | 0        | 0        | 0        | 1         | 42           | 5          | 48           |
| 9 Boundary                   | 0        | 2         | 0         | 46         | 0        | 35         | 0        | 9         | 0        | 1        | 1        | 0        | 1         | 93           | 16         | 110          |
| 10 Simon Fraser              | 0        | 6         | 0         | 37         | 0        | 14         | 0        | 2         | 0        | 0        | 0        | 0        | 0         | 59           | 5          | 64           |
| 11 Coast Garibaldi           | 0        | 0         | 0         | 7          | 0        | 9          | 0        | 4         | 0        | 0        | 0        | 1        | 0         | 21           | 2          | 23           |
| 13 Central Vancouver Island  | 0        | 4         | 2         | 15         | 0        | 19         | 0        | 7         | 0        | 0        | 0        | 0        | 2         | 45           | 6          | 53           |
| 14 Upper Island              | 0        | 1         | 0         | 16         | 0        | 10         | 1        | 2         | 0        | 0        | 0        | 0        | 1         | 29           | 2          | 32           |
| 15 Cariboo                   | 0        | 2         | 1         | 10         | 0        | 5          | 0        | 0         | 0        | 0        | 0        | 0        | 1         | 17           | 2          | 20           |
| 16 Skeena                    | 0        | 1         | 0         | 11         | 0        | 2          | 0        | 0         | 0        | 0        | 0        | 0        | 0         | 14           | 2          | 16           |
| 17 Peace River               | 0        | 1         | 0         | 4          | 0        | 2          | 0        | 2         | 0        | 0        | 0        | 0        | 0         | 9            | 0          | 9            |
| 18 Northern Interior         | 0        | 8         | 0         | 22         | 0        | 12         | 1        | 0         | 0        | 0        | 0        | 0        | 1         | 42           | 1          | 44           |
| 20 Vancouver                 | 1        | 12        | 5         | 112        | 1        | 48         | 0        | 10        | 1        | 2        | 0        | 0        | 8         | 184          | 19         | 211          |
| 30 Burnaby                   | 0        | 8         | 0         | 24         | 0        | 11         | 0        | 1         | 0        | 0        | 0        | 0        | 0         | 44           | 6          | 50           |
| 40 North Shore               | 0        | 4         | 0         | 38         | 0        | 37         | 0        | 17        | 0        | 1        | 0        | 0        | 0         | 97           | 16         | 113          |
| 50 Richmond                  | 0        | 2         | 0         | 18         | 1        | 20         | 0        | 5         | 0        | 0        | 0        | 0        | 1         | 45           | 8          | 54           |
| 60 Capital Regional District | 0        | 11        | 0         | 47         | 0        | 51         | 3        | 10        | 0        | 0        | 0        | 1        | 3         | 120          | 18         | 141          |
| <b>TOTAL</b>                 | <b>1</b> | <b>82</b> | <b>13</b> | <b>530</b> | <b>7</b> | <b>361</b> | <b>6</b> | <b>88</b> | <b>2</b> | <b>4</b> | <b>1</b> | <b>2</b> | <b>30</b> | <b>1,067</b> | <b>130</b> | <b>1,227</b> |

**Table 3**  
**Dental Hygienists (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Status**  
**October 1993**

| Health Region                | Employed in Dental Hygiene |                                    |                                 |            | Employed<br>Other Field | Not<br>Employed | Unknown   | Total      |
|------------------------------|----------------------------|------------------------------------|---------------------------------|------------|-------------------------|-----------------|-----------|------------|
|                              | Dental<br>Hygiene<br>Only  | Dental<br>Hygiene &<br>Other Field | Dental<br>Hygiene &<br>On Leave | Subtotal   |                         |                 |           |            |
| 1 East Kootenay              | 11                         | 1                                  | 1                               | 13         | 0                       | 1               | 0         | 14         |
| 2 Central Kootenay           | 9                          | 0                                  | 0                               | 9          | 0                       | 0               | 0         | 9          |
| 4 North Okanagan             | 21                         | 2                                  | 0                               | 23         | 0                       | 1               | 0         | 24         |
| 5 South Okanagan             | 35                         | 1                                  | 1                               | 37         | 1                       | 1               | 0         | 39         |
| 6 South Central              | 24                         | 1                                  | 2                               | 27         | 0                       | 1               | 0         | 28         |
| 7 Upper Fraser Valley        | 18                         | 2                                  | 1                               | 21         | 0                       | 1               | 0         | 22         |
| 8 Central Fraser Valley      | 27                         | 1                                  | 1                               | 29         | 0                       | 0               | 0         | 29         |
| 9 Boundary                   | 50                         | 7                                  | 3                               | 60         | 2                       | 4               | 1         | 67         |
| 10 Simon Fraser              | 37                         | 2                                  | 2                               | 41         | 0                       | 0               | 1         | 42         |
| 11 Coast Garibaldi           | 11                         | 3                                  | 0                               | 14         | 0                       | 2               | 0         | 16         |
| 13 Central Vancouver Island  | 24                         | 4                                  | 1                               | 29         | 1                       | 1               | 0         | 31         |
| 14 Upper Island              | 15                         | 2                                  | 0                               | 17         | 0                       | 1               | 0         | 18         |
| 15 Cariboo                   | 7                          | 0                                  | 1                               | 8          | 0                       | 2               | 1         | 11         |
| 16 Skeena                    | 9                          | 0                                  | 0                               | 9          | 0                       | 1               | 0         | 10         |
| 17 Peace River               | 5                          | 0                                  | 0                               | 5          | 0                       | 1               | 0         | 6          |
| 18 Northern Interior         | 22                         | 4                                  | 2                               | 28         | 0                       | 0               | 0         | 28         |
| 20 Vancouver                 | 79                         | 10                                 | 4                               | 93         | 0                       | 4               | 3         | 100        |
| 30 Burnaby                   | 18                         | 0                                  | 2                               | 20         | 0                       | 2               | 0         | 22         |
| 40 North Shore               | 53                         | 5                                  | 5                               | 63         | 2                       | 3               | 1         | 69         |
| 50 Richmond                  | 30                         | 2                                  | 1                               | 33         | 0                       | 0               | 0         | 33         |
| 60 Capital Regional District | 59                         | 3                                  | 0                               | 62         | 2                       | 3               | 3         | 70         |
| <b>TOTAL</b>                 | <b>564</b>                 | <b>50</b>                          | <b>27</b>                       | <b>641</b> | <b>8</b>                | <b>29</b>       | <b>10</b> | <b>688</b> |

<sup>1</sup> Data for this table are derived from the 1993 Dental Hygienists' Survey.

**Table 4**  
**Dental Hygienists (Survey Respondents)<sup>1</sup> Employed in Dental Hygiene<sup>2</sup>**  
**in British Columbia by Health Region by Principal Type of Employer**  
**October 1993**

| Health Region                | Solo Practice   |            | Group Practice  |            |                     | Community Health Agency | Post-Secondary Educational Institution | Other    | Unknown   | Total      |
|------------------------------|-----------------|------------|-----------------|------------|---------------------|-------------------------|--|----------|-----------|------------|
|                              | General Dentist | Specialist | General Dentist | Specialist | General/ Specialist |                         |  |          |           |            |
| 1 East Kootenay              | 8               | 2          | 1               | 0          | 0                   | 1                       | 0                                      | 0        | 1         | 13         |
| 2 Central Kootenay           | 7               | 0          | 0               | 0          | 0                   | 2                       | 0                                      | 0        | 0         | 9          |
| 4 North Okanagan             | 20              | 0          | 3               | 0          | 0                   | 0                       | 0                                      | 0        | 0         | 23         |
| 5 South Okanagan             | 20              | 2          | 6               | 0          | 2                   | 4                       | 0                                      | 0        | 3         | 37         |
| 6 South Central              | 21              | 0          | 4               | 0          | 0                   | 0                       | 0                                      | 0        | 2         | 27         |
| 7 Upper Fraser Valley        | 17              | 1          | 2               | 0          | 0                   | 0                       | 0                                      | 0        | 1         | 21         |
| 8 Central Fraser Valley      | 15              | 1          | 8               | 0          | 1                   | 2                       | 1                                      | 0        | 1         | 29         |
| 9 Boundary                   | 42              | 1          | 11              | 0          | 0                   | 2                       | 1                                      | 0        | 3         | 60         |
| 10 Simon Fraser              | 29              | 0          | 6               | 1          | 1                   | 1                       | 0                                      | 1        | 2         | 41         |
| 11 Coast Garibaldi           | 8               | 0          | 4               | 0          | 0                   | 2                       | 0                                      | 0        | 0         | 14         |
| 13 Central Vancouver Island  | 12              | 1          | 9               | 0          | 0                   | 3                       | 1                                      | 1        | 2         | 29         |
| 14 Upper Island              | 14              | 0          | 2               | 0          | 0                   | 0                       | 0                                      | 1        | 0         | 17         |
| 15 Cariboo                   | 4               | 0          | 2               | 0          | 1                   | 0                       | 0                                      | 0        | 1         | 8          |
| 16 Skeena                    | 7               | 0          | 2               | 0          | 0                   | 0                       | 0                                      | 0        | 0         | 9          |
| 17 Peace River               | 2               | 1          | 1               | 0          | 0                   | 1                       | 0                                      | 0        | 0         | 5          |
| 18 Northern Interior         | 15              | 0          | 1               | 1          | 0                   | 3                       | 5                                      | 0        | 3         | 28         |
| 20 Vancouver                 | 56              | 8          | 13              | 1          | 5                   | 0                       | 3                                      | 3        | 4         | 93         |
| 30 Burnaby                   | 12              | 0          | 4               | 0          | 0                   | 2                       | 0                                      | 0        | 2         | 20         |
| 40 North Shore               | 38              | 2          | 9               | 0          | 4                   | 1                       | 4                                      | 0        | 5         | 63         |
| 50 Richmond                  | 19              | 2          | 7               | 1          | 0                   | 0                       | 1                                      | 0        | 3         | 33         |
| 60 Capital Regional District | 34              | 3          | 14              | 0          | 0                   | 2                       | 6                                      | 3        | 0         | 62         |
| <b>TOTAL</b>                 | <b>400</b>      | <b>24</b>  | <b>109</b>      | <b>4</b>   | <b>14</b>           | <b>26</b>               | <b>22</b>                              | <b>9</b> | <b>33</b> | <b>641</b> |

<sup>1</sup> Data for this table are derived from the 1993 Dental Hygienists' Survey.

<sup>2</sup> Excludes 8 survey respondents who are employed in other fields, 29 who are not employed and 10 who did not indicate their employment status.

**Table 5**  
**Dental Hygienists (Survey Respondents)<sup>1</sup> Employed in Dental Hygiene<sup>2</sup>**  
**in British Columbia by Health Region by Principal Area of Responsibility**  
**October 1993**

| Health Region                | Clinical<br>Service | Community<br>Dental<br>Health | Instruction<br>in Dental<br>Hygiene | Instruction<br>in Dental<br>Assisting | Admin-<br>istration | Consulting<br>Services | Other    | Unknown   | Total      |
|------------------------------|---------------------|-------------------------------|-------------------------------------|---------------------------------------|---------------------|------------------------|----------|-----------|------------|
| 1 East Kootenay              | 11                  | 1                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 1         | 13         |
| 2 Central Kootenay           | 6                   | 2                             | 1                                   | 0                                     | 0                   | 0                      | 0        | 0         | 9          |
| 4 North Okanagan             | 23                  | 0                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 0         | 23         |
| 5 South Okanagan             | 29                  | 5                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 3         | 37         |
| 6 South Central              | 25                  | 0                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 2         | 27         |
| 7 Upper Fraser Valley        | 19                  | 1                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 1         | 21         |
| 8 Central Fraser Valley      | 25                  | 2                             | 1                                   | 0                                     | 0                   | 0                      | 0        | 1         | 29         |
| 9 Boundary                   | 54                  | 1                             | 1                                   | 0                                     | 1                   | 0                      | 0        | 3         | 60         |
| 10 Simon Fraser              | 37                  | 1                             | 0                                   | 0                                     | 0                   | 0                      | 1        | 2         | 41         |
| 11 Coast Garibaldi           | 12                  | 2                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 0         | 14         |
| 13 Central Vancouver Island  | 23                  | 3                             | 0                                   | 1                                     | 0                   | 1                      | 0        | 1         | 29         |
| 14 Upper Island              | 16                  | 0                             | 1                                   | 0                                     | 0                   | 0                      | 0        | 0         | 17         |
| 15 Cariboo                   | 7                   | 0                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 1         | 8          |
| 16 Skeena                    | 9                   | 0                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 0         | 9          |
| 17 Peace River               | 4                   | 1                             | 0                                   | 0                                     | 0                   | 0                      | 0        | 0         | 5          |
| 18 Northern Interior         | 17                  | 3                             | 4                                   | 0                                     | 1                   | 0                      | 0        | 3         | 28         |
| 20 Vancouver                 | 82                  | 0                             | 4                                   | 0                                     | 2                   | 0                      | 1        | 4         | 93         |
| 30 Burnaby                   | 13                  | 2                             | 3                                   | 0                                     | 0                   | 0                      | 0        | 2         | 20         |
| 40 North Shore               | 51                  | 1                             | 3                                   | 1                                     | 1                   | 0                      | 1        | 5         | 63         |
| 50 Richmond                  | 28                  | 0                             | 1                                   | 0                                     | 1                   | 0                      | 0        | 3         | 33         |
| 60 Capital Regional District | 51                  | 1                             | 7                                   | 0                                     | 3                   | 0                      | 0        | 0         | 62         |
| <b>TOTAL</b>                 | <b>542</b>          | <b>26</b>                     | <b>26</b>                           | <b>2</b>                              | <b>9</b>            | <b>1</b>               | <b>3</b> | <b>32</b> | <b>641</b> |

<sup>1</sup> Data for this table are derived from the 1993 Dental Hygienists' Survey.

<sup>2</sup> Excludes 8 survey respondents who are employed in other fields, 29 who are not employed and 10 who did not indicate their employment status.

**Table 6**  
**Analysis of Change in the Number of Dental Hygienists**  
**in British Columbia by Health Region**  
**December 1991 to October 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |          |            | Reactivation <sup>3</sup> | Attrition* | Net Intra-provincial Migration | October 1993 |
|------------------------------|----------------------------|---|--------------|---------------|----------|------------|---------------------------|------------|--------------------------------|--------------|
|                              |                            | B.C.  | Other Canada | Other Country | Unknown  | Subtotal   |                           |            |                                |              |
| 1 East Kootenay              | 15                         | 0   | 3            | 1             | 0        | 4          | 0                         | 2          | 2                              | 19           |
| 2 Central Kootenay           | 7                          | 0   | 5            | 0             | 0        | 5          | 2                         | 1          | 1                              | 14           |
| 4 North Okanagan             | 25                         | 4   | 5            | 4             | 0        | 13         | 1                         | 2          | -3                             | 34           |
| 5 South Okanagan             | 58                         | 5   | 9            | 2             | 1        | 17         | 2                         | 5          | 6                              | 78           |
| 6 South Central              | 32                         | 4   | 5            | 0             | 0        | 9          | 0                         | 1          | 4                              | 44           |
| 7 Upper Fraser Valley        | 31                         | 5   | 13           | 0             | 0        | 18         | 1                         | 2          | 2                              | 50           |
| 8 Central Fraser Valley      | 40                         | 3   | 5            | 2             | 0        | 10         | 0                         | 2          | 0                              | 48           |
| 9 Boundary                   | 98                         | 7   | 12           | 2             | 0        | 21         | 1                         | 12         | 2                              | 110          |
| 10 Simon Fraser              | 49                         | 5   | 11           | 3             | 0        | 19         | 0                         | 3          | -1                             | 64           |
| 11 Coast Garibaldi           | 17                         | 1   | 2            | 1             | 0        | 4          | 2                         | 1          | 1                              | 23           |
| 13 Central Vancouver Island  | 45                         | 3   | 5            | 0             | 0        | 8          | 0                         | 6          | 6                              | 53           |
| 14 Upper Island              | 22                         | 1   | 7            | 1             | 0        | 9          | 2                         | 3          | 2                              | 32           |
| 15 Cariboo                   | 16                         | 4   | 2            | 1             | 0        | 7          | 1                         | 3          | -1                             | 20           |
| 16 Skeena                    | 15                         | 2   | 1            | 2             | 0        | 5          | 0                         | 2          | -2                             | 16           |
| 17 Peace River               | 6                          | 0   | 2            | 1             | 0        | 3          | 0                         | 1          | 1                              | 9            |
| 18 Northern Interior         | 31                         | 16  | 0            | 0             | 0        | 16         | 0                         | 0          | -3                             | 44           |
| 20 Vancouver                 | 190                        | 20  | 25           | 10            | 0        | 55         | 0                         | 22         | -12                            | 211          |
| 30 Burnaby                   | 34                         | 7   | 12           | 1             | 0        | 20         | 2                         | 3          | -3                             | 50           |
| 40 North Shore               | 91                         | 8   | 9            | 1             | 0        | 18         | 3                         | 6          | 7                              | 113          |
| 50 Richmond                  | 47                         | 3   | 7            | 2             | 0        | 12         | 1                         | 4          | -2                             | 54           |
| 60 Capital Regional District | 116                        | 18  | 15           | 3             | 0        | 36         | 3                         | 7          | -7                             | 141          |
| <b>TOTAL</b>                 | <b>985</b>                 | <b>116</b>  | <b>155</b>   | <b>37</b>     | <b>1</b> | <b>309</b> | <b>21</b>                 | <b>88</b>  | <b>0</b>                       | <b>1,227</b> |

<sup>1</sup> Dental hygienists who reported B.C. addresses and were licensed or on permit in October 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

<sup>3</sup> Dental hygienists who reported B.C. addresses and were licensed or on permit in October 1993 but not in December 1991 and who were registered for the first time before December 1991.

\* Dental hygienists who reported B.C. addresses and were licensed or on permit in December 1991 but not in October 1993.





## DENTAL TECHNICIANS

**Definition:** A dental technician

...prepares and fabricates dentures and dental devices as prescribed by dentists or dental therapists.

Dental technicians perform some or all of the following duties:

- (a) fabricate or repair full or partial dentures, and other dental devices such as bridges, inlays, clasps, and bands;
- (b) train and supervise other dental technicians or dental laboratory bench workers in fabricating dentures and other dental devices;
- (c) perform supervisory and administrative functions for the dental laboratory.<sup>1</sup>

**Governing Statute:** Dental Technicians and Denturists Act, Revised Statutes of British Columbia, 1979, Chapter 91; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 7-10; administered by the Ministry of Health.

**Governing Body:** Dental Technicians and Denturists Board of British Columbia (DTDBBC). In order to practise as a Dental Technician in British Columbia, it is necessary to be licensed by the Dental Technicians and Denturists Board of British Columbia. Registered dental technicians have exclusive use of the titles: *Dental Technician, Certified Dental Technician* and *Registered Dental Technician*.

**Date of Record:** January 1992 and January 1994.

**Source of Data:** Dental Technicians and Denturists Board of British Columbia.

### Preparation and Updating:

The tables, derived from the *Nominal Roll* supplied by the DTDBBC, include information on licensed dental technicians in British Columbia at the date of record. The data presented in these tables are, for the first time, based on employment address rather than home address. Employment address is available for approximately 85% of dental technicians in 1994, but the 1992 data were available only by home address, so numbers of personnel and numbers per 10,000 population for 1992 and average annual rates of change are not presented by individual Health Region. For those who wish to compare numbers, numbers per 10,000 population and average annual rates of change in number of dental technicians by health region, these figures can be calculated using home address for both the 1992 and 1994 data. These data will be available on request.

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3223, Ottawa: Employment and Immigration Canada.

### Definition of Terms:

Tables 1a and 1b present the number and number per 10,000 population of dental technicians in British Columbia at the date of record by registration status. Table 1c shows the average annual rates of change in these numbers for the province as a whole. The registration categories used by the DTDBBC are:

(a) *Registered*

A registered dental technician is licensed by the Dental Technicians and Denturists Board.

(b) *Apprentice*

An apprentice technician is registered by the Dental Technicians and Denturists Board and is licensed to practise under the supervision of a registered dental technician.

(c) *Student*

A student technician is registered by the Dental Technicians and Denturists Board and is licensed to practise under the supervision of a registered dental technician. After 18 months work experience, a student technician is eligible to undertake the certifying exams to become a registered dental technician.

(d) *Temporary*

A temporary registrant has not yet completed his/her registration examinations, but is licensed to practise under the supervision of a registered dental technician. Included in this category are new arrivals to the province.

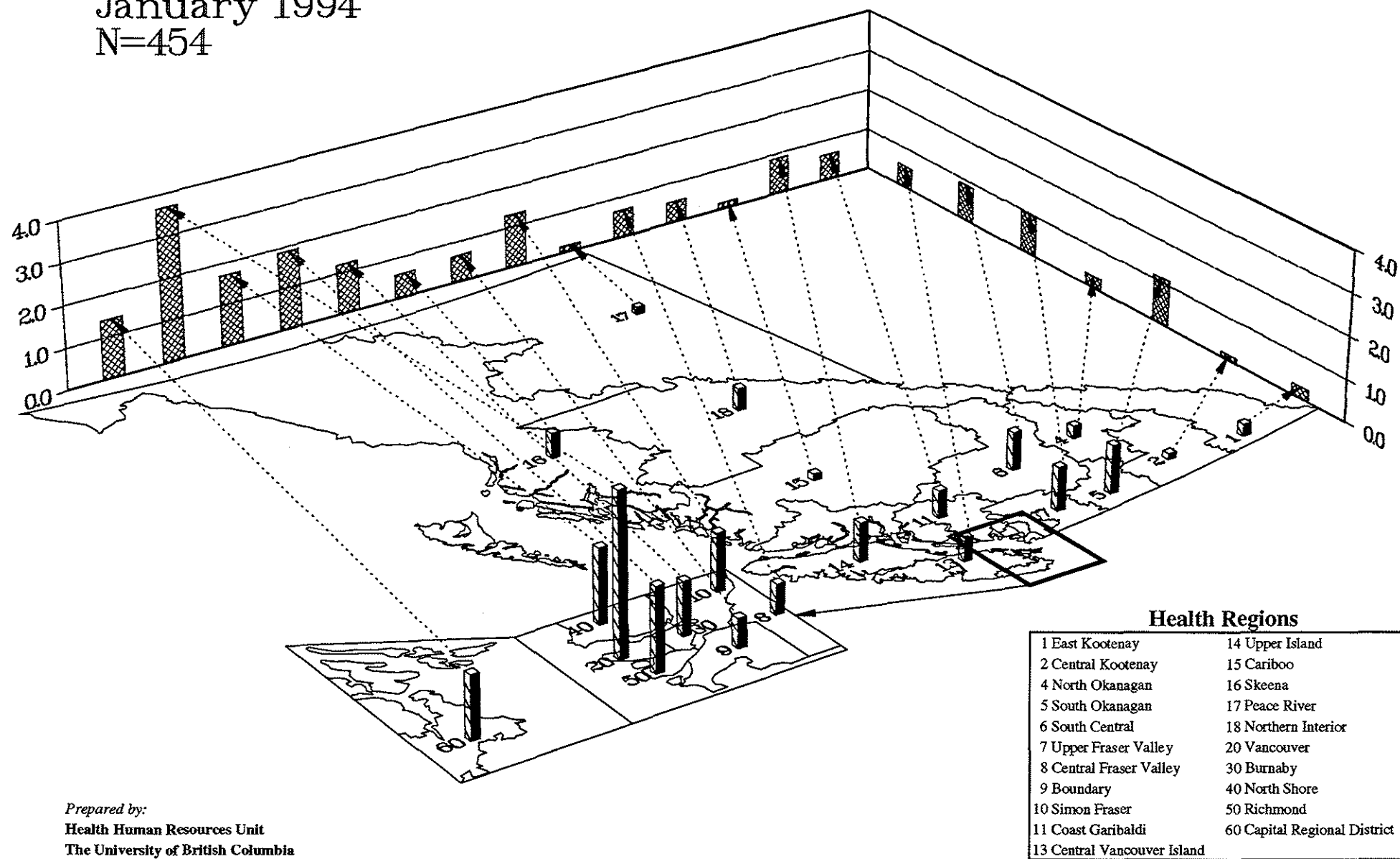
(e) *Non-Practising*

Non-practising membership may be elected by a registered or temporary dental technician who is not currently working in the field. Non-practising status can be taken for a maximum of five years.<sup>2</sup>

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<sup>2</sup>Adapted from information received from the Dental Technicians and Denturists Board of British Columbia.

Registered Dental Technicians  
per 10,000 Population  
by Health Region  
January 1994  
N=454



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Dental Technicians in British Columbia**  
**by Health Region by Licence Category**  
**January 1992<sup>1</sup> and January 1994**

| Health Region                | Registered |            | Temporary |           | Apprentice |          | Student   |           | Non-Practising    |           | Total             |            |
|------------------------------|------------|------------|-----------|-----------|------------|----------|-----------|-----------|-------------------|-----------|-------------------|------------|
|                              | 1992       | 1994       | 1992      | 1994      | 1992       | 1994     | 1992      | 1994      | 1992 <sup>2</sup> | 1994      | 1992 <sup>2</sup> | 1994       |
| 1 East Kootenay              | n/a        | 2          | n/a       | 0         | n/a        | 0        | n/a       | 0         | n/a               | 0         | n/a               | 2          |
| 2 Central Kootenay           | "          | 1          | "         | 0         | "          | 0        | "         | 0         | "                 | 0         | "                 | 1          |
| 4 North Okanagan             | "          | 3          | "         | 1         | "          | 0        | "         | 2         | "                 | 0         | "                 | 6          |
| 5 South Okanagan             | "          | 22         | "         | 0         | "          | 1        | "         | 3         | "                 | 0         | "                 | 26         |
| 6 South Central              | "          | 10         | "         | 0         | "          | 0        | "         | 0         | "                 | 2         | "                 | 12         |
| 7 Upper Fraser Valley        | "          | 17         | "         | 0         | "          | 0        | "         | 3         | "                 | 2         | "                 | 22         |
| 8 Central Fraser Valley      | "          | 13         | "         | 1         | "          | 0        | "         | 2         | "                 | 3         | "                 | 19         |
| 9 Boundary                   | "          | 25         | "         | 4         | "          | 1        | "         | 1         | "                 | 2         | "                 | 33         |
| 10 Simon Fraser              | "          | 26         | "         | 2         | "          | 0        | "         | 1         | "                 | 5         | "                 | 34         |
| 11 Coast Garibaldi           | "          | 4          | "         | 0         | "          | 0        | "         | 0         | "                 | 0         | "                 | 4          |
| 13 Central Vancouver Island  | "          | 11         | "         | 0         | "          | 0        | "         | 0         | "                 | 1         | "                 | 12         |
| 14 Upper Island              | "          | 9          | "         | 0         | "          | 1        | "         | 1         | "                 | 1         | "                 | 12         |
| 15 Cariboo                   | "          | 1          | "         | 0         | "          | 0        | "         | 0         | "                 | 0         | "                 | 1          |
| 16 Skeena                    | "          | 5          | "         | 0         | "          | 0        | "         | 0         | "                 | 0         | "                 | 5          |
| 17 Peace River               | "          | 1          | "         | 0         | "          | 0        | "         | 0         | "                 | 0         | "                 | 1          |
| 18 Northern Interior         | "          | 6          | "         | 0         | "          | 0        | "         | 0         | "                 | 1         | "                 | 7          |
| 20 Vancouver                 | "          | 181        | "         | 12        | "          | 2        | "         | 26        | "                 | 11        | "                 | 232        |
| 30 Burnaby                   | "          | 20         | "         | 4         | "          | 0        | "         | 6         | "                 | 5         | "                 | 35         |
| 40 North Shore               | "          | 28         | "         | 1         | "          | 0        | "         | 5         | "                 | 0         | "                 | 34         |
| 50 Richmond                  | "          | 25         | "         | 1         | "          | 0        | "         | 2         | "                 | 2         | "                 | 30         |
| 60 Capital Regional District | "          | 44         | "         | 3         | "          | 0        | "         | 1         | "                 | 2         | "                 | 50         |
| <b>TOTAL</b>                 | <b>425</b> | <b>454</b> | <b>48</b> | <b>29</b> | <b>8</b>   | <b>5</b> | <b>41</b> | <b>53</b> | <b>17</b>         | <b>37</b> | <b>539</b>        | <b>578</b> |

<sup>1</sup> Dental technician data for 1992 are not available by health region. See attached text.

<sup>2</sup> The total figure for 1992 differs from the corresponding figure for 1992 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

**Table 1b**  
**Dental Technicians in British Columbia**  
**per 10,000 Population by Health Region by Licence Category**  
**January 1992<sup>1</sup> and January 1994**

| Health Region                | Registered  |             | Temporary   |             | Apprentice  |             | Student     |             | Non-Practising |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|
|                              | 1992        | 1994        | 1992        | 1994        | 1992        | 1994        | 1992        | 1994        | 1992           | 1994        | 1992        | 1994        |
| 1 East Kootenay              | n/a         | 0.28        | n/a         | 0.00        | n/a         | 0.00        | n/a         | 0.00        | n/a            | 0.00        | n/a         | 0.28        |
| 2 Central Kootenay           | "           | 0.13        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.00        | "           | 0.13        |
| 4 North Okanagan             | "           | 0.29        | "           | 0.10        | "           | 0.00        | "           | 0.19        | "              | 0.00        | "           | 0.57        |
| 5 South Okanagan             | "           | 1.11        | "           | 0.00        | "           | 0.05        | "           | 0.15        | "              | 0.00        | "           | 1.31        |
| 6 South Central              | "           | 0.88        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.18        | "           | 1.05        |
| 7 Upper Fraser Valley        | "           | 1.00        | "           | 0.00        | "           | 0.00        | "           | 0.18        | "              | 0.12        | "           | 1.29        |
| 8 Central Fraser Valley      | "           | 0.68        | "           | 0.05        | "           | 0.00        | "           | 0.11        | "              | 0.16        | "           | 1.00        |
| 9 Boundary                   | "           | 0.66        | "           | 0.11        | "           | 0.03        | "           | 0.03        | "              | 0.05        | "           | 0.88        |
| 10 Simon Fraser              | "           | 1.31        | "           | 0.10        | "           | 0.00        | "           | 0.05        | "              | 0.25        | "           | 1.72        |
| 11 Coast Garibaldi           | "           | 0.63        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.00        | "           | 0.63        |
| 13 Central Vancouver Island  | "           | 0.53        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.05        | "           | 0.58        |
| 14 Upper Island              | "           | 0.88        | "           | 0.00        | "           | 0.10        | "           | 0.10        | "              | 0.10        | "           | 1.17        |
| 15 Cariboo                   | "           | 0.15        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.00        | "           | 0.15        |
| 16 Skeena                    | "           | 0.59        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.00        | "           | 0.59        |
| 17 Peace River               | "           | 0.17        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.00        | "           | 0.17        |
| 18 Northern Interior         | "           | 0.52        | "           | 0.00        | "           | 0.00        | "           | 0.00        | "              | 0.09        | "           | 0.60        |
| 20 Vancouver                 | "           | 3.68        | "           | 0.24        | "           | 0.04        | "           | 0.53        | "              | 0.22        | "           | 4.71        |
| 30 Burnaby                   | "           | 1.21        | "           | 0.24        | "           | 0.00        | "           | 0.36        | "              | 0.30        | "           | 2.11        |
| 40 North Shore               | "           | 1.70        | "           | 0.06        | "           | 0.00        | "           | 0.30        | "              | 0.00        | "           | 2.06        |
| 50 Richmond                  | "           | 1.89        | "           | 0.08        | "           | 0.00        | "           | 0.15        | "              | 0.15        | "           | 2.27        |
| 60 Capital Regional District | "           | 1.41        | "           | 0.10        | "           | 0.00        | "           | 0.03        | "              | 0.06        | "           | 1.60        |
| <b>TOTAL</b>                 | <b>1.29</b> | <b>1.31</b> | <b>0.15</b> | <b>0.08</b> | <b>0.02</b> | <b>0.01</b> | <b>0.12</b> | <b>0.15</b> | <b>0.05</b>    | <b>0.11</b> | <b>1.64</b> | <b>1.67</b> |

<sup>1</sup> Dental technician data for 1992 are not available by health region. See attached text.

**Table 1c**  
**Average Annual Rate of Change<sup>1</sup>: Dental Technicians in British Columbia**  
**by Health Region by Licence Category**  
**January 1992 to January 1994**

| Health Region                | Registered          |                    | Temporary           |                    | Apprentice          |                    | Student             |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | n/a                 | n/a                | n/a                 | n/a                | n/a                 | n/a                | n/a                 | n/a                | n/a                 | n/a                | n/a                 | n/a                |
| 2 Central Kootenay           | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 4 North Okanagan             | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 5 South Okanagan             | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 6 South Central              | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 7 Upper Fraser Valley        | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 8 Central Fraser Valley      | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 9 Boundary                   | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 10 Simon Fraser              | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 11 Coast Garibaldi           | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 13 Central Vancouver Island  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 14 Upper Island              | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 15 Cariboo                   | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 16 Skeena                    | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 17 Peace River               | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 18 Northern Interior         | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 20 Vancouver                 | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 30 Burnaby                   | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 40 North Shore               | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 50 Richmond                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| 60 Capital Regional District | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  | "                   | "                  |
| <b>TOTAL</b>                 | <b>3.36</b>         | <b>0.67</b>        | <b>-22.27</b>       | <b>-24.29</b>      | <b>*</b>            | <b>*</b>           | <b>13.70</b>        | <b>10.75</b>       | <b>47.53</b>        | <b>43.70</b>       | <b>3.55</b>         | <b>0.87</b>        |

<sup>1</sup> Rate of change for dental technicians is not available by health region. See attached text.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

## DENTISTS

**Definition:** A dentist

...diagnoses and treats disorders of the teeth and mouth.

Dentists perform some or all of the following duties:

- (a) examine patients' teeth, gums, and surrounding tissue to diagnose disease, injury, and decay and plan appropriate treatment;
- (b) restore, extract, and replace diseased and decayed teeth;
- (c) perform oral surgery, periodontal surgery, and other treatments;
- (d) clean teeth and instruct patients on oral hygiene;
- (e) design bridgework, fit dentures and provide appliances to correct abnormal positioning of the teeth and jaws, or write fabrication instructions or prescriptions for use by denturists and dental technicians;
- (f) supervise dental hygienists, dental assistants and other staff.<sup>1</sup>

**Governing Statute:** Dentists Act, Revised Statutes of British Columbia, 1979, Chapter 92; Health Statutes Amendment Act, 1990, Chapter 51, Sections 4-5; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 11-16; administered by the Ministry of Health.

**Governing Body:** The College of Dental Surgeons of British Columbia (CDSBC). In order to practise as a dentist in British Columbia, it is necessary to be registered by the College, and to hold a valid licence or permit under the Act.

**Date of Record:** December 1991 and October 1993.

**Source of Data:** The College of Dental Surgeons of British Columbia (CDSBC).

### **Preparation and Updating:**

The tables were prepared from registration data maintained by the CDSBC and include licensed dentists who reported a British Columbia address at the date of record. Data presented in the tables are based on employment address for the majority of dentists. Precise percentages of home vs. employment or other address are not known.

### **Definition of Terms:**

#### **1. Licensed Dentists**

Tables 1a, 1b, and 1c report licensed dentists based on Non-Specialist and Specialist designations. Since the numbers of dentists in most specialty categories are small, dentists who reported a specialty

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3113, Ottawa: Employment and Immigration Canada.



area have been grouped into the Specialist category in these tables to allow calculation of meaningful population ratio and average annual rates of change figures.

## 2. Age and Sex

Age and sex information on licensed dentists in British Columbia, derived from CDSBC registration information, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

## 3. Specialty

In Table 3, licensed dentists are allocated to the specialty area in which they have been certified by the College of Dental Surgeons. Dentists who are certified in more than one specialty are allocated to the specialty in which they were most recently certified, and changes in the method of allocation may affect the numbers of specialists in various categories for the 1991 data. The categories used in the table are:

- (a) Endodontics;
- (b) Oral and Maxillofacial Surgery;
- (c) Orthodontics;
- (d) Paediatric Dentistry;
- (e) Periodontics;
- (f) Prosthodontics;
- (g) Oral Pathology;
- (h) Oral Radiology;
- (i) Non-specialist.

## 4. Analysis of Change

Table 4 illustrates the sources of change which affected the stock of dentists from 1991 to 1993.

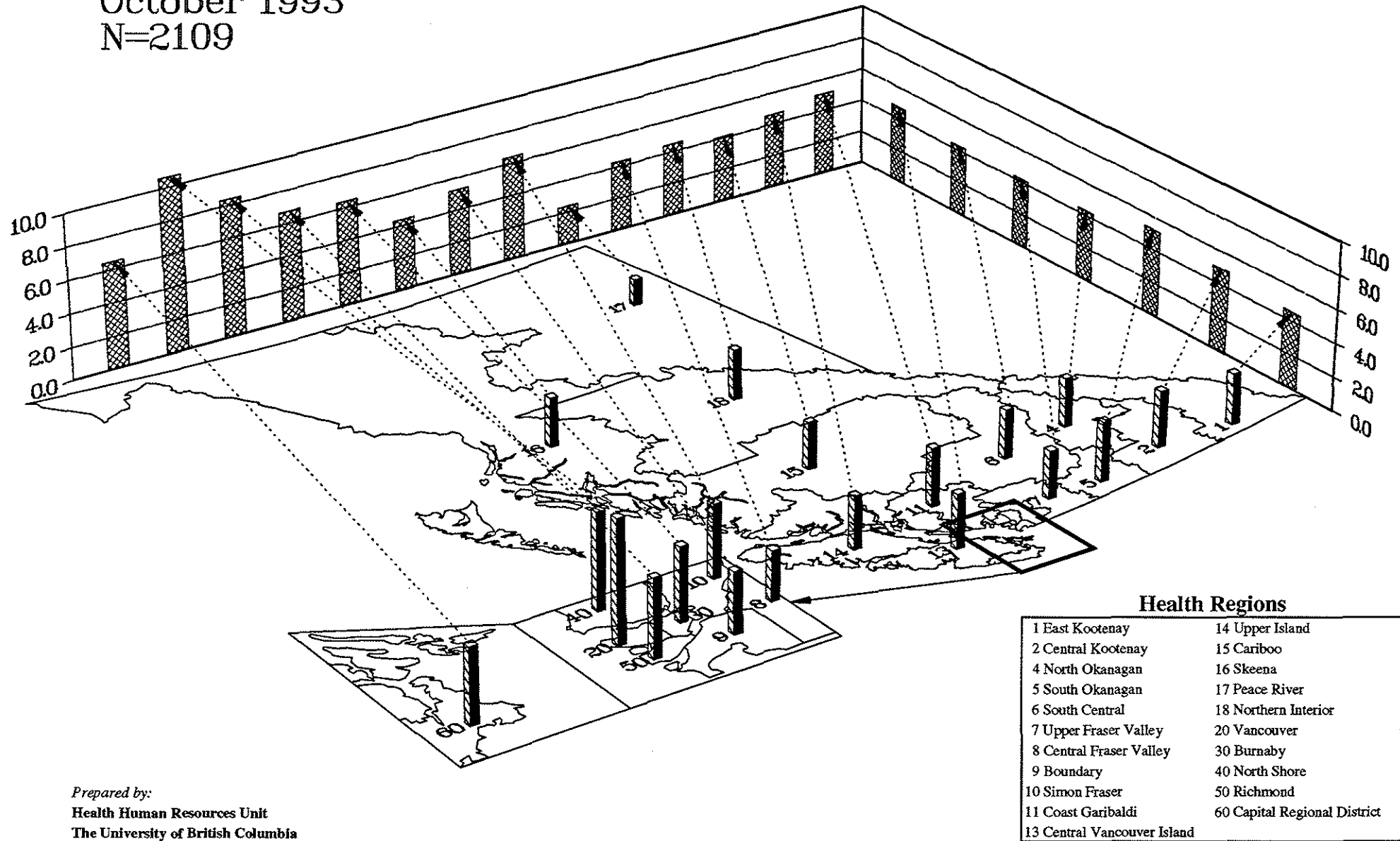
*New registrants* are dentists included in the October 1993 stock who registered with the CDSBC for the first time subsequent to December 1991. They are reported in the table according to their place of graduation: i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent dentists who were not licensed in British Columbia in December 1991, but were licensed in the province in October 1993, and whose date of initial registration was before December 1991. Also included as reactivations are licensed dentists who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in October 1993.

*Attrition* describes dentists who were included in the December 1991 stock but who, because of death, retirement, suspension, out-of-province relocation, or non-renewal of licence, were not included in the October 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of dentists between different Health Regions. The net migration total is therefore zero.

Licensed Dentists  
per 10,000 Population  
by Health Region  
October 1993  
N=2109



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Licensed Dentists in British Columbia**  
**by Health Region by Specialist and Non-Specialist**  
**December 1991 and October 1993**

| Health Region                | Non-Specialist    |              | Specialist |            | Total             |              |
|------------------------------|-------------------|--------------|------------|------------|-------------------|--------------|
|                              | 1991 <sup>1</sup> | 1993         | 1991       | 1993       | 1991 <sup>1</sup> | 1993         |
| 1 East Kootenay              | 28                | 31           | 1          | 1          | 29                | 32           |
| 2 Central Kootenay           | 36                | 37           | 0          | 0          | 36                | 37           |
| 4 North Okanagan             | 39                | 41           | 4          | 4          | 43                | 45           |
| 5 South Okanagan             | 79                | 94           | 11         | 10         | 90                | 104          |
| 6 South Central              | 45                | 47           | 2          | 2          | 47                | 49           |
| 7 Upper Fraser Valley        | 64                | 68           | 3          | 3          | 67                | 71           |
| 8 Central Fraser Valley      | 70                | 78           | 3          | 4          | 73                | 82           |
| 9 Boundary                   | 169               | 184          | 12         | 15         | 181               | 199          |
| 10 Simon Fraser              | 105               | 112          | 13         | 15         | 118               | 127          |
| 11 Coast Garibaldi           | 29                | 32           | 0          | 0          | 29                | 32           |
| 13 Central Vancouver Island  | 85                | 92           | 5          | 6          | 90                | 98           |
| 14 Upper Island              | 43                | 44           | 2          | 3          | 45                | 47           |
| 15 Cariboo                   | 22                | 25           | 2          | 2          | 24                | 27           |
| 16 Skeena                    | 32                | 35           | 1          | 2          | 33                | 37           |
| 17 Peace River               | 15                | 13           | 1          | 1          | 16                | 14           |
| 18 Northern Interior         | 45                | 49           | 2          | 3          | 47                | 52           |
| 20 Vancouver                 | 446               | 442          | 78         | 80         | 524               | 522          |
| 30 Burnaby                   | 96                | 97           | 8          | 9          | 104               | 106          |
| 40 North Shore               | 114               | 125          | 15         | 13         | 129               | 138          |
| 50 Richmond                  | 68                | 80           | 7          | 9          | 75                | 89           |
| 60 Capital Regional District | 174               | 175          | 23         | 26         | 197               | 201          |
| <b>TOTAL</b>                 | <b>1,804</b>      | <b>1,901</b> | <b>193</b> | <b>208</b> | <b>1,997</b>      | <b>2,109</b> |

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

**Table 1b**  
**Licensed Dentists in British Columbia**  
**per 10,000 Population by Health Region by Specialist and Non-Specialist**  
**December 1991 and October 1993**

| Health Region                | Non-Specialist |             | Specialist  |             | Total       |             |
|------------------------------|----------------|-------------|-------------|-------------|-------------|-------------|
|                              | 1991           | 1993        | 1991        | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 4.03           | 4.39        | 0.14        | 0.14        | 4.17        | 4.53        |
| 2 Central Kootenay           | 5.00           | 4.96        | 0.00        | 0.00        | 5.00        | 4.96        |
| 4 North Okanagan             | 4.04           | 3.93        | 0.41        | 0.38        | 4.45        | 4.31        |
| 5 South Okanagan             | 4.42           | 4.72        | 0.62        | 0.50        | 5.04        | 5.23        |
| 6 South Central              | 4.13           | 4.13        | 0.18        | 0.18        | 4.32        | 4.30        |
| 7 Upper Fraser Valley        | 4.10           | 3.99        | 0.19        | 0.18        | 4.29        | 4.17        |
| 8 Central Fraser Valley      | 3.97           | 4.11        | 0.17        | 0.21        | 4.14        | 4.32        |
| 9 Boundary                   | 4.81           | 4.88        | 0.34        | 0.40        | 5.15        | 5.28        |
| 10 Simon Fraser              | 5.72           | 5.65        | 0.71        | 0.76        | 6.43        | 6.41        |
| 11 Coast Garibaldi           | 4.86           | 5.06        | 0.00        | 0.00        | 4.86        | 5.06        |
| 13 Central Vancouver Island  | 4.38           | 4.45        | 0.26        | 0.29        | 4.64        | 4.74        |
| 14 Upper Island              | 4.44           | 4.31        | 0.21        | 0.29        | 4.65        | 4.60        |
| 15 Cariboo                   | 3.40           | 3.80        | 0.31        | 0.30        | 3.70        | 4.10        |
| 16 Skeena                    | 3.85           | 4.14        | 0.12        | 0.24        | 3.97        | 4.37        |
| 17 Peace River               | 2.56           | 2.21        | 0.17        | 0.17        | 2.74        | 2.38        |
| 18 Northern Interior         | 3.95           | 4.23        | 0.18        | 0.26        | 4.13        | 4.49        |
| 20 Vancouver                 | 9.34           | 8.98        | 1.63        | 1.63        | 10.97       | 10.60       |
| 30 Burnaby                   | 6.04           | 5.85        | 0.50        | 0.54        | 6.55        | 6.40        |
| 40 North Shore               | 7.20           | 7.59        | 0.95        | 0.79        | 8.15        | 8.38        |
| 50 Richmond                  | 5.37           | 6.04        | 0.55        | 0.68        | 5.92        | 6.72        |
| 60 Capital Regional District | 5.81           | 5.62        | 0.77        | 0.83        | 6.57        | 6.45        |
| <b>TOTAL</b>                 | <b>5.49</b>    | <b>5.49</b> | <b>0.59</b> | <b>0.60</b> | <b>6.08</b> | <b>6.09</b> |

**Table 1c**  
**Average Annual Rate of Change: Licensed Dentists in British Columbia**  
**by Health Region by Specialist and Non-Specialist**  
**December 1991 to October 1993**

| Health Region                | Non-Specialist      |                    | Specialist          |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | 5.99                | 5.11               | *                   | *                  | 5.79                | 4.91               |
| 2 Central Kootenay           | 1.58                | -0.45              | *                   | *                  | 1.58                | -0.45              |
| 4 North Okanagan             | 2.90                | -1.61              | *                   | *                  | 2.63                | -1.87              |
| 5 South Okanagan             | 10.44               | 3.80               | -5.30               | -11.00             | 8.61                | 2.08               |
| 6 South Central              | 2.52                | -0.11              | *                   | *                  | 2.41                | -0.21              |
| 7 Upper Fraser Valley        | 3.52                | -1.55              | *                   | *                  | 3.37                | -1.70              |
| 8 Central Fraser Valley      | 6.38                | 1.96               | *                   | *                  | 6.87                | 2.43               |
| 9 Boundary                   | 4.98                | 0.81               | 13.60               | 9.09               | 5.57                | 1.38               |
| 10 Simon Fraser              | 3.76                | -0.69              | 8.52                | 3.87               | 4.29                | -0.18              |
| 11 Coast Garibaldi           | 5.79                | 2.38               | *                   | *                  | 5.79                | 2.38               |
| 13 Central Vancouver Island  | 4.63                | 0.85               | *                   | *                  | 4.99                | 1.20               |
| 14 Upper Island              | 1.32                | -1.76              | *                   | *                  | 2.52                | -0.60              |
| 15 Cariboo                   | 7.58                | 6.61               | *                   | *                  | 6.96                | 6.00               |
| 16 Skeena                    | 5.25                | 4.12               | *                   | *                  | 6.76                | 5.61               |
| 17 Peace River               | -7.85               | -8.26              | *                   | *                  | -7.35               | -7.76              |
| 18 Northern Interior         | 4.99                | 4.02               | *                   | *                  | 5.95                | 4.97               |
| 20 Vancouver                 | -0.51               | -2.21              | 1.46                | -0.27              | -0.22               | -1.92              |
| 30 Burnaby                   | 0.59                | -1.81              | *                   | *                  | 1.09                | -1.32              |
| 40 North Shore               | 5.40                | 3.08               | -7.85               | -9.88              | 3.93                | 1.64               |
| 50 Richmond                  | 9.73                | 6.99               | *                   | *                  | 10.27               | 7.52               |
| 60 Capital Regional District | 0.33                | -1.87              | 7.26                | 4.91               | 1.16                | -1.06              |
| <b>TOTAL</b>                 | <b>3.04</b>         | <b>-0.01</b>       | <b>4.37</b>         | <b>1.28</b>        | <b>3.17</b>         | <b>0.11</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Licensed Dentists in British Columbia**  
**by Health Region by Age and Sex**  
**October 1993**

| Health Region                | < 25     |          | 25-34      |            | 35-44      |            | 45-54      |           | 55-64      |           | 65 +      |          | Subtotal     |            | Unknown  | Total        |
|------------------------------|----------|----------|------------|------------|------------|------------|------------|-----------|------------|-----------|-----------|----------|--------------|------------|----------|--------------|
|                              | M        | F        | M          | F          | M          | F          | M          | F         | M          | F         | M         | F        | M            | F          |          |              |
| 1 East Kootenay              | 0        | 1        | 5          | 3          | 7          | 1          | 12         | 0         | 3          | 0         | 0         | 0        | 27           | 5          | 0        | 32           |
| 2 Central Kootenay           | 0        | 0        | 6          | 0          | 15         | 0          | 11         | 0         | 4          | 0         | 1         | 0        | 37           | 0          | 0        | 37           |
| 4 North Okanagan             | 0        | 0        | 7          | 2          | 10         | 0          | 21         | 1         | 4          | 0         | 0         | 0        | 42           | 3          | 0        | 45           |
| 5 South Okanagan             | 1        | 0        | 14         | 4          | 35         | 4          | 32         | 0         | 10         | 0         | 4         | 0        | 96           | 8          | 0        | 104          |
| 6 South Central              | 0        | 1        | 7          | 0          | 19         | 0          | 13         | 1         | 7          | 0         | 1         | 0        | 47           | 2          | 0        | 49           |
| 7 Upper Fraser Valley        | 0        | 0        | 12         | 4          | 24         | 4          | 19         | 1         | 5          | 0         | 2         | 0        | 62           | 9          | 0        | 71           |
| 8 Central Fraser Valley      | 0        | 0        | 20         | 7          | 24         | 7          | 16         | 0         | 5          | 0         | 3         | 0        | 68           | 14         | 0        | 82           |
| 9 Boundary                   | 0        | 0        | 40         | 14         | 66         | 17         | 38         | 5         | 14         | 0         | 4         | 0        | 162          | 36         | 1        | 199          |
| 10 Simon Fraser              | 0        | 0        | 26         | 10         | 33         | 6          | 24         | 1         | 18         | 2         | 7         | 0        | 108          | 19         | 0        | 127          |
| 11 Coast Garibaldi           | 0        | 0        | 5          | 1          | 12         | 1          | 6          | 1         | 3          | 0         | 3         | 0        | 29           | 3          | 0        | 32           |
| 13 Central Vancouver Island  | 0        | 0        | 16         | 3          | 25         | 7          | 30         | 0         | 11         | 0         | 6         | 0        | 88           | 10         | 0        | 98           |
| 14 Upper Island              | 1        | 0        | 5          | 3          | 14         | 2          | 14         | 1         | 5          | 0         | 2         | 0        | 41           | 6          | 0        | 47           |
| 15 Cariboo                   | 0        | 0        | 7          | 2          | 11         | 1          | 2          | 0         | 4          | 0         | 0         | 0        | 24           | 3          | 0        | 27           |
| 16 Skeena                    | 0        | 1        | 7          | 0          | 14         | 0          | 11         | 0         | 4          | 0         | 0         | 0        | 36           | 1          | 0        | 37           |
| 17 Peace River               | 0        | 0        | 1          | 0          | 6          | 1          | 4          | 0         | 2          | 0         | 0         | 0        | 13           | 1          | 0        | 14           |
| 18 Northern Interior         | 0        | 0        | 10         | 5          | 15         | 3          | 13         | 0         | 4          | 0         | 2         | 0        | 44           | 8          | 0        | 52           |
| 20 Vancouver                 | 1        | 1        | 66         | 35         | 145        | 38         | 124        | 13        | 55         | 5         | 38        | 1        | 429          | 93         | 0        | 522          |
| 30 Burnaby                   | 0        | 0        | 23         | 8          | 25         | 6          | 26         | 2         | 13         | 1         | 2         | 0        | 89           | 17         | 0        | 106          |
| 40 North Shore               | 0        | 0        | 19         | 9          | 31         | 13         | 35         | 1         | 24         | 2         | 4         | 0        | 113          | 25         | 0        | 138          |
| 50 Richmond                  | 1        | 0        | 11         | 6          | 27         | 5          | 28         | 3         | 6          | 0         | 2         | 0        | 75           | 14         | 0        | 89           |
| 60 Capital Regional District | 0        | 0        | 27         | 8          | 56         | 4          | 73         | 1         | 21         | 0         | 11        | 0        | 188          | 13         | 0        | 201          |
| <b>TOTAL</b>                 | <b>4</b> | <b>4</b> | <b>334</b> | <b>124</b> | <b>614</b> | <b>120</b> | <b>552</b> | <b>31</b> | <b>222</b> | <b>10</b> | <b>92</b> | <b>1</b> | <b>1,818</b> | <b>290</b> | <b>1</b> | <b>2,109</b> |

**Table 3**  
**Licensed Dentists in British Columbia**  
**by Health Region by Specialty**  
**December 1991 and October 1993**

| Health Region                | Endodontics |           | Oral and<br>Maxillofacial Surgery |           | Orthodontics      |           | Paediatric Dentistry |           | Periodontics |           |
|------------------------------|-------------|-----------|-----------------------------------|-----------|-------------------|-----------|----------------------|-----------|--------------|-----------|
|                              | 1991        | 1993      | 1991                              | 1993      | 1991 <sup>1</sup> | 1993      | 1991 <sup>1</sup>    | 1993      | 1991         | 1993      |
| 1 East Kootenay              | 0           | 0         | 0                                 | 0         | 1                 | 1         | 0                    | 0         | 0            | 0         |
| 2 Central Kootenay           | 0           | 0         | 0                                 | 0         | 0                 | 0         | 0                    | 0         | 0            | 0         |
| 4 North Okanagan             | 0           | 0         | 1                                 | 1         | 3                 | 3         | 0                    | 0         | 0            | 0         |
| 5 South Okanagan             | 2           | 1         | 0                                 | 1         | 5                 | 4         | 0                    | 0         | 2            | 2         |
| 6 South Central              | 0           | 0         | 0                                 | 0         | 2                 | 2         | 0                    | 0         | 0            | 0         |
| 7 Upper Fraser Valley        | 0           | 0         | 0                                 | 0         | 3                 | 3         | 0                    | 0         | 0            | 0         |
| 8 Central Fraser Valley      | 0           | 0         | 0                                 | 1         | 3                 | 3         | 0                    | 0         | 0            | 0         |
| 9 Boundary                   | 1           | 1         | 1                                 | 3         | 8                 | 9         | 0                    | 0         | 1            | 1         |
| 10 Simon Fraser              | 2           | 2         | 2                                 | 2         | 4                 | 5         | 1                    | 2         | 3            | 3         |
| 11 Coast Garibaldi           | 0           | 0         | 0                                 | 0         | 0                 | 0         | 0                    | 0         | 0            | 0         |
| 13 Central Vancouver Island  | 0           | 0         | 1                                 | 2         | 2                 | 2         | 2                    | 2         | 0            | 0         |
| 14 Upper Island              | 0           | 0         | 0                                 | 0         | 2                 | 3         | 0                    | 0         | 0            | 0         |
| 15 Cariboo                   | 0           | 0         | 0                                 | 0         | 2                 | 2         | 0                    | 0         | 0            | 0         |
| 16 Skeena                    | 0           | 0         | 0                                 | 0         | 1                 | 2         | 0                    | 0         | 0            | 0         |
| 17 Peace River               | 0           | 0         | 0                                 | 0         | 0                 | 0         | 0                    | 0         | 0            | 0         |
| 18 Northern Interior         | 0           | 0         | 0                                 | 0         | 2                 | 3         | 0                    | 0         | 0            | 0         |
| 20 Vancouver                 | 8           | 9         | 12                                | 10        | 17                | 18        | 10                   | 10        | 11           | 11        |
| 30 Burnaby                   | 1           | 1         | 1                                 | 1         | 4                 | 4         | 1                    | 1         | 1            | 1         |
| 40 North Shore               | 0           | 0         | 4                                 | 2         | 7                 | 7         | 1                    | 1         | 1            | 1         |
| 50 Richmond                  | 1           | 3         | 2                                 | 2         | 3                 | 3         | 0                    | 0         | 1            | 1         |
| 60 Capital Regional District | 3           | 3         | 5                                 | 4         | 8                 | 10        | 1                    | 1         | 4            | 5         |
| <b>TOTAL</b>                 | <b>18</b>   | <b>20</b> | <b>29</b>                         | <b>29</b> | <b>77</b>         | <b>84</b> | <b>16</b>            | <b>17</b> | <b>24</b>    | <b>25</b> |

*... continued*

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

**Table 3 (continued)**  
**Licensed Dentists in British Columbia**  
**by Health Region by Specialty**  
**December 1991 and October 1993**

| Health Region                | Prosthodontics |           | Oral Pathology |          | Oral Radiology |          | Non-Specialist    |              | Total             |              |
|------------------------------|----------------|-----------|----------------|----------|----------------|----------|-------------------|--------------|-------------------|--------------|
|                              | 1991           | 1993      | 1991           | 1993     | 1991           | 1993     | 1991 <sup>1</sup> | 1993         | 1991 <sup>1</sup> | 1993         |
| 1 East Kootenay              | 0              | 0         | 0              | 0        | 0              | 0        | 28                | 31           | 29                | 32           |
| 2 Central Kootenay           | 0              | 0         | 0              | 0        | 0              | 0        | 36                | 37           | 36                | 37           |
| 4 North Okanagan             | 0              | 0         | 0              | 0        | 0              | 0        | 39                | 41           | 43                | 45           |
| 5 South Okanagan             | 2              | 2         | 0              | 0        | 0              | 0        | 79                | 94           | 90                | 104          |
| 6 South Central              | 0              | 0         | 0              | 0        | 0              | 0        | 45                | 47           | 47                | 49           |
| 7 Upper Fraser Valley        | 0              | 0         | 0              | 0        | 0              | 0        | 64                | 68           | 67                | 71           |
| 8 Central Fraser Valley      | 0              | 0         | 0              | 0        | 0              | 0        | 70                | 78           | 73                | 82           |
| 9 Boundary                   | 1              | 1         | 0              | 0        | 0              | 0        | 169               | 184          | 181               | 199          |
| 10 Simon Fraser              | 1              | 1         | 0              | 0        | 0              | 0        | 105               | 112          | 118               | 127          |
| 11 Coast Garibaldi           | 0              | 0         | 0              | 0        | 0              | 0        | 29                | 32           | 29                | 32           |
| 13 Central Vancouver Island  | 0              | 0         | 0              | 0        | 0              | 0        | 85                | 92           | 90                | 98           |
| 14 Upper Island              | 0              | 0         | 0              | 0        | 0              | 0        | 43                | 44           | 45                | 47           |
| 15 Cariboo                   | 0              | 0         | 0              | 0        | 0              | 0        | 22                | 25           | 24                | 27           |
| 16 Skeena                    | 0              | 0         | 0              | 0        | 0              | 0        | 32                | 35           | 33                | 37           |
| 17 Peace River               | 1              | 1         | 0              | 0        | 0              | 0        | 15                | 13           | 16                | 14           |
| 18 Northern Interior         | 0              | 0         | 0              | 0        | 0              | 0        | 45                | 49           | 47                | 52           |
| 20 Vancouver                 | 18             | 18        | 1              | 3        | 1              | 1        | 446               | 442          | 524               | 522          |
| 30 Burnaby                   | 0              | 1         | 0              | 0        | 0              | 0        | 96                | 97           | 104               | 106          |
| 40 North Shore               | 2              | 2         | 0              | 0        | 0              | 0        | 114               | 125          | 129               | 138          |
| 50 Richmond                  | 0              | 0         | 0              | 0        | 0              | 0        | 68                | 80           | 75                | 89           |
| 60 Capital Regional District | 2              | 3         | 0              | 0        | 0              | 0        | 174               | 175          | 197               | 201          |
| <b>TOTAL</b>                 | <b>27</b>      | <b>29</b> | <b>1</b>       | <b>3</b> | <b>1</b>       | <b>1</b> | <b>1,804</b>      | <b>1,901</b> | <b>1,997</b>      | <b>2,109</b> |

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.



**Table 4**  
**Analysis of Change in the Number of Licensed Dentists**  
**in British Columbia by Health Region**  
**December 1991 to October 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |            | Reactivation <sup>3</sup> | Attrition* | Net Intra-provincial Migration | October 1993 |
|------------------------------|----------------------------|---|--------------|---------------|------------|---------------------------|------------|--------------------------------|--------------|
|                              |                            | B.C.  | Other Canada | Other Country | Subtotal   |                           |            |                                |              |
| 1 East Kootenay              | 29                         | 1   | 2            | 0             | 3          | 1                         | 3          | 2                              | 32           |
| 2 Central Kootenay           | 36                         | 0   | 3            | 0             | 3          | 0                         | 2          | 0                              | 37           |
| 4 North Okanagan             | 43                         | 0   | 1            | 0             | 1          | 0                         | 1          | 2                              | 45           |
| 5 South Okanagan             | 90                         | 1   | 12           | 0             | 13         | 3                         | 5          | 3                              | 104          |
| 6 South Central              | 47                         | 1   | 3            | 0             | 4          | 0                         | 0          | -2                             | 49           |
| 7 Upper Fraser Valley        | 67                         | 4   | 0            | 1             | 5          | 0                         | 2          | 1                              | 71           |
| 8 Central Fraser Valley      | 73                         | 5   | 7            | 0             | 12         | 0                         | 5          | 2                              | 82           |
| 9 Boundary                   | 181                        | 7   | 7            | 3             | 17         | 3                         | 4          | 2                              | 199          |
| 10 Simon Fraser              | 118                        | 3   | 3            | 3             | 9          | 1                         | 5          | 4                              | 127          |
| 11 Coast Garibaldi           | 29                         | 0   | 1            | 0             | 1          | 1                         | 0          | 1                              | 32           |
| 13 Central Vancouver Island  | 90                         | 1   | 4            | 0             | 5          | 3                         | 5          | 5                              | 98           |
| 14 Upper Island              | 45                         | 1   | 4            | 0             | 5          | 1                         | 2          | -2                             | 47           |
| 15 Cariboo                   | 24                         | 0   | 2            | 2             | 4          | 0                         | 0          | -1                             | 27           |
| 16 Skeena                    | 33                         | 6   | 2            | 0             | 8          | 0                         | 3          | -1                             | 37           |
| 17 Peace River               | 16                         | 0   | 0            | 0             | 0          | 0                         | 0          | -2                             | 14           |
| 18 Northern Interior         | 47                         | 5   | 2            | 1             | 8          | 0                         | 2          | -1                             | 52           |
| 20 Vancouver                 | 524                        | 17  | 11           | 9             | 37         | 5                         | 28         | -16                            | 522          |
| 30 Burnaby                   | 104                        | 3   | 3            | 2             | 8          | 0                         | 2          | -4                             | 106          |
| 40 North Shore               | 129                        | 2   | 3            | 3             | 8          | 4                         | 6          | 3                              | 138          |
| 50 Richmond                  | 75                         | 4   | 2            | 2             | 8          | 3                         | 1          | 4                              | 89           |
| 60 Capital Regional District | 197                        | 2   | 9            | 1             | 12         | 7                         | 15         | 0                              | 201          |
| <b>TOTAL</b>                 | <b>1,997</b>               | <b>63</b>   | <b>81</b>    | <b>27</b>     | <b>171</b> | <b>32</b>                 | <b>91</b>  | <b>0</b>                       | <b>2,109</b> |

<sup>1</sup> Dentists who reported B.C. addresses and were licensed in October 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

<sup>3</sup> Dentists who reported B.C. addresses and were licensed in October 1993 but not in December 1991 and who were registered for the first time before December 1991.

\* Dentists who reported B.C. addresses and were licensed in December 1991 but not in October 1993.

## DENTURISTS

**Definition:** A denturist

...is licensed subject to terms and conditions established by the rules or set out in his certificate of registration...

- (a) to make, repair, reline, replace, or furnish upper or lower full dentures, or both, and for that purpose carry out non surgical intraoral procedures, including the taking of impressions that are necessary to make, repair, reline, replace or furnish upper or lower full dentures, or both, and
- (b) where the repairs or replacement can be done without intraoral procedures or the taking of impressions, make structural repairs to a removable dental prosthesis or replace teeth in a denture.<sup>1</sup>

**Governing Statute:** Dental Technicians and Denturists Act, Revised Statutes of British Columbia, 1979, Chapter 91; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 7-10; administered by the Ministry of Health.

**Governing Body:** Dental Technicians and Denturists Board of British Columbia (DTDBBC). In order to practise as a Denturist in British Columbia, it is necessary to be licensed by the Dental Technicians and Denturists Board. Registered denturists have exclusive use of the titles: *Denturist*, *Certified Denturist* and *Registered Denturist*.

**Date of Record:** December 1991 and January 1994.

**Source of Data:** Dental Technicians and Denturists Board of British Columbia (DTDBBC).

### Preparation and Updating:

Information reported in the tables is derived from the *Nominal Roll* supplied by the DTDBBC and includes denturists who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when the registration status is "registered", "temporary", "apprentice", or "student", and when employment address is available. In 1993, employment address was available for 97% of registered, temporary, apprentice, or student denturists. The corresponding figure for 1991 is 84%. Home address is used for the remainder, as well as for denturists with non-practising status.

### Definition of Terms:

Tables 1a and 1b show number and number per 10,000 population of denturists in B.C. at the date of record by registration category. Table 1c shows the average annual rates of change in these numbers from December 1991 to January 1994. The registration categories used by the DTDBBC are as follows:

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<sup>1</sup>*Dental Technicians and Denturists Act*, 1979, RSBC Chap. 91, S.5(2). See also *National Occupational Classification 1992*, Major Group 32, No. 3221, Ottawa: Employment and Immigration Canada.

(a) *Registered*

A registered denturist is licensed by the Dental Technicians and Denturists Board of British Columbia.

(b) *Temporary*

A temporary registrant (formerly a denturist on permit) has not yet completed the DTDBBC registration examinations, but is licensed to practise under the supervision of a registered denturist. Included in this category are new arrivals to the province.

(c) *Apprentice*

An apprentice denturist is registered by the Dental Technicians and Denturists Board and is licensed to practise under the supervision of a registered denturist.

(d) *Student*

A student denturist is registered by the Dental Technicians and Denturists Board and is licensed to practise under the supervision of a registered denturist. After 18 months work experience, a student denturist is eligible to undertake the certification exams to become a registered denturist.

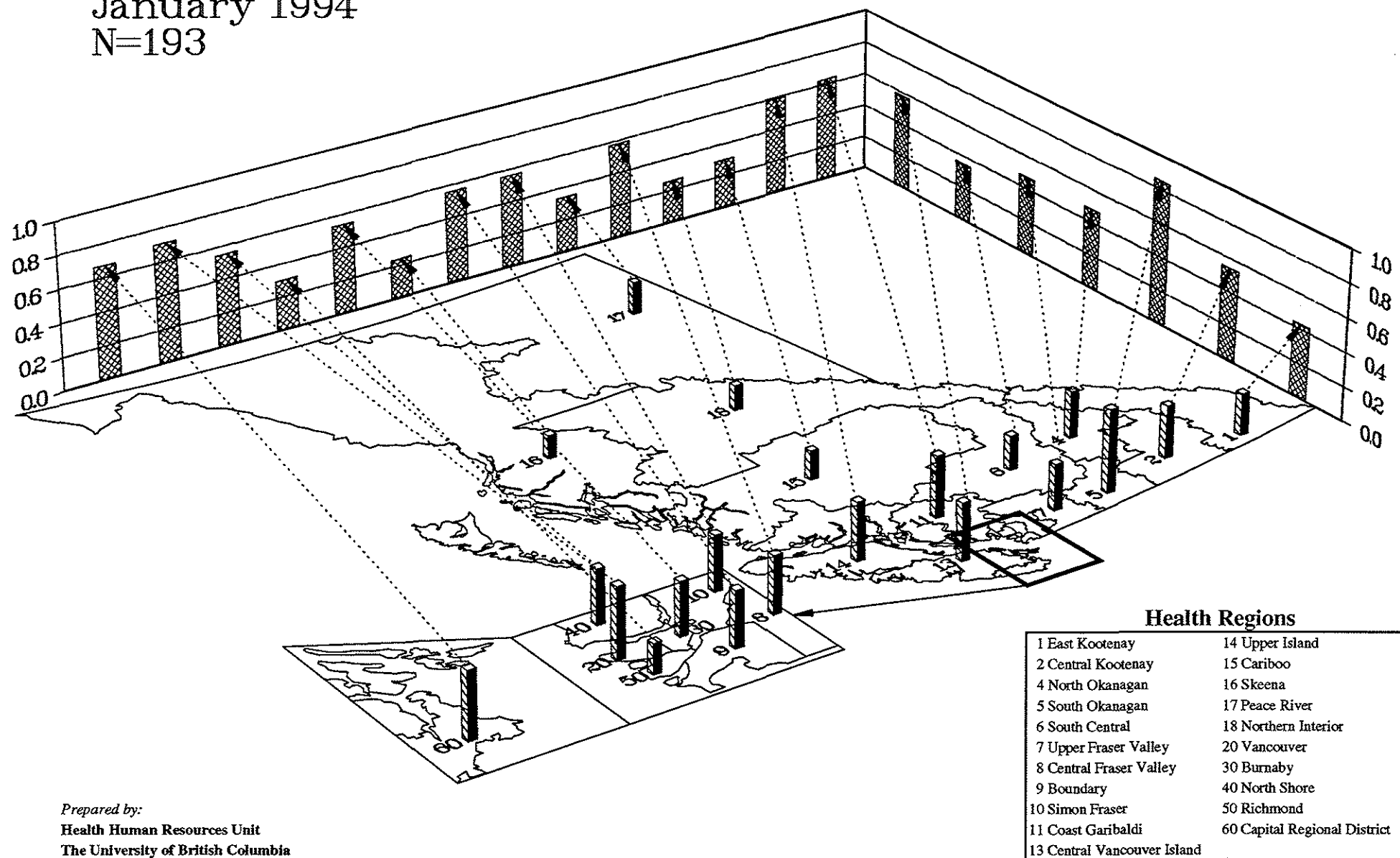
(e) *Non-Practising*

Non-practising membership may be elected by a registered or temporary denturist who is not currently working in the field. Non-practising status can be taken for a maximum of five years.<sup>2</sup>

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<sup>2</sup>Adapted from information received from the Dental Technicians and Denturists Board of British Columbia.

Registered Denturists  
per 10,000 Population  
by Health Region  
January 1994  
N=193



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Denturists in British Columbia**  
**by Health Region by Licence Category**  
**December 1991 and January 1994**

| Health Region                | Registered |            | Temporary |          | Apprentice |          | Student   |           | Non-Practising |           | Total      |            |
|------------------------------|------------|------------|-----------|----------|------------|----------|-----------|-----------|----------------|-----------|------------|------------|
|                              | 1991       | 1994       | 1991      | 1994     | 1991       | 1994     | 1991      | 1994      | 1991           | 1994      | 1991       | 1994       |
| 1 East Kootenay              | 2          | 3          | 0         | 0        | 0          | 0        | 0         | 0         | 1              | 1         | 3          | 4          |
| 2 Central Kootenay           | 4          | 4          | 0         | 0        | 0          | 0        | 0         | 0         | 2              | 0         | 6          | 4          |
| 4 North Okanagan             | 5          | 5          | 0         | 0        | 0          | 0        | 0         | 0         | 0              | 1         | 5          | 6          |
| 5 South Okanagan             | 17         | 17         | 1         | 1        | 0          | 0        | 1         | 1         | 1              | 2         | 20         | 21         |
| 6 South Central              | 4          | 4          | 0         | 0        | 0          | 0        | 0         | 0         | 1              | 0         | 5          | 4          |
| 7 Upper Fraser Valley        | 8          | 8          | 0         | 0        | 0          | 0        | 0         | 0         | 1              | 2         | 9          | 10         |
| 8 Central Fraser Valley      | 7          | 11         | 0         | 0        | 0          | 0        | 0         | 1         | 1              | 1         | 8          | 13         |
| 9 Boundary                   | 21         | 21         | 0         | 1        | 0          | 0        | 1         | 1         | 2              | 1         | 24         | 24         |
| 10 Simon Fraser              | 9          | 11         | 0         | 0        | 0          | 0        | 1         | 1         | 1              | 0         | 11         | 12         |
| 11 Coast Garibaldi           | 3          | 4          | 0         | 0        | 0          | 0        | 0         | 2         | 0              | 0         | 3          | 6          |
| 13 Central Vancouver Island  | 13         | 12         | 0         | 0        | 0          | 0        | 1         | 3         | 0              | 1         | 14         | 16         |
| 14 Upper Island              | 6          | 6          | 0         | 0        | 1          | 0        | 0         | 0         | 0              | 0         | 7          | 6          |
| 15 Cariboo                   | 2          | 2          | 0         | 0        | 0          | 0        | 0         | 0         | 0              | 0         | 2          | 2          |
| 16 Skeena                    | 1          | 2          | 0         | 0        | 0          | 0        | 1         | 0         | 0              | 0         | 2          | 2          |
| 17 Peace River               | 2          | 2          | 0         | 0        | 0          | 0        | 0         | 0         | 0              | 0         | 2          | 2          |
| 18 Northern Interior         | 4          | 3          | 0         | 0        | 0          | 0        | 0         | 0         | 0              | 0         | 4          | 3          |
| 20 Vancouver                 | 34         | 35         | 1         | 0        | 0          | 0        | 4         | 4         | 4              | 5         | 43         | 44         |
| 30 Burnaby                   | 12         | 9          | 1         | 0        | 0          | 0        | 0         | 2         | 0              | 0         | 13         | 11         |
| 40 North Shore               | 9          | 9          | 1         | 2        | 0          | 0        | 0         | 0         | 3              | 2         | 13         | 13         |
| 50 Richmond                  | 4          | 4          | 2         | 0        | 0          | 0        | 3         | 1         | 0              | 0         | 9          | 5          |
| 60 Capital Regional District | 22         | 21         | 0         | 0        | 0          | 0        | 3         | 3         | 1              | 1         | 26         | 25         |
| <b>TOTAL</b>                 | <b>189</b> | <b>193</b> | <b>6</b>  | <b>4</b> | <b>1</b>   | <b>0</b> | <b>15</b> | <b>19</b> | <b>18</b>      | <b>17</b> | <b>229</b> | <b>233</b> |

**Table 1b**  
**Denturists in British Columbia**  
**per 10,000 Population by Health Region by Licence Category**  
**December 1991 and January 1994**

| Health Region                | Registered  |             | Temporary   |             | Apprentice  |             | Student     |             | Non-Practising |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|
|                              | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        | 1991           | 1994        | 1991        | 1994        |
| 1 East Kootenay              | 0.29        | 0.43        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.14           | 0.14        | 0.43        | 0.57        |
| 2 Central Kootenay           | 0.56        | 0.54        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.28           | 0.00        | 0.83        | 0.54        |
| 4 North Okanagan             | 0.52        | 0.48        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00           | 0.10        | 0.52        | 0.57        |
| 5 South Okanagan             | 0.95        | 0.85        | 0.06        | 0.05        | 0.00        | 0.00        | 0.06        | 0.05        | 0.06           | 0.10        | 1.12        | 1.06        |
| 6 South Central              | 0.37        | 0.35        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.09           | 0.00        | 0.46        | 0.35        |
| 7 Upper Fraser Valley        | 0.51        | 0.47        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.06           | 0.12        | 0.58        | 0.59        |
| 8 Central Fraser Valley      | 0.40        | 0.58        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.05        | 0.06           | 0.05        | 0.45        | 0.68        |
| 9 Boundary                   | 0.60        | 0.56        | 0.00        | 0.03        | 0.00        | 0.00        | 0.03        | 0.03        | 0.06           | 0.03        | 0.68        | 0.64        |
| 10 Simon Fraser              | 0.49        | 0.56        | 0.00        | 0.00        | 0.00        | 0.00        | 0.05        | 0.05        | 0.05           | 0.00        | 0.60        | 0.61        |
| 11 Coast Garibaldi           | 0.50        | 0.63        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.32        | 0.00           | 0.00        | 0.50        | 0.95        |
| 13 Central Vancouver Island  | 0.67        | 0.58        | 0.00        | 0.00        | 0.00        | 0.00        | 0.05        | 0.15        | 0.00           | 0.05        | 0.72        | 0.77        |
| 14 Upper Island              | 0.62        | 0.59        | 0.00        | 0.00        | 0.10        | 0.00        | 0.00        | 0.00        | 0.00           | 0.00        | 0.72        | 0.59        |
| 15 Cariboo                   | 0.31        | 0.30        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00           | 0.00        | 0.31        | 0.30        |
| 16 Skeena                    | 0.12        | 0.24        | 0.00        | 0.00        | 0.00        | 0.00        | 0.12        | 0.00        | 0.00           | 0.00        | 0.24        | 0.24        |
| 17 Peace River               | 0.34        | 0.34        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00           | 0.00        | 0.34        | 0.34        |
| 18 Northern Interior         | 0.35        | 0.26        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00           | 0.00        | 0.35        | 0.26        |
| 20 Vancouver                 | 0.71        | 0.71        | 0.02        | 0.00        | 0.00        | 0.00        | 0.08        | 0.08        | 0.08           | 0.10        | 0.90        | 0.89        |
| 30 Burnaby                   | 0.76        | 0.54        | 0.06        | 0.00        | 0.00        | 0.00        | 0.00        | 0.12        | 0.00           | 0.00        | 0.82        | 0.66        |
| 40 North Shore               | 0.57        | 0.55        | 0.06        | 0.12        | 0.00        | 0.00        | 0.00        | 0.00        | 0.19           | 0.12        | 0.82        | 0.79        |
| 50 Richmond                  | 0.32        | 0.30        | 0.16        | 0.00        | 0.00        | 0.00        | 0.24        | 0.08        | 0.00           | 0.00        | 0.71        | 0.38        |
| 60 Capital Regional District | 0.73        | 0.67        | 0.00        | 0.00        | 0.00        | 0.00        | 0.10        | 0.10        | 0.03           | 0.03        | 0.87        | 0.80        |
| <b>TOTAL</b>                 | <b>0.58</b> | <b>0.56</b> | <b>0.02</b> | <b>0.01</b> | <b>0.00</b> | <b>0.00</b> | <b>0.05</b> | <b>0.05</b> | <b>0.05</b>    | <b>0.05</b> | <b>0.70</b> | <b>0.67</b> |

**Table 1c**  
**Average Annual Rate of Change: Denturists in British Columbia**  
**by Health Region by Licence Category**  
**December 1991 to January 1994**

| Health Region                | Registered          |                    | Temporary           |                    | Apprentice          |                    | Student             |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 2 Central Kootenay           | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 4 North Okanagan             | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 5 South Okanagan             | 0.00                | -5.29              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 2.47                | -2.95              |
| 6 South Central              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 7 Upper Fraser Valley        | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 8 Central Fraser Valley      | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 9 Boundary                   | 0.00                | -3.48              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 0.00                | -3.48              |
| 10 Simon Fraser              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 4.45                | 0.52               |
| 11 Coast Garibaldi           | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 13 Central Vancouver Island  | -3.92               | -6.96              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 6.90                | 3.52               |
| 14 Upper Island              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 15 Cariboo                   | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 16 Skeena                    | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 17 Peace River               | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 20 Vancouver                 | 1.46                | -0.05              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 1.16                | -0.35              |
| 30 Burnaby                   | -13.40              | -15.21             | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | -8.01               | -9.94              |
| 40 North Shore               | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 0.00                | -1.93              |
| 50 Richmond                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 60 Capital Regional District | -2.30               | -4.17              | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | -1.94               | -3.82              |
| <b>TOTAL</b>                 | <b>1.05</b>         | <b>-1.57</b>       | <b>*</b>            | <b>*</b>           | <b>*</b>            | <b>*</b>           | <b>12.55</b>        | <b>9.63</b>        | <b>-2.82</b>        | <b>-5.34</b>       | <b>0.87</b>         | <b>-1.75</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

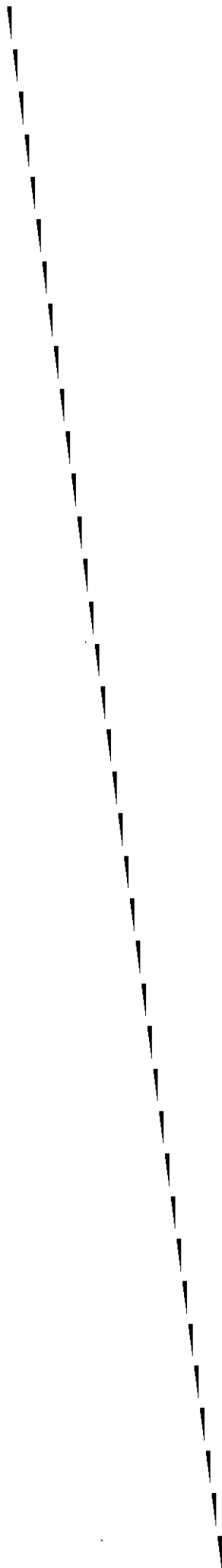
<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.





### **III. HEALTH STANDARDS**



## PUBLIC HEALTH INSPECTORS

**Definition:** A public health inspector

...investigates health- and safety-related complaints and inspects restaurants, food processing and industrial establishments, hotels, municipal water systems, and other workplaces to ensure compliance with government regulations regarding sanitation, pollution control, the handling and storage of hazardous substances, and workplace safety.

Public health inspectors perform some or all of the following duties:

- (a) inspect the sanitary conditions of restaurants, hotels, schools, hospitals, and other public facilities or institutions and investigate outbreaks of diseases and poisonings resulting from spoiled food supplies;
- (b) conduct surveys and monitor programs of the natural environment to identify sources of pollution;
- (c) investigate spills of hazardous chemicals or products which may pose a risk to human health or the natural environment and collect samples of water or other materials for analysis;
- (d) inspect workplaces to ensure that equipment, materials, and production processes do not present a safety or health hazard to employees or to the general public;
- (e) initiate enforcement procedures to fine or to close an establishment contravening municipal, provincial, or federal regulations;
- (f) provide information to employers, employees, and the general public on issues of public health, environmental protection or workplace safety.<sup>1</sup>

**Governing Statute:** Health Act, Revised Statutes of British Columbia, 1979, Chapter 161.

**Governing Body:** Board of Certification of Public Health Inspectors of the Canadian Public Health Association. No person shall be appointed to the position of public health inspector unless he or she holds a certificate in Public Health (Canada) or the acceptable authorised equivalent. Members of the British Columbia Branch of the Canadian Institute of Public Health Inspectors have exclusive use of the titles: *Registered Public Health Inspector*, *Registered Environmental Health Officer*, *RPHI*, and *REHO*.

**Date of Record:** August 1991 and December 1993.

**Source of Data:** The Environmental Health Protection Service of the B.C. Ministry of Health.

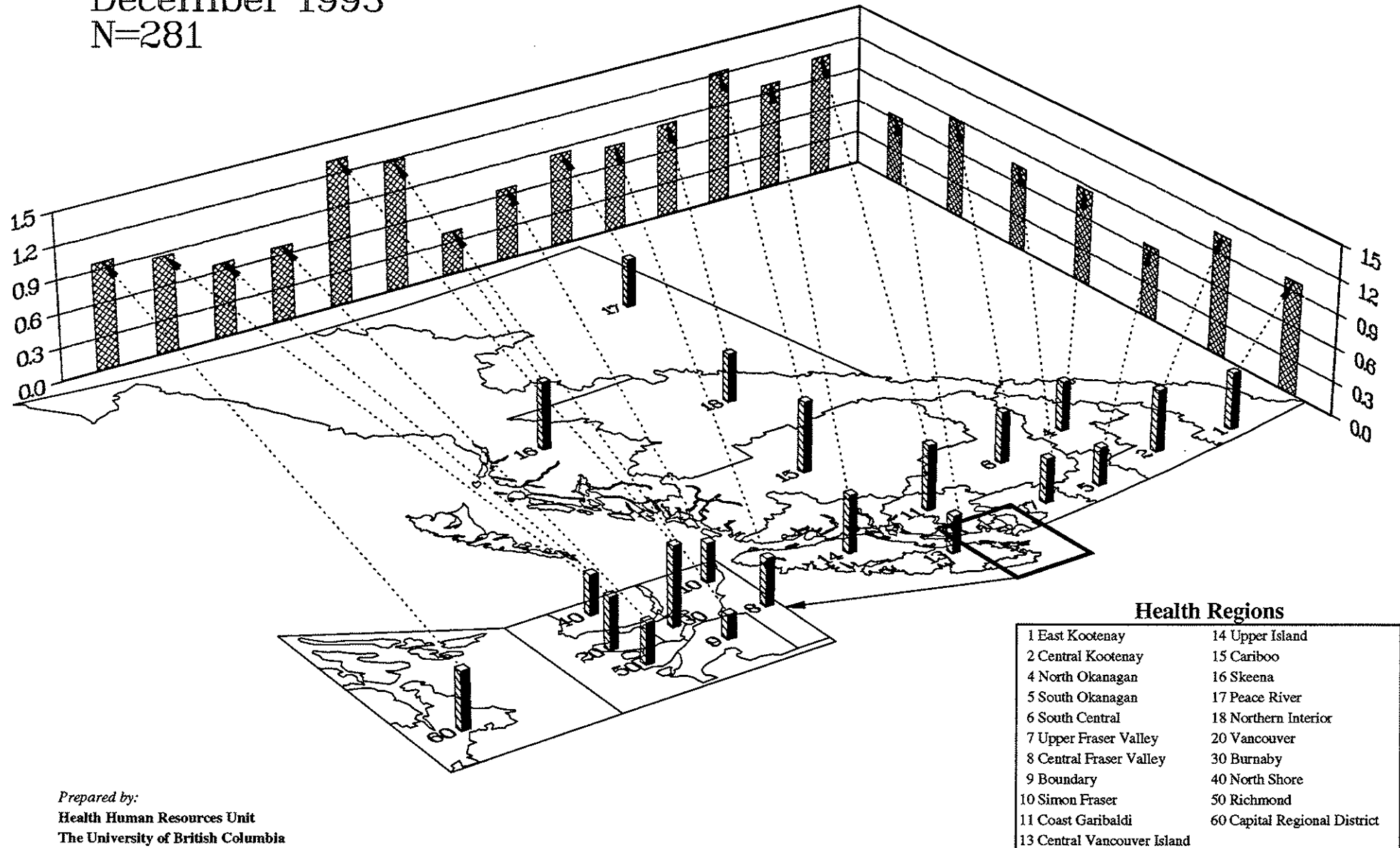
### **Preparation and Updating:**

A list of public health inspectors employed in British Columbia was prepared by the Environmental Health Protection Service of the Ministry of Health. The table includes all persons known to be employed in provincial, municipal or federal positions in British Columbia at the date of record. Data presented in the tables are based on employment address for all public health inspectors.

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<sup>1</sup>*National Occupational Classification 1992*, Major Group 22, No. 2263, Ottawa: Employment and Immigration Canada

# Public Health Inspectors per 10,000 Population by Health Region December 1993 N=281



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Public Health Inspectors in British Columbia**  
**by Health Region**  
**August 1991 and December 1993**

| Health Region                | Number     |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|------------|------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991       | 1993       | 1991                            | 1993        | Number <sup>1</sup>              | Ratio <sup>2</sup> |
| 1 East Kootenay              | 6          | 7          | 0.86                            | 0.99        | *                                | *                  |
| 2 Central Kootenay           | 7          | 8          | 0.97                            | 1.07        | *                                | *                  |
| 4 North Okanagan             | 8          | 9          | 0.83                            | 0.86        | *                                | *                  |
| 5 South Okanagan             | 11         | 13         | 0.62                            | 0.65        | 7.42                             | 2.54               |
| 6 South Central              | 7          | 10         | 0.64                            | 0.88        | *                                | *                  |
| 7 Upper Fraser Valley        | 9          | 13         | 0.58                            | 0.76        | *                                | *                  |
| 8 Central Fraser Valley      | 12         | 15         | 0.68                            | 0.79        | 10.04                            | 6.59               |
| 9 Boundary                   | 10         | 15         | 0.28                            | 0.40        | 18.98                            | 15.42              |
| 10 Simon Fraser              | 11         | 13         | 0.60                            | 0.66        | 7.42                             | 3.95               |
| 11 Coast Garibaldi           | 5          | 7          | 0.84                            | 1.11        | *                                | *                  |
| 13 Central Vancouver Island  | 10         | 13         | 0.52                            | 0.63        | 11.90                            | 8.86               |
| 14 Upper Island              | 8          | 10         | 0.83                            | 0.98        | *                                | *                  |
| 15 Cariboo                   | 6          | 8          | 0.93                            | 1.22        | *                                | *                  |
| 16 Skeena                    | 8          | 10         | 0.96                            | 1.18        | *                                | *                  |
| 17 Peace River               | 6          | 5          | 1.03                            | 0.85        | *                                | *                  |
| 18 Northern Interior         | 9          | 10         | 0.79                            | 0.86        | *                                | *                  |
| 20 Vancouver                 | 42         | 43         | 0.88                            | 0.87        | 1.01                             | -0.28              |
| 30 Burnaby                   | 19         | 22         | 1.20                            | 1.33        | 6.48                             | 4.57               |
| 40 North Shore               | 9          | 11         | 0.57                            | 0.67        | *                                | *                  |
| 50 Richmond                  | 8          | 9          | 0.63                            | 0.68        | *                                | *                  |
| 60 Capital Regional District | 33         | 30         | 1.10                            | 0.96        | -4.00                            | -5.58              |
| <b>TOTAL</b>                 | <b>244</b> | <b>281</b> | <b>0.74</b>                     | <b>0.81</b> | <b>6.24</b>                      | <b>3.87</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.



**IV. LABORATORY &  
THERAPEUTIC  
TECHNOLOGICAL SERVICES**

## CARDIOLOGY TECHNOLOGISTS

**Definition:** A cardiology technologist

...operates electrocardiogram and other electronic equipment to record cardiac activity of patients to aid in the diagnosis and treatment of heart disease.

Cardiology technologists perform some or all of the following duties:

- (a) operate electrocardiogram and other electronic equipment to record cardiac activity of patients;
- (b) prepare patients for cardiology procedures and tests, such as electrocardiograph tests, ambulatory monitoring, exercise stress testing and pacemaker analysis;
- (c) monitor cardiac activity and record results;
- (d) prepare reports for interpretation by cardiologists;
- (e) reprogram pacemakers according to required standards;
- (f) check cardiology equipment to ensure proper operation.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the Cardiology Technologists Association of British Columbia is voluntary. However, registered members have exclusive use of the titles: *Registered Cardiology Technologist*, *Registered Cardiology Technician*, and *RCT*.

**Date of Record:** November 1991 and September 1993.

**Source of Data:** The Cardiology Technologists Association of British Columbia (CTABC).

### Preparation and Updating:

The tables, prepared from the membership list provided by the CTABC, include cardiology technologists who were residents of British Columbia at the date of record. Data presented in the tables are based on home address for all cardiology technologists.

### Definition of Terms:

#### 1. Cardiology Technologists

Tables 1a and 1b show the number and number per 10,000 of cardiology technologists in active practice based on membership status. Table 1c shows the average annual rates of change in these numbers. The CTABC uses the following membership categories:<sup>2</sup>

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<sup>1</sup> Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3217, Ottawa: Employment and Immigration Canada.

<sup>2</sup> Adapted from information provided by the Cardiology Technologists' Association of B.C.



(a) *Registered* members:

Registered members are persons engaged in the field of Cardiology who have completed two years of training in the field and one year with the Canadian Society of Cardiology Technologists Inc. (CSCT Inc.) study course of theory and technique, and who have passed examinations set by the CSCT Inc.

(b) *Advanced Registered* members:

Advanced Registered members are persons engaged in the field of Cardiology who have been registered members for one full year, and who have passed the Advanced examinations set by the CSCT Inc.

(c) *Associate* members:

Associate members are persons engaged in the field of Cardiology who have not undertaken and passed the examinations set by the CSCT Inc.

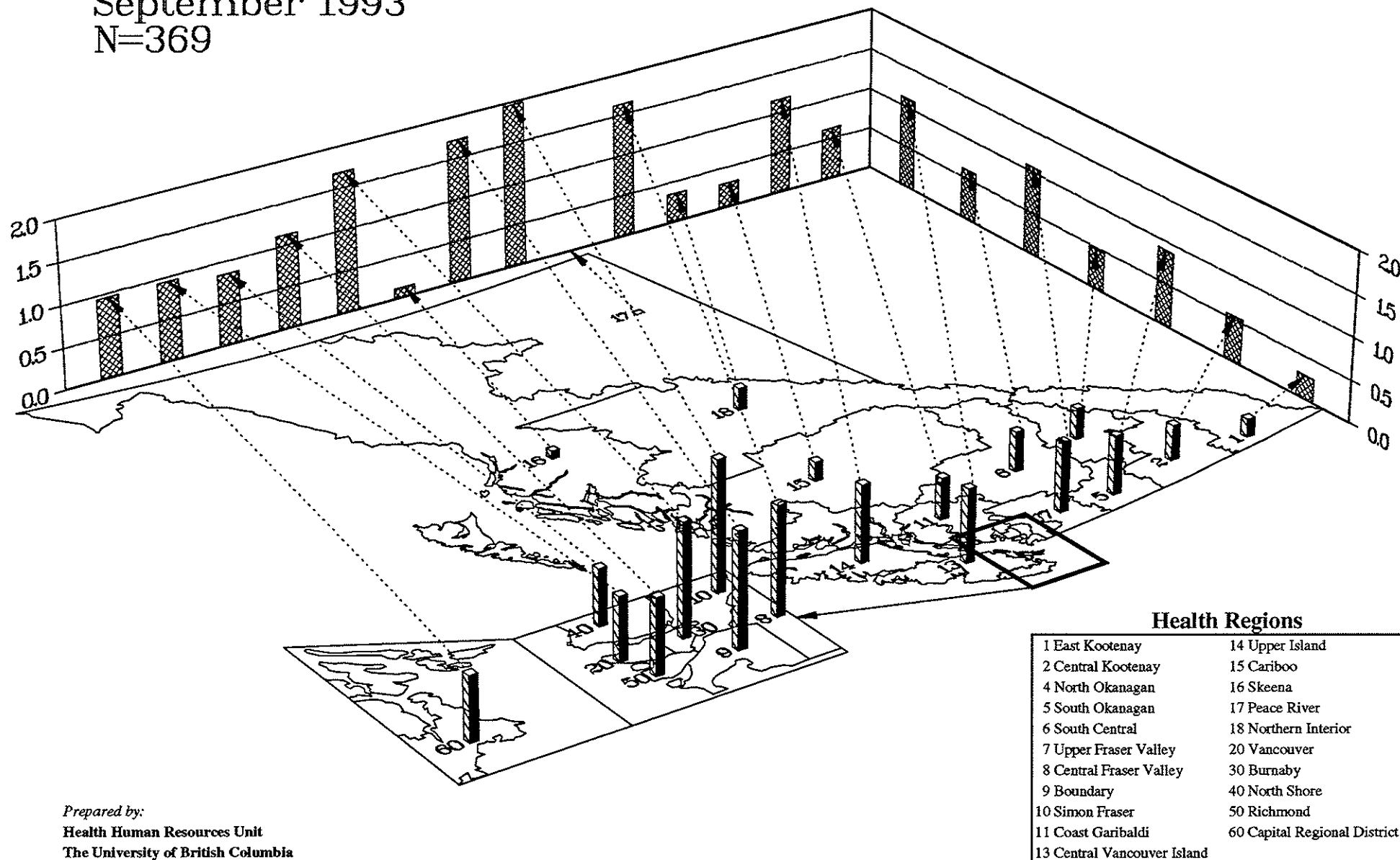
## **2. Employment Setting**

Table 2 shows cardiology technologists based on employment setting using the following categories:

- (a) Hospital;
- (b) Laboratory/Clinic;
- (c) Other.

# Cardiology Technologists (CTABC Members) per 10,000 Population by Health Region September 1993 N=369

70



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Cardiology Technologists (CTABC Members)<sup>1</sup> in British Columbia**  
**by Health Region by Membership Status**  
**November 1991 and September 1993**

| Health Region                | Registered |            | Advanced<br>Registered |            | Associate |                   | Total      |            |
|------------------------------|------------|------------|------------------------|------------|-----------|-------------------|------------|------------|
|                              | 1991       | 1993       | 1991                   | 1993       | 1991      | 1993 <sup>2</sup> | 1991       | 1993       |
| 1 East Kootenay              | 1          | 0          | 0                      | 2          | 2         | 0                 | 3          | 2          |
| 2 Central Kootenay           | 3          | 2          | 0                      | 2          | 1         | 0                 | 4          | 4          |
| 4 North Okanagan             | 2          | 3          | 0                      | 1          | 3         | 1                 | 5          | 5          |
| 5 South Okanagan             | 6          | 5          | 8                      | 9          | 5         | 4                 | 19         | 18         |
| 6 South Central              | 3          | 2          | 3                      | 4          | 2         | 1                 | 8          | 7          |
| 7 Upper Fraser Valley        | 3          | 6          | 4                      | 4          | 8         | 8                 | 15         | 18         |
| 8 Central Fraser Valley      | 9          | 10         | 10                     | 12         | 3         | 9                 | 22         | 31         |
| 9 Boundary                   | 21         | 17         | 15                     | 23         | 5         | 25                | 41         | 65         |
| 10 Simon Fraser              | 15         | 9          | 12                     | 14         | 5         | 16                | 32         | 39         |
| 11 Coast Garibaldi           | 3          | 2          | 1                      | 2          | 1         | 0                 | 5          | 4          |
| 13 Central Vancouver Island  | 10         | 12         | 4                      | 8          | 7         | 3                 | 21         | 23         |
| 14 Upper Island              | 10         | 6          | 1                      | 5          | 1         | 1                 | 12         | 12         |
| 15 Cariboo                   | 0          | 2          | 0                      | 0          | 1         | 0                 | 1          | 2          |
| 16 Skeena                    | 0          | 0          | 1                      | 1          | 0         | 0                 | 1          | 1          |
| 17 Peace River               | 0          | 0          | 0                      | 0          | 0         | 0                 | 0          | 0          |
| 18 Northern Interior         | 2          | 3          | 1                      | 1          | 2         | 0                 | 5          | 4          |
| 20 Vancouver                 | 32         | 18         | 16                     | 18         | 11        | 11                | 59         | 47         |
| 30 Burnaby                   | 9          | 6          | 6                      | 8          | 7         | 14                | 22         | 28         |
| 40 North Shore               | 9          | 8          | 7                      | 5          | 2         | 1                 | 18         | 14         |
| 50 Richmond                  | 4          | 1          | 3                      | 3          | 3         | 11                | 10         | 15         |
| 60 Capital Regional District | 18         | 15         | 9                      | 12         | 7         | 3                 | 34         | 30         |
| <b>TOTAL</b>                 | <b>160</b> | <b>127</b> | <b>101</b>             | <b>134</b> | <b>76</b> | <b>108</b>        | <b>337</b> | <b>369</b> |

<sup>1</sup> Membership in the Cardiology Technologists Association of B.C. (CTABC) is voluntary.

<sup>2</sup> Excludes 13 student members.

**Table 1b**  
**Cardiology Technologists (CTABC Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Membership Status**  
**November 1991 and September 1993**

| Health Region                | Registered  |             | Advanced<br>Registered |             | Associate   |                   | Total       |             |
|------------------------------|-------------|-------------|------------------------|-------------|-------------|-------------------|-------------|-------------|
|                              | 1991        | 1993        | 1991                   | 1993        | 1991        | 1993 <sup>2</sup> | 1991        | 1993        |
| 1 East Kootenay              | 0.14        | 0.00        | 0.00                   | 0.28        | 0.29        | 0.00              | 0.43        | 0.28        |
| 2 Central Kootenay           | 0.42        | 0.27        | 0.00                   | 0.27        | 0.14        | 0.00              | 0.56        | 0.54        |
| 4 North Okanagan             | 0.21        | 0.29        | 0.00                   | 0.10        | 0.31        | 0.10              | 0.52        | 0.48        |
| 5 South Okanagan             | 0.34        | 0.25        | 0.45                   | 0.45        | 0.28        | 0.20              | 1.06        | 0.90        |
| 6 South Central              | 0.28        | 0.18        | 0.28                   | 0.35        | 0.18        | 0.09              | 0.74        | 0.61        |
| 7 Upper Fraser Valley        | 0.19        | 0.35        | 0.26                   | 0.23        | 0.51        | 0.47              | 0.96        | 1.06        |
| 8 Central Fraser Valley      | 0.51        | 0.53        | 0.57                   | 0.63        | 0.17        | 0.47              | 1.25        | 1.63        |
| 9 Boundary                   | 0.60        | 0.45        | 0.43                   | 0.61        | 0.14        | 0.66              | 1.17        | 1.72        |
| 10 Simon Fraser              | 0.82        | 0.45        | 0.65                   | 0.71        | 0.27        | 0.81              | 1.74        | 1.97        |
| 11 Coast Garibaldi           | 0.50        | 0.32        | 0.17                   | 0.32        | 0.17        | 0.00              | 0.84        | 0.63        |
| 13 Central Vancouver Island  | 0.52        | 0.58        | 0.21                   | 0.39        | 0.36        | 0.15              | 1.08        | 1.11        |
| 14 Upper Island              | 1.03        | 0.59        | 0.10                   | 0.49        | 0.10        | 0.10              | 1.24        | 1.17        |
| 15 Cariboo                   | 0.00        | 0.30        | 0.00                   | 0.00        | 0.15        | 0.00              | 0.15        | 0.30        |
| 16 Skeena                    | 0.00        | 0.00        | 0.12                   | 0.12        | 0.00        | 0.00              | 0.12        | 0.12        |
| 17 Peace River               | 0.00        | 0.00        | 0.00                   | 0.00        | 0.00        | 0.00              | 0.00        | 0.00        |
| 18 Northern Interior         | 0.18        | 0.26        | 0.09                   | 0.09        | 0.18        | 0.00              | 0.44        | 0.35        |
| 20 Vancouver                 | 0.67        | 0.37        | 0.33                   | 0.37        | 0.23        | 0.22              | 1.23        | 0.95        |
| 30 Burnaby                   | 0.57        | 0.36        | 0.38                   | 0.48        | 0.44        | 0.84              | 1.38        | 1.69        |
| 40 North Shore               | 0.57        | 0.49        | 0.44                   | 0.30        | 0.13        | 0.06              | 1.14        | 0.85        |
| 50 Richmond                  | 0.32        | 0.08        | 0.24                   | 0.23        | 0.24        | 0.83              | 0.79        | 1.13        |
| 60 Capital Regional District | 0.60        | 0.48        | 0.30                   | 0.39        | 0.23        | 0.10              | 1.13        | 0.96        |
| <b>TOTAL</b>                 | <b>0.49</b> | <b>0.37</b> | <b>0.31</b>            | <b>0.39</b> | <b>0.23</b> | <b>0.31</b>       | <b>1.03</b> | <b>1.07</b> |

<sup>1</sup> Membership in the Cardiology Technologists Association of B.C. (CTABC) is voluntary.

<sup>2</sup> Excludes 13 student members.

**Table 1c**  
**Average Annual Rate of Change: Cardiology Technologists (CTABC Members)<sup>1</sup>**  
**in British Columbia by Health Region by Membership Status**  
**November 1991 to September 1993**

| Health Region                | Registered          |                    | Advanced<br>Registered |                    | Associate           |                    | Total               |                    |
|------------------------------|---------------------|--------------------|------------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup>    | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 2 Central Kootenay           | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 4 North Okanagan             | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 5 South Okanagan             | *                   | *                  | *                      | *                  | *                   | *                  | -2.91               | -8.49              |
| 6 South Central              | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 7 Upper Fraser Valley        | *                   | *                  | *                      | *                  | *                   | *                  | 10.46               | 5.28               |
| 8 Central Fraser Valley      | *                   | *                  | 10.46                  | 6.07               | *                   | *                  | 20.57               | 15.78              |
| 9 Boundary                   | -10.89              | -14.27             | 26.26                  | 21.47              | *                   | *                  | 28.58               | 23.70              |
| 10 Simon Fraser              | -24.32              | -27.42             | 8.77                   | 4.32               | *                   | *                  | 11.39               | 6.84               |
| 11 Coast Garibaldi           | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 13 Central Vancouver Island  | 10.46               | 6.65               | *                      | *                  | *                   | *                  | 5.09                | 1.47               |
| 14 Upper Island              | -24.32              | -26.52             | *                      | *                  | *                   | *                  | 0.00                | -2.91              |
| 15 Cariboo                   | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 16 Skeena                    | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 17 Peace River               | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | *                   | *                  | *                      | *                  | *                   | *                  | *                   | *                  |
| 20 Vancouver                 | -26.94              | -28.12             | 6.64                   | 4.90               | 0.00                | -1.62              | -11.66              | -13.10             |
| 30 Burnaby                   | *                   | *                  | *                      | *                  | *                   | *                  | 14.06               | 11.46              |
| 40 North Shore               | *                   | *                  | *                      | *                  | *                   | *                  | -12.81              | -14.65             |
| 50 Richmond                  | *                   | *                  | *                      | *                  | *                   | *                  | 24.75               | 21.78              |
| 60 Capital Regional District | -9.47               | -11.36             | *                      | *                  | *                   | *                  | -6.60               | -8.55              |
| <b>TOTAL</b>                 | <b>-11.84</b>       | <b>-14.33</b>      | <b>16.67</b>           | <b>13.37</b>       | <b>21.13</b>        | <b>17.70</b>       | <b>5.07</b>         | <b>2.10</b>        |

<sup>1</sup> Membership in the Cardiology Technicians Association of B.C. (CTABC) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Cardiology Technologists (CTABC Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Setting**  
**September 1993**

| Health Region                | Hospital   | Laboratory/<br>Clinic | Other    | Unknown   | Total      |
|------------------------------|------------|-----------------------|----------|-----------|------------|
| 1 East Kootenay              | 1          | 0                     | 0        | 1         | 2          |
| 2 Central Kootenay           | 1          | 1                     | 0        | 2         | 4          |
| 4 North Okanagan             | 4          | 0                     | 0        | 1         | 5          |
| 5 South Okanagan             | 16         | 2                     | 0        | 0         | 18         |
| 6 South Central              | 6          | 1                     | 0        | 0         | 7          |
| 7 Upper Fraser Valley        | 6          | 8                     | 0        | 4         | 18         |
| 8 Central Fraser Valley      | 8          | 17                    | 0        | 6         | 31         |
| 9 Boundary                   | 25         | 34                    | 0        | 6         | 65         |
| 10 Simon Fraser              | 14         | 18                    | 0        | 7         | 39         |
| 11 Coast Garibaldi           | 1          | 1                     | 0        | 2         | 4          |
| 13 Central Vancouver Island  | 15         | 3                     | 0        | 5         | 23         |
| 14 Upper Island              | 10         | 1                     | 0        | 1         | 12         |
| 15 Cariboo                   | 2          | 0                     | 0        | 0         | 2          |
| 16 Skeena                    | 1          | 0                     | 0        | 0         | 1          |
| 17 Peace River               | 0          | 0                     | 0        | 0         | 0          |
| 18 Northern Interior         | 3          | 0                     | 1        | 0         | 4          |
| 20 Vancouver                 | 22         | 18                    | 2        | 5         | 47         |
| 30 Burnaby                   | 9          | 16                    | 0        | 3         | 28         |
| 40 North Shore               | 10         | 3                     | 1        | 0         | 14         |
| 50 Richmond                  | 5          | 9                     | 0        | 1         | 15         |
| 60 Capital Regional District | 21         | 5                     | 1        | 3         | 30         |
| <b>TOTAL</b>                 | <b>180</b> | <b>137</b>            | <b>5</b> | <b>47</b> | <b>369</b> |

<sup>1</sup> Membership in the Cardiology Technologists Association of B.C. (CTABC) is voluntary.

## CARDIOVASCULAR PERFUSIONISTS

**Definition:** A cardiovascular perfusionist

...provides technical support to cardiac surgeons and anaesthetists during open-heart surgery.

Cardiovascular perfusionists perform some or all of the following duties:

- (a) assemble, maintain and operate extra-corporeal circulation equipment, intra-aortic balloon pumps and other heart assist devices to support or temporarily replace patients' cardiopulmonary functions during open-heart surgery;
- (b) administer blood products, drugs, and other substances through heart-lung machines and other devices as directed by cardiac surgeons and anaesthetists;
- (c) monitor vital signs to maintain patients' physiological functions during cardiopulmonary surgery;
- (d) supervise and train student clinical perfusionists and other clinical perfusionists.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory licensure and/or registration do not exist. Voluntary certification by the Canadian Society of Clinical Perfusion (CSCP) or by the American Board of Cardiovascular Perfusion is common.

**Date of Record:** October 1993

**Source of Data:** The British Columbia Society of Clinical Perfusionists (BCSCP).

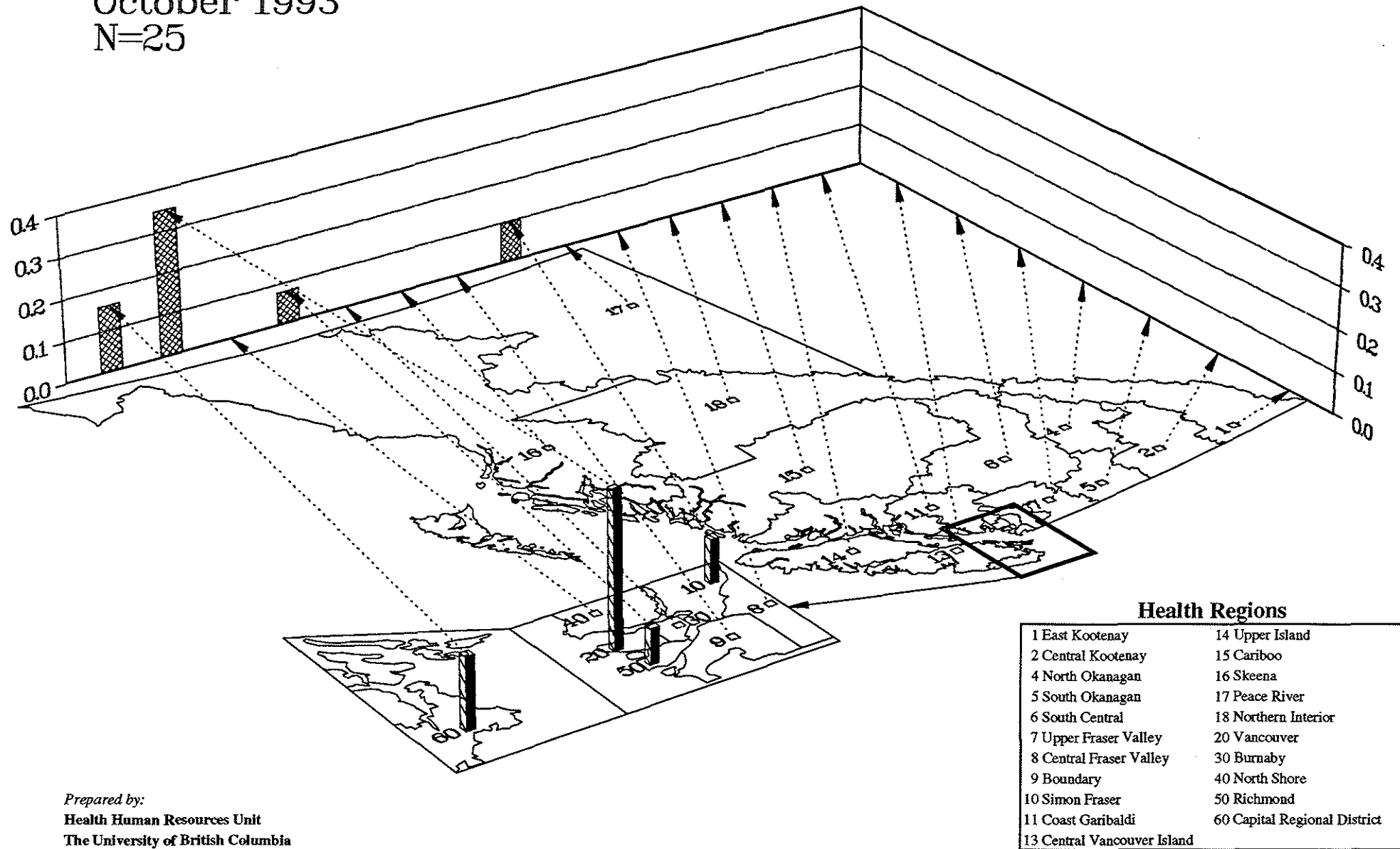
### Preparation and Updating:

The table has been prepared from a membership list provided by the British Columbia Society of Clinical Perfusion (BCSCP) and includes cardiovascular perfusionists who reported a British Columbia address at the date of record. Data for *ROLLCALL 91* came from the University College of the Cariboo, so the data are not comparable and 1991 numbers have not been presented. Data presented in the table are based on employment address for all cardiovascular perfusionists.

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3214, Ottawa: Employment and Immigration Canada.

# Cardiovascular Perfusionists (BCSCP Members) per 10,000 Population by Health Region October 1993 N=25



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Cardiovascular Perfusionists (BCSCP Members)<sup>1</sup> in British Columbia**  
**by Health Region by Sex**  
**October 1993<sup>2</sup>**

| Health Region                | Male      | Female   | Total     |
|------------------------------|-----------|----------|-----------|
| 1 East Kootenay              | 0         | 0        | 0         |
| 2 Central Kootenay           | 0         | 0        | 0         |
| 4 North Okanagan             | 0         | 0        | 0         |
| 5 South Okanagan             | 0         | 0        | 0         |
| 6 South Central              | 0         | 0        | 0         |
| 7 Upper Fraser Valley        | 0         | 0        | 0         |
| 8 Central Fraser Valley      | 0         | 0        | 0         |
| 9 Boundary                   | 0         | 0        | 0         |
| 10 Simon Fraser              | 2         | 0        | 2         |
| 11 Coast Garibaldi           | 0         | 0        | 0         |
| 13 Central Vancouver Island  | 0         | 0        | 0         |
| 14 Upper Island              | 0         | 0        | 0         |
| 15 Cariboo                   | 0         | 0        | 0         |
| 16 Skeena                    | 0         | 0        | 0         |
| 17 Peace River               | 0         | 0        | 0         |
| 18 Northern Interior         | 0         | 0        | 0         |
| 20 Vancouver                 | 12        | 5        | 17        |
| 30 Burnaby                   | 0         | 0        | 0         |
| 40 North Shore               | 0         | 0        | 0         |
| 50 Richmond                  | 0         | 1        | 1         |
| 60 Capital Regional District | 5         | 0        | 5         |
| <b>TOTAL</b>                 | <b>19</b> | <b>6</b> | <b>25</b> |

<sup>1</sup> Membership in the B.C. Society of Clinical Perfusion (BCSCP) is voluntary.

<sup>2</sup> Excludes 3 cardiovascular perfusionists who are not employed in clinical perfusion and 1 who is on leave of absence.



## CLINICAL ENGINEERS AND BIOMEDICAL ENGINEERING TECHNOLOGISTS AND TECHNICIANS

**Definition:** A clinical engineer

...applies physiological theory and engineering theory, methodologies, technology, instrumentation and materials to some or all of the following areas:

- (a) professional engineering practice in the clinical environment including incident investigation, investigation of equipment hazards, equipment evaluation, education on equipment safety and operation, design of parts or systems required to meet clinical needs, and administration of repairs, preventive maintenance and performance assurance of clinical equipment;
- (b) teaching clinical engineering practice or biomedical engineering technology at a university or college;
- (c) clinical research and development.

Training for clinical engineering consists of an engineering degree (usually Electrical, Mechanical, or Biomedical Engineering), commonly supplemented with graduate work in biomedical or clinical engineering.<sup>1</sup>

**Governing Statute:** Engineer's Act, Revised Statutes of British Columbia, 1979, Chapter 109, administered by the Ministry of Skills, Training and Labour.

**Governing Body:** Association of Professional Engineers of the Province of British Columbia (APEPBC). In order to practise as a professional engineer in British Columbia, it is necessary to be registered by the APEPBC.

Biomedical engineers may also become members of the Canadian Medical and Biological Engineering Society (CMBES) and may be certified as Clinical Engineers by the CMBES.

**Definition:** A biomedical engineering technologist or technician

...practises the application of detailed operational systems and methods in the biomedical electronics field. In particular, the field of practice of the technologist is the implementation and development of applied science techniques, while that of the technician is the operation of sophisticated scientific instruments and equipment. The technologist may also take part in systems development, layout and co-ordination of activities and resources.<sup>2</sup>

**Governing Statute:** None.

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<sup>1</sup>From information provided by the B.C. Chapter of the Canadian Medical and Biological Engineering Society.

<sup>2</sup>From information provided by the Applied Science Technologists and Technicians of British Columbia.

**Governing Body:** None. Compulsory licensure/registration do not exist. Individuals working as biomedical engineering technologists/technicians may be registered with the Applied Science Technologists and Technicians of British Columbia (ASTTBC). Members of the ASTTBC have exclusive use of the titles: *Applied Science Technologist, Certified Technician, C Tech*. It is also possible to be certified by the Canadian Medical and Biological Engineering Society (CMBES) as a Canadian Biological Engineering Technologist (CBET).

**Date of Record:** February 1994.

**Source of Data:** Health Human Resources Unit (HHRU) survey.

**Preparation and Updating:**

The figures in Table 1 are derived from an HHRU survey of possible employers of clinical and biological engineering personnel, developed from previous surveys and an informal list of employers provided by Institute of Biomedical Engineering Technology (IBET). Data for all other tables are based on responses to a mail survey of this group conducted by the HHRU. The overall response rate to the HHRU survey was 67 percent. Data presented in the tables are based on employment address for all clinical engineers and biomedical engineering technologists and technicians.

**Interpretation of the Data:**

The data presented are based on the results of the HHRU survey and include only those individuals directly engaged in clinical activities through employment at hospitals, universities or colleges, or private firms which provide equipment service to health care facilities.

The numbers presented here should be considered as an approximate indicator of the number of the personnel employed in this field. Because of different methods of data collection, comparison with 1991 figures is of limited value and has not been presented.

**Definition of Terms:**

**1. Clinical Engineers & Biomedical Engineering Technologists & Technicians**

Table 1 shows the number of clinical engineers and biomedical engineering technologists and technicians working in British Columbia at the date of record.

**2. Age and Sex**

Age and sex information on clinical engineers and biomedical engineering technologists and technicians who responded to the HHRU survey is shown in Table 2. Age information is grouped according to standard age categories developed and used by Statistics Canada. No respondents indicated that they were over 65 years of age.

### **3. Employment Status**

Employment status of clinical engineers and biomedical engineering technologists and technicians who responded to the HHRU survey is provided in Table 3. The categories used to display this information are as follows:

- (a) Employed in Clinical or Biomedical Engineering;
  - (i) Full-Time
  - (ii) Part-time
  - (iii) Casual
- (b) Employed in Other Field;
- (c) On Leave.

### **4. Employment Setting**

Employment setting for clinical engineers and biomedical engineering technologists and technicians, based on their responses to the HHRU survey, is provided in Table 4. The categories used to display this information are as follows:

- (a) Acute Care/General Hospital;
- (b) Non-Acute Health Care Facility;
- (c) Private Lab/Facility;
- (d) University/Technical Institute/Research Centre;
- (e) Other.

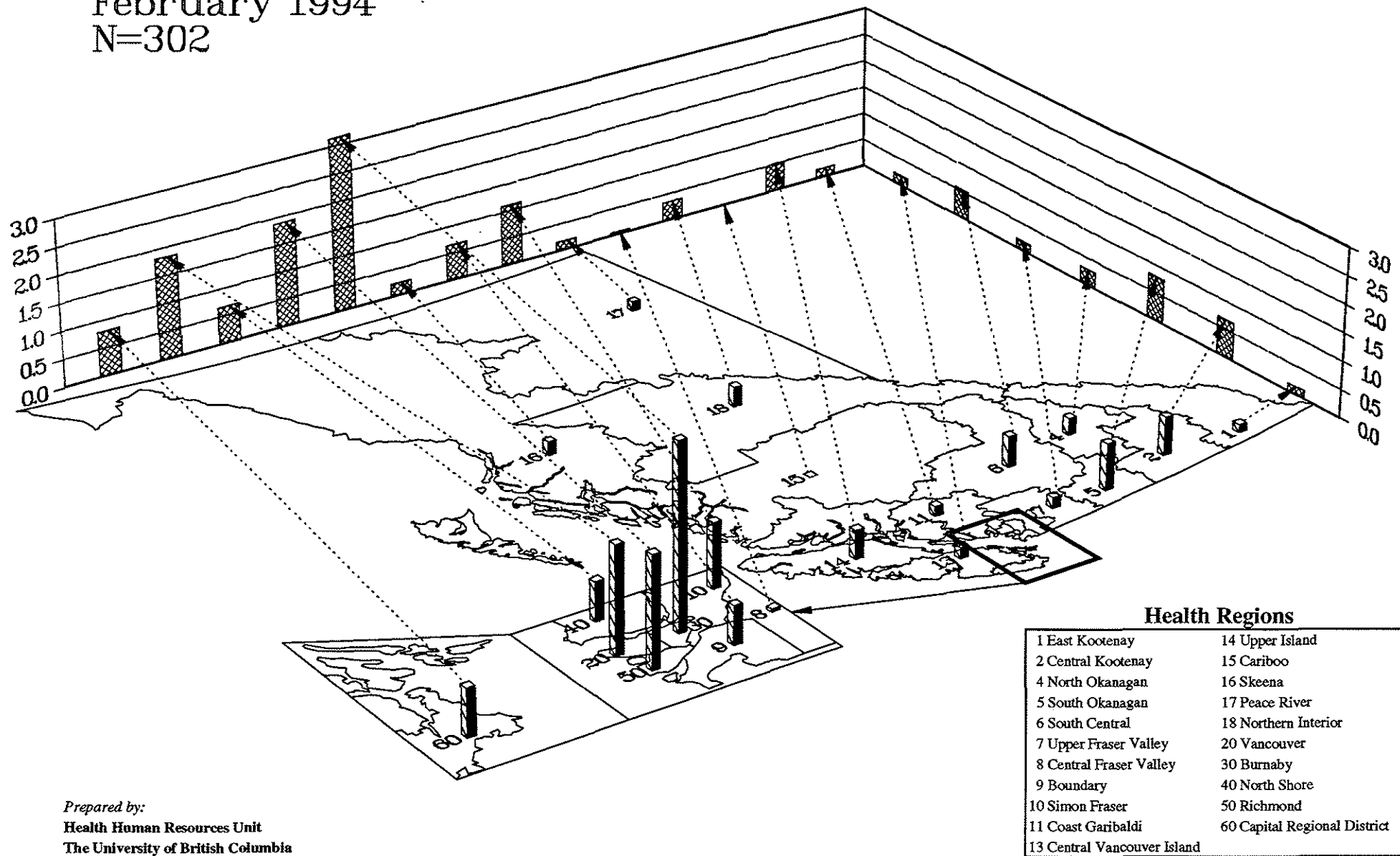
### **5. Employment Title**

Employment title for clinical engineers and biomedical engineering technologists and technicians is shown in Table 5, using the following categories:

- (a) Clinical/Biomedical Engineer;
- (b) Clinical/Biomedical Technologist/Technician;
- (c) Service Manager;
- (d) Repair/Service Technologist/Technician;
- (e) Instructor.

# Clinical Engineers & Biomedical Engineering Technologists & Technicians per 10,000 Population by Health Region

February 1994  
N=302



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Clinical Engineers & Biomedical Engineering Technologists**  
**& Technicians in British Columbia by Health Region**  
**February 1994**

| Health Region                | Number     | Number per<br>10,000 Population |
|------------------------------|------------|---------------------------------|
| 1 East Kootenay              | 1          | 0.14                            |
| 2 Central Kootenay           | 5          | 0.67                            |
| 4 North Okanagan             | 3          | 0.29                            |
| 5 South Okanagan             | 16         | 0.80                            |
| 6 South Central              | 6          | 0.53                            |
| 7 Upper Fraser Valley        | 3          | 0.18                            |
| 8 Central Fraser Valley      | 1          | 0.05                            |
| 9 Boundary                   | 25         | 0.66                            |
| 10 Simon Fraser              | 22         | 1.11                            |
| 11 Coast Garibaldi           | 1          | 0.16                            |
| 13 Central Vancouver Island  | 4          | 0.19                            |
| 14 Upper Island              | 5          | 0.49                            |
| 15 Cariboo                   | 0          | 0.00                            |
| 16 Skeena                    | 2          | 0.24                            |
| 17 Peace River               | 1          | 0.17                            |
| 18 Northern Interior         | 4          | 0.35                            |
| 20 Vancouver                 | 90         | 1.83                            |
| 30 Burnaby                   | 52         | 3.14                            |
| 40 North Shore               | 11         | 0.67                            |
| 50 Richmond                  | 25         | 1.89                            |
| 60 Capital Regional District | 25         | 0.80                            |
| <b>TOTAL</b>                 | <b>302</b> | <b>0.87</b>                     |

**Table 2**  
**Clinical Engineers & Biomedical Engineering Technologists & Technicians (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Age and Sex**  
**February 1994**

| Health Region                | < 25     |          | 25-34     |          | 35-44     |          | 45-54     |          | 55-64     |          | Subtotal   |           | Unknown  | Total      |
|------------------------------|----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|------------|-----------|----------|------------|
|                              | M        | F        | M         | F        | M         | F        | M         | F        | M         | F        | M          | F         |          |            |
| 1 East Kootenay              | 0        | 0        | 1         | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 1          | 0         | 0        | 1          |
| 2 Central Kootenay           | 0        | 0        | 1         | 0        | 1         | 0        | 1         | 0        | 1         | 0        | 4          | 0         | 0        | 4          |
| 4 North Okanagan             | 0        | 0        | 0         | 0        | 1         | 0        | 0         | 0        | 1         | 0        | 2          | 0         | 0        | 2          |
| 5 South Okanagan             | 0        | 0        | 4         | 0        | 6         | 0        | 2         | 0        | 2         | 0        | 14         | 0         | 0        | 14         |
| 6 South Central              | 0        | 0        | 1         | 0        | 4         | 0        | 1         | 0        | 0         | 0        | 6          | 0         | 0        | 6          |
| 7 Upper Fraser Valley        | 0        | 0        | 0         | 0        | 2         | 0        | 0         | 0        | 0         | 0        | 2          | 0         | 0        | 2          |
| 8 Central Fraser Valley      | 0        | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 0          | 0         | 1        | 1          |
| 9 Boundary                   | 0        | 0        | 7         | 1        | 2         | 1        | 3         | 0        | 0         | 0        | 12         | 2         | 0        | 14         |
| 10 Simon Fraser              | 0        | 0        | 5         | 0        | 2         | 1        | 2         | 0        | 2         | 0        | 11         | 1         | 1        | 13         |
| 11 Coast Garibaldi           | 0        | 0        | 1         | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 1          | 0         | 0        | 1          |
| 13 Central Vancouver Island  | 0        | 0        | 1         | 0        | 1         | 0        | 0         | 0        | 0         | 0        | 2          | 0         | 0        | 2          |
| 14 Upper Island              | 0        | 0        | 1         | 0        | 3         | 0        | 1         | 0        | 0         | 0        | 5          | 0         | 0        | 5          |
| 15 Cariboo                   | 0        | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 0          | 0         | 0        | 0          |
| 16 Skeena                    | 0        | 0        | 1         | 0        | 0         | 0        | 0         | 0        | 0         | 0        | 1          | 0         | 0        | 1          |
| 17 Peace River               | 0        | 0        | 0         | 0        | 1         | 0        | 0         | 0        | 0         | 0        | 1          | 0         | 0        | 1          |
| 18 Northern Interior         | 0        | 0        | 1         | 0        | 0         | 0        | 0         | 0        | 3         | 0        | 4          | 0         | 0        | 4          |
| 20 Vancouver                 | 2        | 0        | 17        | 3        | 22        | 1        | 8         | 0        | 0         | 0        | 49         | 4         | 5        | 58         |
| 30 Burnaby                   | 3        | 0        | 10        | 1        | 9         | 0        | 6         | 0        | 1         | 0        | 29         | 1         | 0        | 30         |
| 40 North Shore               | 0        | 0        | 5         | 1        | 1         | 0        | 1         | 0        | 0         | 0        | 7          | 1         | 1        | 9          |
| 50 Richmond                  | 0        | 1        | 10        | 2        | 5         | 0        | 0         | 0        | 1         | 0        | 16         | 3         | 0        | 19         |
| 60 Capital Regional District | 0        | 0        | 0         | 1        | 6         | 0        | 7         | 0        | 2         | 0        | 15         | 1         | 0        | 16         |
| <b>TOTAL</b>                 | <b>5</b> | <b>1</b> | <b>66</b> | <b>9</b> | <b>66</b> | <b>3</b> | <b>32</b> | <b>0</b> | <b>13</b> | <b>0</b> | <b>182</b> | <b>13</b> | <b>8</b> | <b>203</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Clinical Engineers & Biomedical Engineering Technologists & Technicians' survey.



**Table 3**  
**Clinical Engineers & Biomedical Engineering Technologists & Technicians (Survey Respondents)<sup>1</sup>**  
**in British Columbia by Health Region by Employment Status**  
**February 1994**

| Health Region                | Employed in Clinical or Biomedical Engineering |           |          |            | Employed in<br>Other Field | On<br>Leave | Total      |
|------------------------------|--|-----------|----------|------------|----------------------------|-------------|------------|
|                              | Full-Time                                      | Part-Time | Casual   | Subtotal   |                            |             |            |
| 1 East Kootenay              | 1  | 0         | 0        | 1          | 0                          | 0           | 1          |
| 2 Central Kootenay           | 4  | 0         | 0        | 4          | 0                          | 0           | 4          |
| 4 North Okanagan             | 2  | 0         | 0        | 2          | 0                          | 0           | 2          |
| 5 South Okanagan             | 13   | 1         | 0        | 14         | 0                          | 0           | 14         |
| 6 South Central              | 6  | 0         | 0        | 6          | 0                          | 0           | 6          |
| 7 Upper Fraser Valley        | 2  | 0         | 0        | 2          | 0                          | 0           | 2          |
| 8 Central Fraser Valley      | 1  | 0         | 0        | 1          | 0                          | 0           | 1          |
| 9 Boundary                   | 12   | 2         | 0        | 14         | 0                          | 0           | 14         |
| 10 Simon Fraser              | 13   | 0         | 0        | 13         | 0                          | 0           | 13         |
| 11 Coast Garibaldi           | 1  | 0         | 0        | 1          | 0                          | 0           | 1          |
| 13 Central Vancouver Island  | 2  | 0         | 0        | 2          | 0                          | 0           | 2          |
| 14 Upper Island              | 5  | 0         | 0        | 5          | 0                          | 0           | 5          |
| 15 Cariboo                   | 0  | 0         | 0        | 0          | 0                          | 0           | 0          |
| 16 Skeena                    | 1  | 0         | 0        | 1          | 0                          | 0           | 1          |
| 17 Peace River               | 1  | 0         | 0        | 1          | 0                          | 0           | 1          |
| 18 Northern Interior         | 4  | 0         | 0        | 4          | 0                          | 0           | 4          |
| 20 Vancouver                 | 54   | 2         | 1        | 57         | 0                          | 1           | 58         |
| 30 Burnaby                   | 26   | 1         | 0        | 27         | 3                          | 0           | 30         |
| 40 North Shore               | 7  | 0         | 0        | 7          | 2                          | 0           | 9          |
| 50 Richmond                  | 18   | 1         | 0        | 19         | 0                          | 0           | 19         |
| 60 Capital Regional District | 14   | 1         | 0        | 15         | 1                          | 0           | 16         |
| <b>TOTAL</b>                 | <b>187</b>                                     | <b>8</b>  | <b>1</b> | <b>196</b> | <b>6</b>                   | <b>1</b>    | <b>203</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Clinical Engineers & Biomedical Engineering Technologists & Technicians' survey.

**Table 4**  
**Clinical Engineers & Biomedical Engineering Technologists & Technicians (Survey Respondents)<sup>1</sup>**  
**Employed in Clinical or Biomedical Engineering<sup>2</sup> in British Columbia by Health Region by Employment Setting**  
**February 1994**

| Health Region                | Acute Care/<br>General Hospital | Non -Acute<br>Health Care<br>Facility | Private Lab/<br>Facility <sup>3</sup> | University/<br>Technical Institute/<br>Research Centre | Other    | Unknown  | Total      |
|------------------------------|---------------------------------|---------------------------------------|---------------------------------------|--|----------|----------|------------|
| 1 East Kootenay              | 1                               | 0                                     | 0                                     | 0  | 0        | 0        | 1          |
| 2 Central Kootenay           | 4                               | 0                                     | 0                                     | 0  | 0        | 0        | 4          |
| 4 North Okanagan             | 2                               | 0                                     | 0                                     | 0  | 0        | 0        | 2          |
| 5 South Okanagan             | 14                              | 0                                     | 0                                     | 0  | 0        | 0        | 14         |
| 6 South Central              | 6                               | 0                                     | 0                                     | 0  | 0        | 0        | 6          |
| 7 Upper Fraser Valley        | 2                               | 0                                     | 0                                     | 0  | 0        | 0        | 2          |
| 8 Central Fraser Valley      | 1                               | 0                                     | 0                                     | 0  | 0        | 0        | 1          |
| 9 Boundary                   | 7                               | 2                                     | 4                                     | 0  | 0        | 1        | 14         |
| 10 Simon Fraser              | 13                              | 0                                     | 0                                     | 0  | 0        | 0        | 13         |
| 11 Coast Garibaldi           | 1                               | 0                                     | 0                                     | 0  | 0        | 0        | 1          |
| 13 Central Vancouver Island  | 2                               | 0                                     | 0                                     | 0  | 0        | 0        | 2          |
| 14 Upper Island              | 4                               | 0                                     | 0                                     | 0  | 1        | 0        | 5          |
| 15 Cariboo                   | 0                               | 0                                     | 0                                     | 0  | 0        | 0        | 0          |
| 16 Skeena                    | 1                               | 0                                     | 0                                     | 0  | 0        | 0        | 1          |
| 17 Peace River               | 1                               | 0                                     | 0                                     | 0  | 0        | 0        | 1          |
| 18 Northern Interior         | 4                               | 0                                     | 0                                     | 0  | 0        | 0        | 4          |
| 20 Vancouver                 | 40                              | 4                                     | 11                                    | 1  | 1        | 0        | 57         |
| 30 Burnaby                   | 0                               | 0                                     | 22                                    | 5  | 0        | 0        | 27         |
| 40 North Shore               | 3                               | 0                                     | 0                                     | 4  | 0        | 0        | 7          |
| 50 Richmond                  | 3                               | 0                                     | 12                                    | 0  | 3        | 1        | 19         |
| 60 Capital Regional District | 11                              | 1                                     | 2                                     | 1  | 0        | 0        | 15         |
| <b>TOTAL</b>                 | <b>120</b>                      | <b>7</b>                              | <b>51</b>                             | <b>11</b>  | <b>5</b> | <b>2</b> | <b>196</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Clinical Engineers & Biomedical Engineering Technologists & Technicians' survey.

<sup>2</sup> Excludes 6 survey respondents who are employed in other fields and 1 who is on leave of absence.

<sup>3</sup> Includes 25 survey respondents who described their employment setting as equipment manufacturer or field service.

**Table 5**  
**Clinical Engineers & Biomedical Engineering Technologists & Technicians (Survey Respondents)<sup>1</sup>**  
**Employed in Clinical or Biomedical Engineering<sup>2</sup> in British Columbia by Health Region by Employment Title**  
**February 1994**

| Health Region                | Clinical/<br>Biomedical<br>Engineer | Clinical/<br>Biomedical<br>Technologist/<br>Technician | Service<br>Manager | Repair/Service<br>Technologist/<br>Technician | Instructor | Researcher | Other     | Unknown  | Total      |
|------------------------------|-------------------------------------|--|--------------------|---|------------|------------|-----------|----------|------------|
| 1 East Kootenay              | 0                                   | 1  | 0                  | 0   | 0          | 0          | 0         | 0        | 1          |
| 2 Central Kootenay           | 0                                   | 3  | 0                  | 0   | 0          | 0          | 0         | 1        | 4          |
| 4 North Okanagan             | 0                                   | 2  | 0                  | 0   | 0          | 0          | 0         | 0        | 2          |
| 5 South Okanagan             | 3                                   | 9  | 2                  | 0   | 0          | 0          | 0         | 0        | 14         |
| 6 South Central              | 0                                   | 4  | 0                  | 1   | 0          | 0          | 1         | 0        | 6          |
| 7 Upper Fraser Valley        | 0                                   | 2  | 0                  | 0   | 0          | 0          | 0         | 0        | 2          |
| 8 Central Fraser Valley      | 0                                   | 1  | 0                  | 0   | 0          | 0          | 0         | 0        | 1          |
| 9 Boundary                   | 1                                   | 5  | 2                  | 5   | 1          | 0          | 0         | 0        | 14         |
| 10 Simon Fraser              | 1                                   | 9  | 0                  | 1   | 0          | 0          | 2         | 0        | 13         |
| 11 Coast Garibaldi           | 0                                   | 1  | 0                  | 0   | 0          | 0          | 0         | 0        | 1          |
| 13 Central Vancouver Island  | 0                                   | 2  | 0                  | 0   | 0          | 0          | 0         | 0        | 2          |
| 14 Upper Island              | 1                                   | 3  | 0                  | 0   | 0          | 0          | 1         | 0        | 5          |
| 15 Cariboo                   | 0                                   | 0  | 0                  | 0   | 0          | 0          | 0         | 0        | 0          |
| 16 Skeena                    | 0                                   | 1  | 0                  | 0   | 0          | 0          | 0         | 0        | 1          |
| 17 Peace River               | 0                                   | 1  | 0                  | 0   | 0          | 0          | 0         | 0        | 1          |
| 18 Northern Interior         | 0                                   | 2  | 0                  | 2   | 0          | 0          | 0         | 0        | 4          |
| 20 Vancouver                 | 6                                   | 33   | 4                  | 7   | 0          | 0          | 3         | 4        | 57         |
| 30 Burnaby                   | 2                                   | 3  | 3                  | 15  | 2          | 0          | 1         | 1        | 27         |
| 40 North Shore               | 2                                   | 2  | 0                  | 2   | 0          | 0          | 1         | 0        | 7          |
| 50 Richmond                  | 0                                   | 6  | 2                  | 7   | 0          | 0          | 3         | 1        | 19         |
| 60 Capital Regional District | 3                                   | 7  | 0                  | 3   | 0          | 2          | 0         | 0        | 15         |
| <b>TOTAL</b>                 | <b>19</b>                           | <b>97</b>  | <b>13</b>          | <b>43</b>                                     | <b>3</b>   | <b>2</b>   | <b>12</b> | <b>7</b> | <b>196</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Clinical Engineers & Biomedical Engineering Technologists & Technicians' survey.

<sup>2</sup> Excludes 6 survey respondents who are employed in other fields and 1 who is on leave of absence.

## DIAGNOSTIC MEDICAL SONOGRAPHERS

**Definition:** A diagnostic medical sonographer

...operates ultrasound equipment to produce and record images of various parts of the body to aid physicians in monitoring pregnancies and in diagnosing cardiac, vascular and other disorders.

Diagnostic medical sonographers perform some or all of the following duties:

- (a) operate ultrasound imaging equipment that transmits high frequency sound pulses through the body to produce images of those parts of the body requiring examination;
- (b) monitor examination by viewing images on video screen, to evaluate quality and consistency of diagnostic images, and make adjustments to equipment, as required;
- (c) observe and care for patients throughout examinations to ensure patient safety and comfort;
- (d) prepare examination reports for physicians to aid in the monitoring of pregnancies and the diagnosis of cardiac, abdominal, ophthalmic, vascular, and other disorders;
- (e) check ultrasound equipment to ensure proper operation and perform minor repairs and adjustments as required.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the British Columbia Ultrasonographers' Society is voluntary.

**Date of Record:** February 1994

**Source of Data:** Health Human Resources Unit survey.

### Preparation and Updating:

Table 1 includes diagnostic medical sonographer (DMS) personnel employed in British Columbia at the date of record as identified by institutions, physicians, and organisations licensed to provide ultrasound services in the province.

Data for the other tables have been derived from responses to a mailed survey of ultrasound personnel that was conducted by the HHRU. The overall response rate to the HHRU survey was 79%. Because of the nature of data collection for this group, comparison with 1991 figures would be of limited value and has not been presented. Data presented in the tables are based on employment address for all diagnostic medical sonographers.

In 1993 there were 47 DMS personnel who were also qualified to work as medical radiation technologists (MRT). DMS personnel who are also qualified as MRTs are included in both the DMS and MRT sections of *ROLLCALL 93*.

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<sup>1</sup> Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3216, Ottawa: Employment and Immigration Canada.

During survey preparation, a large number of ophthalmology offices performing ultrasound was found. An attempt was made to include staff from these offices in the survey population. Fifteen staff members performing ultrasound were identified and mailed surveys, nine of whom responded. Their responses indicated that they spent very little work time in this capacity, that this was the only type of ultrasound performed by them, and that they did not receive formal educational training in it. For these reasons, this group was subsequently excluded from analysis, and is not included in any of the tables that follow. In future *ROLLCALL* issues, it may be possible to include this group in some other form.

#### **Definition of Terms:**

##### **1. Diagnostic Medical Sonographers**

The number and number per 10,000 population of diagnostic medical sonographers is shown in Table 1. The total number is an estimate of all people employed in this field at the date of record.

##### **2. Age and Sex**

Age and sex information on diagnostic medical sonographers who responded to the HHRU survey is shown in Table 2. Age information is grouped according to standard age categories developed and used by Statistics Canada.

##### **3. Employment Status**

Employment status of diagnostic medical sonographers who responded to the HHRU survey is provided in Table 3. The categories used for this information are as follows:

- (a) Employed in ultrasound;
  - (i) Full-time
  - (ii) Part-time
  - (iii) Casual
- (b) Employed in other field;
- (c) On leave.

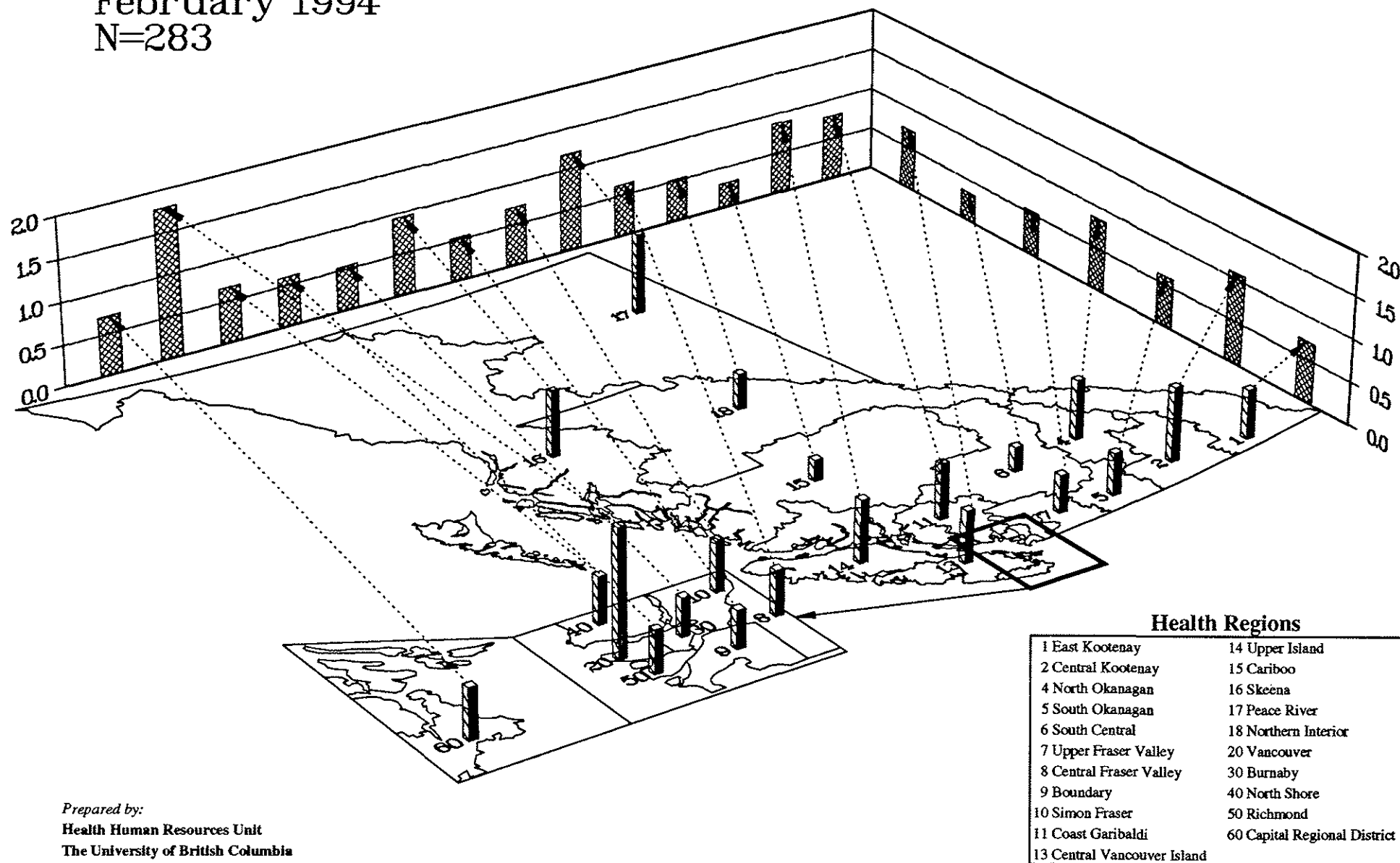
##### **4. Principal Employing Institution**

Principal employing institution of diagnostic medical sonographers is provided in Table 4 based on responses to the HHRU survey. The categories used for this information are as follows:

- (a) Hospital;
- (b) Private Clinic/Laboratory;
- (c) University/Technical Institute/Research Centre;
- (d) Other.

# Diagnostic Medical Sonographers per 10,000 Population by Health Region February 1994 N=283

06



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Diagnostic Medical Sonographers**  
**in British Columbia by Health Region**  
**February 1994**

| Health Region                | Number     | Number per<br>10,000 Population |
|------------------------------|------------|---------------------------------|
| 1 East Kootenay              | 5          | 0.71                            |
| 2 Central Kootenay           | 8          | 1.07                            |
| 4 North Okanagan             | 9          | 0.86                            |
| 5 South Okanagan             | 12         | 0.60                            |
| 6 South Central              | 4          | 0.35                            |
| 7 Upper Fraser Valley        | 9          | 0.53                            |
| 8 Central Fraser Valley      | 12         | 0.63                            |
| 9 Boundary                   | 20         | 0.53                            |
| 10 Simon Fraser              | 14         | 0.71                            |
| 11 Coast Garibaldi           | 5          | 0.79                            |
| 13 Central Vancouver Island  | 15         | 0.73                            |
| 14 Upper Island              | 9          | 0.88                            |
| 15 Cariboo                   | 2          | 0.30                            |
| 16 Skeena                    | 8          | 0.95                            |
| 17 Peace River               | 7          | 1.19                            |
| 18 Northern Interior         | 6          | 0.52                            |
| 20 Vancouver                 | 88         | 1.79                            |
| 30 Burnaby <sup>1</sup>      | 9          | 0.54                            |
| 40 North Shore               | 11         | 0.67                            |
| 50 Richmond                  | 8          | 0.60                            |
| 60 Capital Regional District | 22         | 0.71                            |
| <b>TOTAL</b>                 | <b>283</b> | <b>0.82</b>                     |

<sup>1</sup> We have reason to believe that the number for this region is artificially low because of the refusal of the employees of one public sector institution to be identified for the purposes of the survey.

**Table 2**  
**Diagnostic Medical Sonographers (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Age and Sex**  
**February 1994**

| Health Region                | < 25     |          | 25-34     |           | 35-44     |           | 45-54    |           | 55-64    |          | Subtotal  |            | Unknown   | Total      |
|------------------------------|----------|----------|-----------|-----------|-----------|-----------|----------|-----------|----------|----------|-----------|------------|-----------|------------|
|                              | M        | F        | M         | F         | M         | F         | M        | F         | M        | F        | M         | F          |           |            |
| 1 East Kootenay              | 0        | 0        | 0         | 0         | 0         | 4         | 0        | 1         | 0        | 0        | 0         | 5          | 0         | 5          |
| 2 Central Kootenay           | 0        | 0        | 0         | 1         | 1         | 4         | 0        | 0         | 0        | 0        | 1         | 5          | 0         | 6          |
| 4 North Okanagan             | 0        | 0        | 0         | 2         | 1         | 1         | 0        | 2         | 0        | 0        | 1         | 5          | 1         | 7          |
| 5 South Okanagan             | 0        | 0        | 1         | 3         | 0         | 2         | 0        | 1         | 0        | 0        | 1         | 6          | 1         | 8          |
| 6 South Central              | 0        | 0        | 0         | 1         | 0         | 3         | 0        | 0         | 0        | 0        | 0         | 4          | 0         | 4          |
| 7 Upper Fraser Valley        | 0        | 0        | 1         | 1         | 0         | 3         | 0        | 1         | 0        | 0        | 1         | 5          | 0         | 6          |
| 8 Central Fraser Valley      | 0        | 0        | 0         | 2         | 0         | 6         | 0        | 3         | 0        | 1        | 0         | 12         | 0         | 12         |
| 9 Boundary                   | 0        | 0        | 0         | 3         | 2         | 6         | 2        | 0         | 0        | 0        | 4         | 9          | 1         | 14         |
| 10 Simon Fraser              | 0        | 0        | 0         | 1         | 0         | 9         | 0        | 2         | 0        | 0        | 0         | 12         | 1         | 13         |
| 11 Coast Garibaldi           | 0        | 0        | 0         | 2         | 0         | 2         | 0        | 0         | 0        | 0        | 0         | 4          | 1         | 5          |
| 13 Central Vancouver Island  | 0        | 0        | 1         | 2         | 0         | 1         | 0        | 3         | 0        | 1        | 1         | 7          | 3         | 11         |
| 14 Upper Island              | 0        | 1        | 1         | 2         | 1         | 3         | 0        | 1         | 0        | 0        | 2         | 7          | 0         | 9          |
| 15 Cariboo                   | 0        | 0        | 0         | 1         | 0         | 0         | 0        | 1         | 0        | 0        | 0         | 2          | 0         | 2          |
| 16 Skeena                    | 0        | 0        | 2         | 2         | 0         | 1         | 0        | 0         | 0        | 0        | 2         | 3          | 2         | 7          |
| 17 Peace River               | 0        | 0        | 0         | 2         | 0         | 2         | 0        | 2         | 0        | 0        | 0         | 6          | 0         | 6          |
| 18 Northern Interior         | 0        | 0        | 0         | 0         | 1         | 2         | 0        | 1         | 1        | 0        | 2         | 3          | 0         | 5          |
| 20 Vancouver                 | 0        | 0        | 4         | 16        | 3         | 21        | 2        | 7         | 0        | 1        | 9         | 45         | 7         | 61         |
| 30 Burnaby                   | 0        | 0        | 2         | 2         | 0         | 4         | 0        | 0         | 0        | 0        | 2         | 6          | 0         | 8          |
| 40 North Shore               | 0        | 0        | 0         | 3         | 0         | 4         | 0        | 2         | 0        | 0        | 0         | 9          | 1         | 10         |
| 50 Richmond                  | 0        | 0        | 0         | 1         | 0         | 4         | 0        | 1         | 0        | 1        | 0         | 7          | 0         | 7          |
| 60 Capital Regional District | 0        | 0        | 0         | 8         | 2         | 5         | 0        | 3         | 0        | 0        | 2         | 16         | 0         | 18         |
| <b>TOTAL</b>                 | <b>0</b> | <b>1</b> | <b>12</b> | <b>55</b> | <b>11</b> | <b>87</b> | <b>4</b> | <b>31</b> | <b>1</b> | <b>4</b> | <b>28</b> | <b>178</b> | <b>18</b> | <b>224</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Diagnostic Medical Sonographers' survey.



**Table 3**  
**Diagnostic Medical Sonographers (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Status**  
**February 1994**

| Health Region                | Employed in Ultrasound |           |           |            | Employed in<br>Other Field | On<br>Leave | Total      |
|------------------------------|------------------------|-----------|-----------|------------|----------------------------|-------------|------------|
|                              | Full-Time              | Part-Time | Casual    | Subtotal   |                            |             |            |
| 1 East Kootenay              | 2                      | 2         | 1         | 5          | 0                          | 0           | 5          |
| 2 Central Kootenay           | 1                      | 4         | 1         | 6          | 0                          | 0           | 6          |
| 4 North Okanagan             | 4                      | 3         | 0         | 7          | 0                          | 0           | 7          |
| 5 South Okanagan             | 7                      | 0         | 1         | 8          | 0                          | 0           | 8          |
| 6 South Central              | 3                      | 1         | 0         | 4          | 0                          | 0           | 4          |
| 7 Upper Fraser Valley        | 4                      | 2         | 0         | 6          | 0                          | 0           | 6          |
| 8 Central Fraser Valley      | 6                      | 4         | 1         | 11         | 0                          | 1           | 12         |
| 9 Boundary                   | 8                      | 4         | 2         | 14         | 0                          | 0           | 14         |
| 10 Simon Fraser              | 3                      | 10        | 0         | 13         | 0                          | 0           | 13         |
| 11 Coast Garibaldi           | 1                      | 3         | 1         | 5          | 0                          | 0           | 5          |
| 13 Central Vancouver Island  | 6                      | 4         | 0         | 10         | 1                          | 0           | 11         |
| 14 Upper Island              | 5                      | 2         | 2         | 9          | 0                          | 0           | 9          |
| 15 Cariboo                   | 2                      | 0         | 0         | 2          | 0                          | 0           | 2          |
| 16 Skeena                    | 1                      | 5         | 1         | 7          | 0                          | 0           | 7          |
| 17 Peace River               | 1                      | 4         | 1         | 6          | 0                          | 0           | 6          |
| 18 Northern Interior         | 2                      | 3         | 0         | 5          | 0                          | 0           | 5          |
| 20 Vancouver                 | 38                     | 14        | 7         | 59         | 1                          | 1           | 61         |
| 30 Burnaby                   | 6                      | 1         | 1         | 8          | 0                          | 0           | 8          |
| 40 North Shore               | 7                      | 2         | 0         | 9          | 1                          | 0           | 10         |
| 50 Richmond                  | 2                      | 5         | 0         | 7          | 0                          | 0           | 7          |
| 60 Capital Regional District | 14                     | 3         | 1         | 18         | 0                          | 0           | 18         |
| <b>TOTAL</b>                 | <b>123</b>             | <b>76</b> | <b>20</b> | <b>219</b> | <b>3</b>                   | <b>2</b>    | <b>224</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Diagnostic Medical Sonographers' survey.

**Table 4**  
**Diagnostic Medical Sonographers (Survey Respondents)<sup>1</sup> Employed in Ultrasound<sup>2</sup>**  
**in British Columbia by Health Region by Employment Setting**  
**February 1994**

| Health Region                | Hospital   | Private<br>Clinic/Lab | University/<br>Technical Institute/<br>Research Centre | Other    | Total      |
|------------------------------|------------|-----------------------|--|----------|------------|
| 1 East Kootenay              | 5          | 0                     | 0  | 0        | 5          |
| 2 Central Kootenay           | 6          | 0                     | 0  | 0        | 6          |
| 4 North Okanagan             | 7          | 0                     | 0  | 0        | 7          |
| 5 South Okanagan             | 6          | 2                     | 0  | 0        | 8          |
| 6 South Central              | 4          | 0                     | 0  | 0        | 4          |
| 7 Upper Fraser Valley        | 5          | 1                     | 0  | 0        | 6          |
| 8 Central Fraser Valley      | 9          | 2                     | 0  | 0        | 11         |
| 9 Boundary                   | 9          | 4                     | 0  | 1        | 14         |
| 10 Simon Fraser              | 11         | 2                     | 0  | 0        | 13         |
| 11 Coast Garibaldi           | 5          | 0                     | 0  | 0        | 5          |
| 13 Central Vancouver Island  | 7          | 3                     | 0  | 0        | 10         |
| 14 Upper Island              | 9          | 0                     | 0  | 0        | 9          |
| 15 Cariboo                   | 2          | 0                     | 0  | 0        | 2          |
| 16 Skeena                    | 7          | 0                     | 0  | 0        | 7          |
| 17 Peace River               | 6          | 0                     | 0  | 0        | 6          |
| 18 Northern Interior         | 3          | 2                     | 0  | 0        | 5          |
| 20 Vancouver                 | 49         | 8                     | 2  | 0        | 59         |
| 30 Burnaby                   | 2          | 5                     | 1  | 0        | 8          |
| 40 North Shore               | 7          | 2                     | 0  | 0        | 9          |
| 50 Richmond                  | 2          | 5                     | 0  | 0        | 7          |
| 60 Capital Regional District | 16         | 2                     | 0  | 0        | 18         |
| <b>TOTAL</b>                 | <b>177</b> | <b>38</b>             | <b>3</b>   | <b>1</b> | <b>219</b> |

<sup>1</sup> Data for this table are derived from the 1993 HHRU Diagnostic Medical Sonographers' survey.

<sup>2</sup> Excludes 3 survey respondents who are employed in other fields and 2 who are on leave of absence.



## MEDICAL LABORATORY TECHNOLOGISTS

**Definition:** A medical laboratory technologist

...conducts medical laboratory tests, experiments, and analyses to assist in the diagnosis, treatment, and prevention of disease.

Medical laboratory technologists perform some or all of the following duties:

- (a) conduct chemical analyses of blood, urine, cerebro-spinal and other body fluids;
- (b) study blood cells and other tissue to determine their relation to various physiological and pathological conditions;
- (c) prepare tissue sections for microscopic examinations using techniques to demonstrate special cellular tissue elements or other characteristics;
- (d) establish procedures for the analysis of specimens and for medical laboratory experiments;
- (e) perform blood group, type and compatibility tests for transfusion purposes;
- (f) may supervise and train other medical laboratory technologists and other medical laboratory workers.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary. The CSLT administers examinations for certification with the designations RT (Registered Technologist), ART (Advanced Registered Technologist), and FCSLT (Fellowship of the CSLT).

**Date of Record:** October 1991 and October 1993.

**Source of Data:** Canadian Society of Laboratory Technologists (CSLT).

### Preparation and Updating:

The tables are derived solely from the *Official Registry of Medical Laboratory Technologists (Canada)* supplied by the CSLT and include medical laboratory technologists who reported a British Columbia address at the date of record. Members are classified by the CSLT according to their training and practice. Where members have more than one certificate, the most recently obtained is used. Data presented in the tables are based on home address for the majority of medical laboratory technologists. Precise percentages of home vs. employment or other address are not known.

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3211, Ottawa; Employment and Immigration Canada.

## Definition of Terms:

### 1. Membership Status

Tables 1a and 1b show number and number per 10,000 population based on membership status for members who reported a British Columbia address at the date of record. Table 1c shows the average annual rates of change in these numbers from 1991 to 1993. The following categories are used for membership status:

(a) *Certified (Active)*

A certified active member has passed the required examinations and is currently employed in medical laboratory technology in British Columbia.

(b) *Certified (Inactive)*

A certified inactive member has passed the required examinations, but is not currently employed in medical laboratory technology in British Columbia.

(c) *Subscriber (Non-Certified)*

A subscriber is a member who has met medical laboratory technology standards in another country, but has not yet taken the Canadian examinations for certification. These members generally are employed in the field.

(d) *Trainee*

A trainee member is a student, and not considered to be part of the work force.<sup>2</sup>

### 2. Level of Training

Tables 2a and 2b report number and number per 10,000 population based on level of training for Certified (Active) members who were British Columbia residents at the date of record. Table 2c shows the average annual rates of change in these numbers from 1991 to 1993. The categories used for level of training are as follows:

(a) *Registered Technologist (RT)*

Requires set standards for schooling, and successful completion of examinations administered by the CSLT. Certification can be general or in a specific area.

(b) *Advanced Registered Technologist (ART)*

Requires additional course work and examinations.

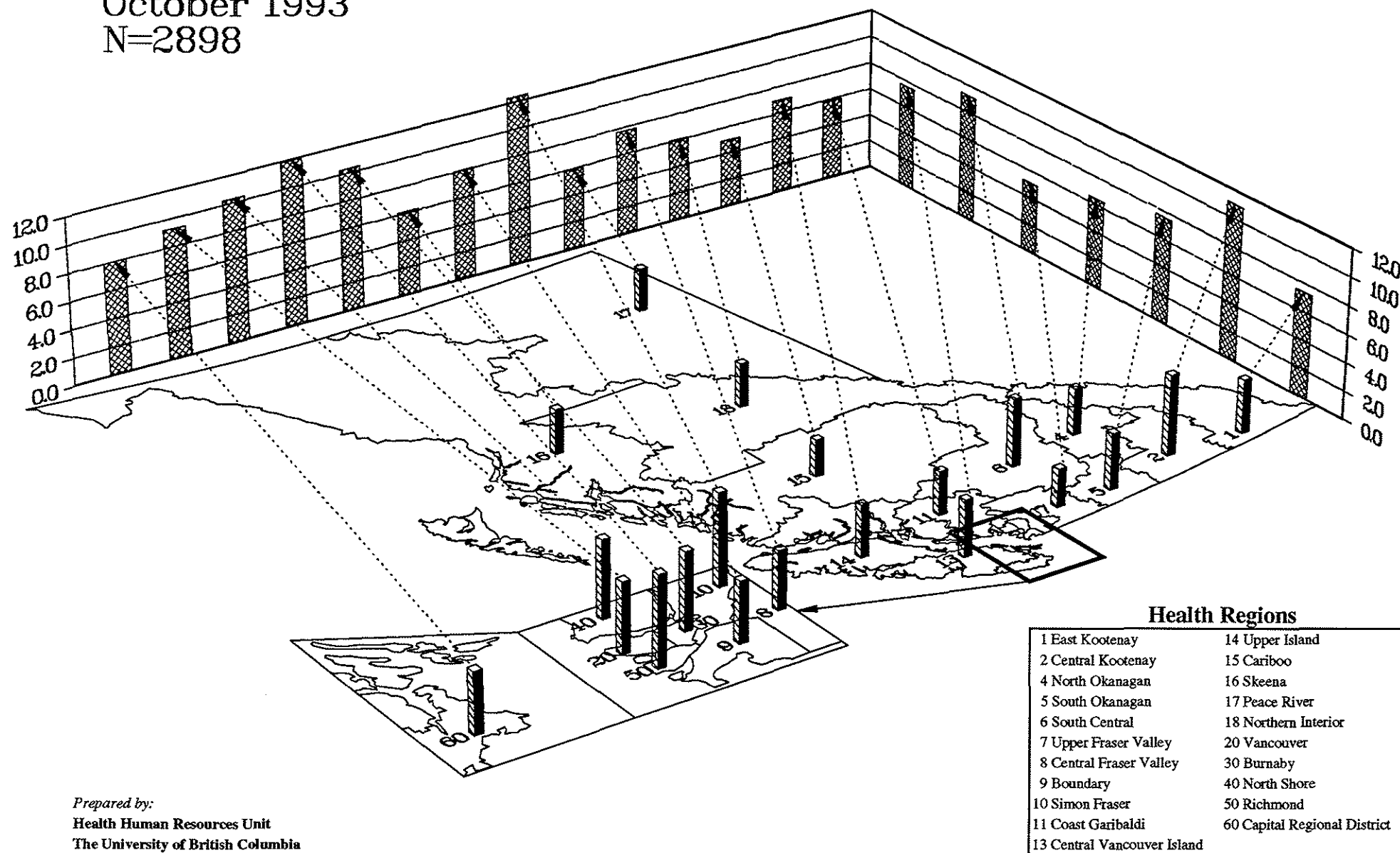
(c) *Fellowship of the CSLT (FCSLT)*.

Highest certification level, with educational and examination requirements.<sup>2</sup>

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<sup>2</sup>Adapted from information received from the Canadian Society of Laboratory Technologists.

Certified (Active) Medical Laboratory  
Technologists (CSLT Members) per 10,000 Population  
by Health Region  
October 1993  
N=2898



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Medical Laboratory Technologists (CSLT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Membership Status**  
**October 1991 and October 1993**

| Health Region                | Certified (Active) |              | Certified (Inactive) |            | Subscriber<br>(Non-Certified) |           | Trainee   |           | Total        |              |
|------------------------------|--------------------|--------------|----------------------|------------|-------------------------------|-----------|-----------|-----------|--------------|--------------|
|                              | 1991               | 1993         | 1991                 | 1993       | 1991                          | 1993      | 1991      | 1993      | 1991         | 1993         |
| 1 East Kootenay              | 55                 | 52           | 5                    | 5          | 0                             | 0         | 0         | 0         | 60           | 57           |
| 2 Central Kootenay           | 71                 | 82           | 8                    | 4          | 3                             | 2         | 2         | 4         | 84           | 92           |
| 4 North Okanagan             | 65                 | 67           | 13                   | 10         | 1                             | 1         | 0         | 0         | 79           | 78           |
| 5 South Okanagan             | 138                | 151          | 13                   | 20         | 0                             | 0         | 1         | 2         | 152          | 173          |
| 6 South Central              | 108                | 105          | 13                   | 15         | 0                             | 1         | 14        | 17        | 135          | 138          |
| 7 Upper Fraser Valley        | 88                 | 87           | 8                    | 9          | 0                             | 0         | 2         | 1         | 98           | 97           |
| 8 Central Fraser Valley      | 133                | 147          | 8                    | 10         | 0                             | 1         | 3         | 3         | 144          | 161          |
| 9 Boundary                   | 297                | 303          | 28                   | 31         | 7                             | 1         | 4         | 6         | 336          | 341          |
| 10 Simon Fraser              | 209                | 245          | 14                   | 20         | 5                             | 5         | 4         | 4         | 232          | 274          |
| 11 Coast Garibaldi           | 37                 | 37           | 5                    | 3          | 0                             | 0         | 0         | 1         | 42           | 41           |
| 13 Central Vancouver Island  | 132                | 157          | 22                   | 24         | 2                             | 2         | 2         | 2         | 158          | 185          |
| 14 Upper Island              | 72                 | 71           | 6                    | 9          | 1                             | 1         | 0         | 0         | 79           | 81           |
| 15 Cariboo                   | 32                 | 33           | 6                    | 7          | 0                             | 0         | 0         | 1         | 38           | 41           |
| 16 Skeena                    | 57                 | 52           | 5                    | 10         | 2                             | 1         | 0         | 0         | 64           | 63           |
| 17 Peace River               | 35                 | 35           | 4                    | 3          | 0                             | 1         | 0         | 0         | 39           | 39           |
| 18 Northern Interior         | 78                 | 70           | 9                    | 14         | 1                             | 2         | 2         | 2         | 90           | 88           |
| 20 Vancouver                 | 474                | 456          | 43                   | 45         | 23                            | 23        | 38        | 26        | 578          | 550          |
| 30 Burnaby                   | 159                | 171          | 10                   | 12         | 6                             | 2         | 9         | 14        | 184          | 199          |
| 40 North Shore               | 170                | 170          | 19                   | 19         | 2                             | 1         | 4         | 6         | 195          | 196          |
| 50 Richmond                  | 166                | 158          | 11                   | 16         | 5                             | 6         | 7         | 4         | 189          | 184          |
| 60 Capital Regional District | 267                | 249          | 31                   | 35         | 5                             | 3         | 4         | 5         | 307          | 292          |
| <b>TOTAL</b>                 | <b>2,843</b>       | <b>2,898</b> | <b>281</b>           | <b>321</b> | <b>63</b>                     | <b>53</b> | <b>96</b> | <b>98</b> | <b>3,283</b> | <b>3,370</b> |

<sup>1</sup> Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary.

**Table 1b**  
**Medical Laboratory Technologists (CSLT Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Membership Status**  
**October 1991 and October 1993**

| Health Region                | Certified (Active) |             | Certified (Inactive) |             | Subscriber<br>(Non-Certified) |             | Trainee     |             | Total        |             |
|------------------------------|--------------------|-------------|----------------------|-------------|-------------------------------|-------------|-------------|-------------|--------------|-------------|
|                              | 1991               | 1993        | 1991                 | 1993        | 1991                          | 1993        | 1991        | 1993        | 1991         | 1993        |
| 1 East Kootenay              | 7.91               | 7.37        | 0.72                 | 0.71        | 0.00                          | 0.00        | 0.00        | 0.00        | 8.63         | 8.08        |
| 2 Central Kootenay           | 9.87               | 11.00       | 1.11                 | 0.54        | 0.42                          | 0.27        | 0.28        | 0.54        | 11.68        | 12.34       |
| 4 North Okanagan             | 6.73               | 6.41        | 1.35                 | 0.96        | 0.10                          | 0.10        | 0.00        | 0.00        | 8.18         | 7.47        |
| 5 South Okanagan             | 7.73               | 7.59        | 0.73                 | 1.00        | 0.00                          | 0.00        | 0.06        | 0.10        | 8.51         | 8.69        |
| 6 South Central              | 9.92               | 9.22        | 1.19                 | 1.32        | 0.00                          | 0.09        | 1.29        | 1.49        | 12.40        | 12.12       |
| 7 Upper Fraser Valley        | 5.64               | 5.11        | 0.51                 | 0.53        | 0.00                          | 0.00        | 0.13        | 0.06        | 6.28         | 5.69        |
| 8 Central Fraser Valley      | 7.54               | 7.74        | 0.45                 | 0.53        | 0.00                          | 0.05        | 0.17        | 0.16        | 8.17         | 8.48        |
| 9 Boundary                   | 8.45               | 8.03        | 0.80                 | 0.82        | 0.20                          | 0.03        | 0.11        | 0.16        | 9.56         | 9.04        |
| 10 Simon Fraser              | 11.39              | 12.37       | 0.76                 | 1.01        | 0.27                          | 0.25        | 0.22        | 0.20        | 12.64        | 13.83       |
| 11 Coast Garibaldi           | 6.20               | 5.86        | 0.84                 | 0.47        | 0.00                          | 0.00        | 0.00        | 0.16        | 7.04         | 6.49        |
| 13 Central Vancouver Island  | 6.81               | 7.59        | 1.13                 | 1.16        | 0.10                          | 0.10        | 0.10        | 0.10        | 8.15         | 8.94        |
| 14 Upper Island              | 7.44               | 6.95        | 0.62                 | 0.88        | 0.10                          | 0.10        | 0.00        | 0.00        | 8.16         | 7.93        |
| 15 Cariboo                   | 4.94               | 5.01        | 0.93                 | 1.06        | 0.00                          | 0.00        | 0.00        | 0.15        | 5.87         | 6.23        |
| 16 Skeena                    | 6.86               | 6.15        | 0.60                 | 1.18        | 0.24                          | 0.12        | 0.00        | 0.00        | 7.71         | 7.45        |
| 17 Peace River               | 5.98               | 5.94        | 0.68                 | 0.51        | 0.00                          | 0.17        | 0.00        | 0.00        | 6.67         | 6.62        |
| 18 Northern Interior         | 6.85               | 6.05        | 0.79                 | 1.21        | 0.09                          | 0.17        | 0.18        | 0.17        | 7.90         | 7.60        |
| 20 Vancouver                 | 9.92               | 9.26        | 0.90                 | 0.91        | 0.48                          | 0.47        | 0.80        | 0.53        | 12.10        | 11.17       |
| 30 Burnaby                   | 10.01              | 10.32       | 0.63                 | 0.72        | 0.38                          | 0.12        | 0.57        | 0.84        | 11.58        | 12.01       |
| 40 North Shore               | 10.74              | 10.32       | 1.20                 | 1.15        | 0.13                          | 0.06        | 0.25        | 0.36        | 12.31        | 11.90       |
| 50 Richmond                  | 13.11              | 11.94       | 0.87                 | 1.21        | 0.39                          | 0.45        | 0.55        | 0.30        | 14.93        | 13.90       |
| 60 Capital Regional District | 8.91               | 7.99        | 1.03                 | 1.12        | 0.17                          | 0.10        | 0.13        | 0.16        | 10.24        | 9.37        |
| <b>TOTAL</b>                 | <b>8.66</b>        | <b>8.37</b> | <b>0.86</b>          | <b>0.93</b> | <b>0.19</b>                   | <b>0.15</b> | <b>0.29</b> | <b>0.28</b> | <b>10.00</b> | <b>9.73</b> |

<sup>1</sup> Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary.



**Table 1c**  
**Average Annual Rate of Change: Medical Laboratory Technologists (CSLT Members)<sup>1</sup>**  
**in British Columbia by Health Region by Membership Status**  
**October 1991 to October 1993**

| Health Region                | Certified (Active)  |                    | Certified (Inactive) |                    | Subscriber<br>(Non-Certified) |                    | Trainee             |                    | Total               |                    |
|------------------------------|---------------------|--------------------|----------------------|--------------------|-------------------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup>  | Ratio <sup>3</sup> | Number <sup>2</sup>           | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | -2.77               | -3.47              | *                    | *                  | *                             | *                  | *                   | *                  | -2.53               | -3.24              |
| 2 Central Kootenay           | 7.47                | 5.59               | *                    | *                  | *                             | *                  | *                   | *                  | 4.65                | 2.82               |
| 4 North Okanagan             | 1.53                | -2.38              | -12.29               | -15.67             | *                             | *                  | *                   | *                  | -0.63               | -4.46              |
| 5 South Okanagan             | 4.60                | -0.93              | 24.03                | 17.48              | *                             | *                  | *                   | *                  | 6.68                | 1.04               |
| 6 South Central              | -1.40               | -3.61              | 7.42                 | 5.01               | *                             | *                  | 10.19               | 7.72               | 1.11                | -1.16              |
| 7 Upper Fraser Valley        | -0.57               | -4.85              | *                    | *                  | *                             | *                  | *                   | *                  | -0.51               | -4.79              |
| 8 Central Fraser Valley      | 5.13                | 1.30               | *                    | *                  | *                             | *                  | *                   | *                  | 5.74                | 1.88               |
| 9 Boundary                   | 1.01                | -2.51              | 5.22                 | 1.56               | *                             | *                  | *                   | *                  | 0.74                | -2.77              |
| 10 Simon Fraser              | 8.27                | 4.20               | 19.52                | 15.03              | *                             | *                  | *                   | *                  | 8.68                | 4.59               |
| 11 Coast Garibaldi           | 0.00                | -2.83              | *                    | *                  | *                             | *                  | *                   | *                  | -1.20               | -3.99              |
| 13 Central Vancouver Island  | 9.06                | 5.61               | 4.45                 | 1.14               | *                             | *                  | *                   | *                  | 8.21                | 4.79               |
| 14 Upper Island              | -0.70               | -3.35              | *                    | *                  | *                             | *                  | *                   | *                  | 1.26                | -1.44              |
| 15 Cariboo                   | 1.55                | 0.75               | *                    | *                  | *                             | *                  | *                   | *                  | 3.87                | 3.06               |
| 16 Skeena                    | -4.49               | -5.39              | *                    | *                  | *                             | *                  | *                   | *                  | -0.78               | -1.72              |
| 17 Peace River               | 0.00                | -0.39              | *                    | *                  | *                             | *                  | *                   | *                  | 0.00                | -0.39              |
| 18 Northern Interior         | -5.27               | -6.03              | *                    | *                  | *                             | *                  | *                   | *                  | -1.12               | -1.91              |
| 20 Vancouver                 | -1.92               | -3.38              | 2.30                 | 0.77               | 0.00                          | -1.49              | -17.28              | -18.52             | -2.45               | -3.91              |
| 30 Burnaby                   | 3.70                | 1.54               | 9.54                 | 7.25               | *                             | *                  | *                   | *                  | 4.00                | 1.82               |
| 40 North Shore               | 0.00                | -1.93              | 0.00                 | -1.93              | *                             | *                  | *                   | *                  | 0.26                | -1.68              |
| 50 Richmond                  | -2.44               | -4.57              | 20.60                | 17.97              | *                             | *                  | *                   | *                  | -1.33               | -3.49              |
| 60 Capital Regional District | -3.43               | -5.28              | 6.26                 | 4.22               | *                             | *                  | *                   | *                  | -2.47               | -4.34              |
| <b>TOTAL</b>                 | <b>0.96</b>         | <b>-1.66</b>       | <b>6.88</b>          | <b>4.11</b>        | <b>-8.28</b>                  | <b>-10.66</b>      | <b>1.04</b>         | <b>-1.59</b>       | <b>1.32</b>         | <b>-1.31</b>       |

<sup>1</sup> Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2a**  
**Certified (Active) Medical Laboratory Technologists (CSLT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Level of Certification**  
**October 1991 and October 1993**

| Health Region                | RT           |              | ART        |            | FCSLT    |          | Unknown  |          | Total        |              |
|------------------------------|--------------|--------------|------------|------------|----------|----------|----------|----------|--------------|--------------|
|                              | 1991         | 1993         | 1991       | 1993       | 1991     | 1993     | 1991     | 1993     | 1991         | 1993         |
| 1 East Kootenay              | 53           | 51           | 2          | 1          | 0        | 0        | 0        | 0        | 55           | 52           |
| 2 Central Kootenay           | 66           | 77           | 5          | 5          | 0        | 0        | 0        | 0        | 71           | 82           |
| 4 North Okanagan             | 62           | 65           | 3          | 2          | 0        | 0        | 0        | 0        | 65           | 67           |
| 5 South Okanagan             | 124          | 133          | 13         | 17         | 1        | 0        | 0        | 1        | 138          | 151          |
| 6 South Central              | 90           | 87           | 18         | 18         | 0        | 0        | 0        | 0        | 108          | 105          |
| 7 Upper Fraser Valley        | 80           | 81           | 8          | 6          | 0        | 0        | 0        | 0        | 88           | 87           |
| 8 Central Fraser Valley      | 124          | 136          | 9          | 11         | 0        | 0        | 0        | 0        | 133          | 147          |
| 9 Boundary                   | 268          | 275          | 29         | 28         | 0        | 0        | 0        | 0        | 297          | 303          |
| 10 Simon Fraser              | 185          | 218          | 24         | 27         | 0        | 0        | 0        | 0        | 209          | 245          |
| 11 Coast Garibaldi           | 35           | 35           | 2          | 2          | 0        | 0        | 0        | 0        | 37           | 37           |
| 13 Central Vancouver Island  | 121          | 143          | 11         | 14         | 0        | 0        | 0        | 0        | 132          | 157          |
| 14 Upper Island              | 70           | 67           | 2          | 4          | 0        | 0        | 0        | 0        | 72           | 71           |
| 15 Cariboo                   | 32           | 33           | 0          | 0          | 0        | 0        | 0        | 0        | 32           | 33           |
| 16 Skeena                    | 54           | 50           | 2          | 1          | 1        | 1        | 0        | 0        | 57           | 52           |
| 17 Peace River               | 35           | 35           | 0          | 0          | 0        | 0        | 0        | 0        | 35           | 35           |
| 18 Northern Interior         | 72           | 64           | 5          | 5          | 1        | 1        | 0        | 0        | 78           | 70           |
| 20 Vancouver                 | 428          | 401          | 45         | 54         | 1        | 1        | 0        | 0        | 474          | 456          |
| 30 Burnaby                   | 141          | 148          | 17         | 22         | 1        | 1        | 0        | 0        | 159          | 171          |
| 40 North Shore               | 146          | 146          | 24         | 24         | 0        | 0        | 0        | 0        | 170          | 170          |
| 50 Richmond                  | 147          | 141          | 18         | 16         | 1        | 1        | 0        | 0        | 166          | 158          |
| 60 Capital Regional District | 236          | 221          | 30         | 28         | 1        | 0        | 0        | 0        | 267          | 249          |
| <b>TOTAL</b>                 | <b>2,569</b> | <b>2,607</b> | <b>267</b> | <b>285</b> | <b>7</b> | <b>5</b> | <b>0</b> | <b>1</b> | <b>2,843</b> | <b>2,898</b> |

<sup>1</sup> Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary.

**Table 2b**  
**Certified (Active) Medical Laboratory Technologists (CSLT Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Level of Certification**  
**October 1991 and October 1993**

| Health Region                | RT          |             | ART         |             | FCSLT       |             | Unknown     |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              | 1991        | 1993        | 1991        | 1993        | 1991        | 1993        | 1991        | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 7.62        | 7.23        | 0.29        | 0.14        | 0.00        | 0.00        | 0.00        | 0.00        | 7.91        | 7.37        |
| 2 Central Kootenay           | 9.17        | 10.33       | 0.70        | 0.67        | 0.00        | 0.00        | 0.00        | 0.00        | 9.87        | 11.00       |
| 4 North Okanagan             | 6.42        | 6.22        | 0.31        | 0.19        | 0.00        | 0.00        | 0.00        | 0.00        | 6.73        | 6.41        |
| 5 South Okanagan             | 6.95        | 6.68        | 0.73        | 0.85        | 0.06        | 0.00        | 0.00        | 0.05        | 7.73        | 7.59        |
| 6 South Central              | 8.27        | 7.64        | 1.65        | 1.58        | 0.00        | 0.00        | 0.00        | 0.00        | 9.92        | 9.22        |
| 7 Upper Fraser Valley        | 5.13        | 4.75        | 0.51        | 0.35        | 0.00        | 0.00        | 0.00        | 0.00        | 5.64        | 5.11        |
| 8 Central Fraser Valley      | 7.03        | 7.16        | 0.51        | 0.58        | 0.00        | 0.00        | 0.00        | 0.00        | 7.54        | 7.74        |
| 9 Boundary                   | 7.63        | 7.29        | 0.83        | 0.74        | 0.00        | 0.00        | 0.00        | 0.00        | 8.45        | 8.03        |
| 10 Simon Fraser              | 10.08       | 11.00       | 1.31        | 1.36        | 0.00        | 0.00        | 0.00        | 0.00        | 11.39       | 12.37       |
| 11 Coast Garibaldi           | 5.87        | 5.54        | 0.34        | 0.32        | 0.00        | 0.00        | 0.00        | 0.00        | 6.20        | 5.86        |
| 13 Central Vancouver Island  | 6.24        | 6.91        | 0.57        | 0.68        | 0.00        | 0.00        | 0.00        | 0.00        | 6.81        | 7.59        |
| 14 Upper Island              | 7.23        | 6.56        | 0.21        | 0.39        | 0.00        | 0.00        | 0.00        | 0.00        | 7.44        | 6.95        |
| 15 Cariboo                   | 4.94        | 5.01        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 4.94        | 5.01        |
| 16 Skeena                    | 6.50        | 5.91        | 0.24        | 0.12        | 0.12        | 0.12        | 0.00        | 0.00        | 6.86        | 6.15        |
| 17 Peace River               | 5.98        | 5.94        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 5.98        | 5.94        |
| 18 Northern Interior         | 6.32        | 5.53        | 0.44        | 0.43        | 0.09        | 0.09        | 0.00        | 0.00        | 6.85        | 6.05        |
| 20 Vancouver                 | 8.96        | 8.15        | 0.94        | 1.10        | 0.02        | 0.02        | 0.00        | 0.00        | 9.92        | 9.26        |
| 30 Burnaby                   | 8.88        | 8.93        | 1.07        | 1.33        | 0.06        | 0.06        | 0.00        | 0.00        | 10.01       | 10.32       |
| 40 North Shore               | 9.22        | 8.87        | 1.52        | 1.46        | 0.00        | 0.00        | 0.00        | 0.00        | 10.74       | 10.32       |
| 50 Richmond                  | 11.61       | 10.65       | 1.42        | 1.21        | 0.08        | 0.08        | 0.00        | 0.00        | 13.11       | 11.94       |
| 60 Capital Regional District | 7.87        | 7.09        | 1.00        | 0.90        | 0.03        | 0.00        | 0.00        | 0.00        | 8.91        | 7.99        |
| <b>TOTAL</b>                 | <b>7.82</b> | <b>7.53</b> | <b>0.81</b> | <b>0.82</b> | <b>0.02</b> | <b>0.01</b> | <b>0.00</b> | <b>0.00</b> | <b>8.66</b> | <b>8.37</b> |

<sup>1</sup> Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary.

**Table 2c**  
**Average Annual Rate of Change: Certified (Active) Medical Laboratory Technologists (CSLT Members)<sup>1</sup>**  
**in British Columbia by Health Region by Level of Certification**  
**October 1991 to October 1993**

| Health Region                | RT                  |                    | ART                 |                    | FCSLT               |                    | Unknown             |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | -1.90               | -2.62              | *                   | *                  | *                   | *                  | *                   | *                  | -2.77               | -3.47              |
| 2 Central Kootenay           | 8.01                | 6.12               | *                   | *                  | *                   | *                  | *                   | *                  | 7.47                | 5.59               |
| 4 North Okanagan             | 2.39                | -1.55              | *                   | *                  | *                   | *                  | *                   | *                  | 1.53                | -2.38              |
| 5 South Okanagan             | 3.57                | -1.91              | 14.35               | 8.31               | *                   | *                  | *                   | *                  | 4.60                | -0.93              |
| 6 South Central              | -1.68               | -3.89              | 0.00                | -2.24              | *                   | *                  | *                   | *                  | -1.40               | -3.61              |
| 7 Upper Fraser Valley        | 0.62                | -3.71              | *                   | *                  | *                   | *                  | *                   | *                  | -0.57               | -4.85              |
| 8 Central Fraser Valley      | 4.73                | 0.91               | *                   | *                  | *                   | *                  | *                   | *                  | 5.13                | 1.30               |
| 9 Boundary                   | 1.30                | -2.23              | -1.74               | -5.16              | *                   | *                  | *                   | *                  | 1.01                | -2.51              |
| 10 Simon Fraser              | 8.55                | 4.47               | 6.07                | 2.08               | *                   | *                  | *                   | *                  | 8.27                | 4.20               |
| 11 Coast Garibaldi           | 0.00                | -2.83              | *                   | *                  | *                   | *                  | *                   | *                  | 0.00                | -2.83              |
| 13 Central Vancouver Island  | 8.71                | 5.27               | 12.82               | 9.25               | *                   | *                  | *                   | *                  | 9.06                | 5.61               |
| 14 Upper Island              | -2.17               | -4.78              | *                   | *                  | *                   | *                  | *                   | *                  | -0.70               | -3.35              |
| 15 Cariboo                   | 1.55                | 0.75               | *                   | *                  | *                   | *                  | *                   | *                  | 1.55                | 0.75               |
| 16 Skeena                    | -3.77               | -4.68              | *                   | *                  | *                   | *                  | *                   | *                  | -4.49               | -5.39              |
| 17 Peace River               | 0.00                | -0.39              | *                   | *                  | *                   | *                  | *                   | *                  | 0.00                | -0.39              |
| 18 Northern Interior         | -5.72               | -6.48              | *                   | *                  | *                   | *                  | *                   | *                  | -5.27               | -6.03              |
| 20 Vancouver                 | -3.21               | -4.65              | 9.54                | 7.91               | *                   | *                  | *                   | *                  | -1.92               | -3.38              |
| 30 Burnaby                   | 2.45                | 0.31               | 13.76               | 11.38              | *                   | *                  | *                   | *                  | 3.70                | 1.54               |
| 40 North Shore               | 0.00                | -1.93              | 0.00                | -1.93              | *                   | *                  | *                   | *                  | 0.00                | -1.93              |
| 50 Richmond                  | -2.06               | -4.20              | -5.72               | -7.78              | *                   | *                  | *                   | *                  | -2.44               | -4.57              |
| 60 Capital Regional District | -3.23               | -5.08              | -3.39               | -5.24              | *                   | *                  | *                   | *                  | -3.43               | -5.28              |
| <b>TOTAL</b>                 | <b>0.74</b>         | <b>-1.88</b>       | <b>3.32</b>         | <b>0.63</b>        | <b>*</b>            | <b>*</b>           | <b>*</b>            | <b>*</b>           | <b>0.96</b>         | <b>-1.66</b>       |

<sup>1</sup> Membership in the Canadian Society of Laboratory Technologists (CSLT) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

## MEDICAL RADIATION TECHNOLOGISTS

**Definition:** A medical radiation technologist

...operates radiographic and radiation therapy equipment to administer radiation treatment and produce images of body structures for the diagnosis and treatment of injury and disease.

Three major areas for employment are diagnostic radiography, radiation therapy, and nuclear medicine.

(I) Diagnostic radiographers perform some or all of the following duties:

- (a) operate X-ray, radiographic, and fluoroscopic equipment, specialised CT scanners, and mammography units to produce radiographs or images of body structures for diagnosis by radiologists of disease or injury;
- (b) record and process patient data;
- (c) perform scheduled maintenance and minor emergency repairs on radiographic equipment;
- (d) may train and supervise student radiographers or supervise other radiography technologists.

(II) Radiation therapists perform some or all of the following duties:

- (a) operate linear accelerators, cobalt 60, X-ray, and other radiation therapy equipment to administer radiation treatment prescribed by radiation oncologists;
- (b) check radiation therapy equipment to ensure proper operation;
- (c) assist radiation oncologists and clinical physicians with preparation of radiation treatment plans;
- (d) assist in the preparation of sealed radioactive materials such as cobalt, radium, caesium, and isotopes and the construction of devices such as plaster casts and acrylic moulds to assist with administration of radiation treatment;
- (e) may train and supervise student radiotherapy technologists or supervise other radiotherapy technologists.

(III) Nuclear medicine technologists perform some or all of the following duties:

- (a) prepare radiopharmaceuticals, such as radionuclides and other materials and administer them to patients or to biological samples;
- (b) operate radiation detection equipment, such as gamma cameras, scanners, scintillation counters, and ionisation chambers, to acquire data for use by nuclear medicine physicians in the diagnosis of disease;
- (c) perform diagnostic procedures using radioactive materials on biological specimens, such as blood, urine, and faeces;
- (d) record and process results of procedures;
- (e) check equipment to ensure proper operation;
- (f) may train and supervise student nuclear medicine technologists or supervise other nuclear medicine technologists.<sup>1</sup>

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3215, Ottawa: Employment and Immigration Canada.

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the British Columbia Association of Medical Radiation Technologists is voluntary. However, BCAMRT membership is restricted to those technologists who pass a certification examination administered by the Canadian Association of Medical Radiation Technologists, or an equivalent examination.

**Date of Record:** October 1991 and October 1993.

**Source of Data:** British Columbia Association of Medical Radiation Technologists (BCAMRT).

**Preparation and Updating:**

The tables, derived solely from the membership list supplied by the BCAMRT, include qualified members who had a British Columbia address at the date of record. Associate members, who may or may not be working in the field but do not qualify for full BCAMRT membership, are excluded. In 1991 and 1993 there were 49 and 47 technologists respectively who were also qualified to work as diagnostic medical sonographers (DMS). Medical radiation technologists who are also qualified as DMS are included in both the MRT and DMS sections of *ROLLCALL 93*.

The data presented in these tables are, for the first time, based on employment address rather than home address. Employment address is available for just under 90% of medical radiation technologists in 1993, but the 1991 data were available only by home address, so numbers of personnel and numbers per 10,000 population for 1991 and average annual rates of change are not presented by individual health region. For those who wish to compare numbers, numbers per 10,000 population and average annual rates of change in number of medical radiation technologists by health region, these figures can be calculated using home address for both the 1991 and 1993 data. These data will be available on request.

**Definition of Terms:**

Medical radiation technologists are classified in the tables according to last known employment discipline supported by the necessary qualifications.

**1. Membership Status**

Total number and number per 10,000 of medical radiation technologists at the date of record are presented in Tables 1a and 1b by membership status. Table 1c shows the provincial average annual rates of changes in these numbers. The categories used are:

- (a) Diagnostic Radiography;
- (b) Radiation Therapy;
- (c) Nuclear Medicine.

## **2. Age**

Table 2 shows age information as provided by BCAMRT. Age information in the table is grouped according to standard age categories developed and used by Statistics Canada. Information about sex distribution is not available for medical radiation technologists.

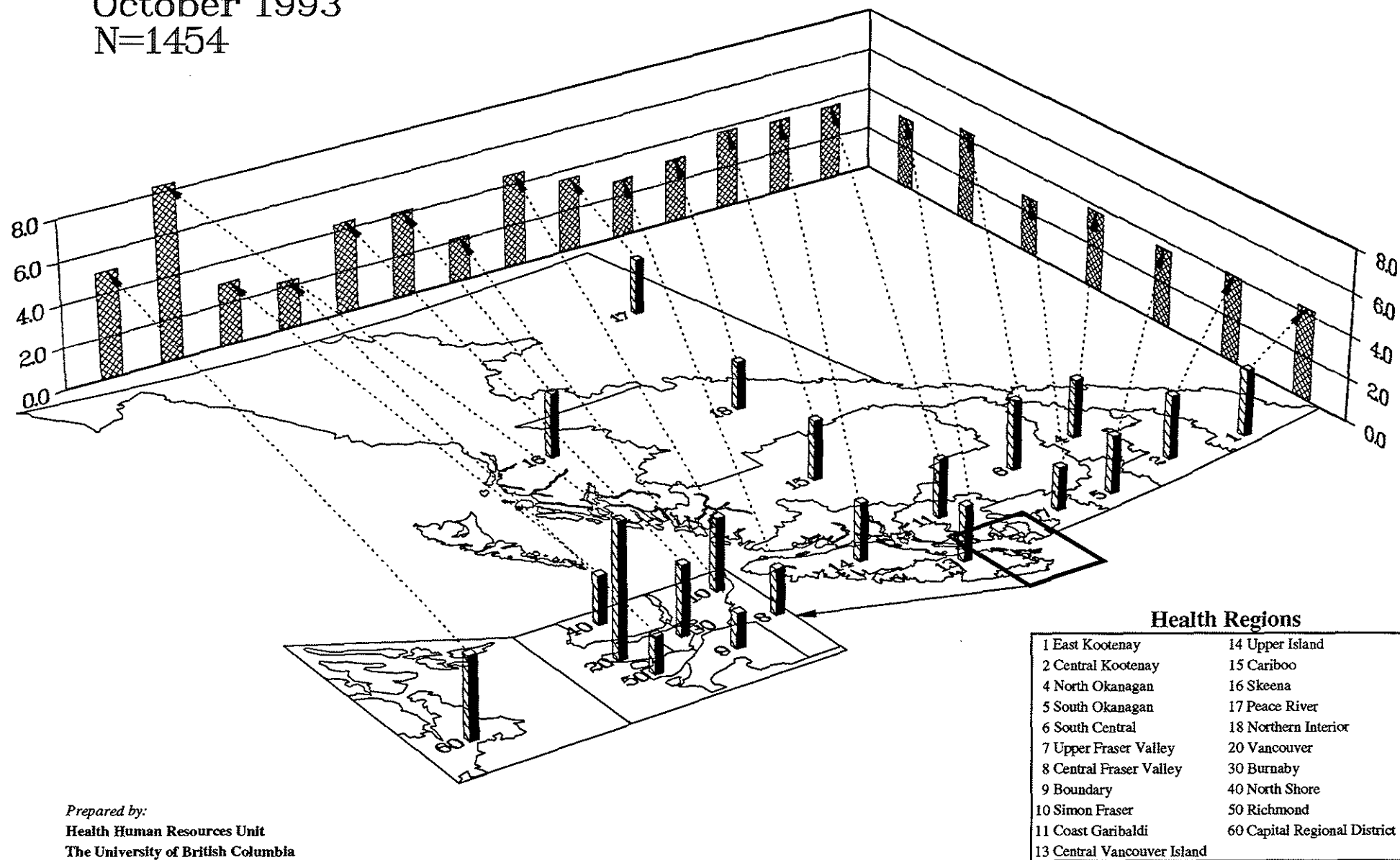
## **3. Employment Setting**

Information about employment setting was provided by the BCAMRT. Table 3 shows this information for medical radiation technologists using the following categories:

- (a) Hospital;
- (b) Laboratory/Clinic;
- (c) Other.

# Medical Radiation Technologists (BCAMRT Members) per 10,000 Population by Health Region October 1993 N=1454

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Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1a**  
**Medical Radiation Technologists (BCAMRT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Discipline**  
**October 1991<sup>2</sup> and October 1993<sup>3</sup>**

| Health Region                | Diagnostic Radiography |              | Radiation Therapy |           | Nuclear Medicine |            | Total        |              |
|------------------------------|------------------------|--------------|-------------------|-----------|------------------|------------|--------------|--------------|
|                              | 1991                   | 1993         | 1991              | 1993      | 1991*            | 1993       | 1991*        | 1993         |
| 1 East Kootenay              | n/a                    | 27           | n/a               | 0         | n/a              | 3          | n/a          | 30           |
| 2 Central Kootenay           | "                      | 27           | "                 | 0         | "                | 3          | "            | 30           |
| 4 North Okanagan             | "                      | 36           | "                 | 0         | "                | 3          | "            | 39           |
| 5 South Okanagan             | "                      | 65           | "                 | 0         | "                | 7          | "            | 72           |
| 6 South Central              | "                      | 46           | "                 | 0         | "                | 4          | "            | 50           |
| 7 Upper Fraser Valley        | "                      | 46           | "                 | 0         | "                | 0          | "            | 46           |
| 8 Central Fraser Valley      | "                      | 51           | "                 | 1         | "                | 1          | "            | 53           |
| 9 Boundary                   | "                      | 75           | "                 | 0         | "                | 5          | "            | 80           |
| 10 Simon Fraser              | "                      | 77           | "                 | 0         | "                | 12         | "            | 89           |
| 11 Coast Garibaldi           | "                      | 23           | "                 | 0         | "                | 0          | "            | 23           |
| 13 Central Vancouver Island  | "                      | 71           | "                 | 0         | "                | 0          | "            | 71           |
| 14 Upper Island              | "                      | 37           | "                 | 0         | "                | 0          | "            | 37           |
| 15 Cariboo                   | "                      | 25           | "                 | 0         | "                | 0          | "            | 25           |
| 16 Skeena                    | "                      | 32           | "                 | 0         | "                | 3          | "            | 35           |
| 17 Peace River               | "                      | 20           | "                 | 0         | "                | 1          | "            | 21           |
| 18 Northern Interior         | "                      | 33           | "                 | 0         | "                | 3          | "            | 36           |
| 20 Vancouver                 | "                      | 291          | "                 | 65        | "                | 53         | "            | 409          |
| 30 Burnaby                   | "                      | 57           | "                 | 2         | "                | 13         | "            | 72           |
| 40 North Shore               | "                      | 38           | "                 | 2         | "                | 9          | "            | 49           |
| 50 Richmond                  | "                      | 26           | "                 | 3         | "                | 1          | "            | 30           |
| 60 Capital Regional District | "                      | 117          | "                 | 20        | "                | 20         | "            | 157          |
| <b>TOTAL</b>                 | <b>1,122</b>           | <b>1,220</b> | <b>74</b>         | <b>93</b> | <b>139</b>       | <b>141</b> | <b>1,335</b> | <b>1,454</b> |

<sup>1</sup> Membership in the B.C. Association of Medical Radiation Technologists (BCAMRT) is voluntary.

<sup>2</sup> Medical radiation technologists data for 1991 are not available by health region. See attached text.

<sup>3</sup> Excludes 2 medical radiation technologists with unknown address.

\* The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

**Table 1b**  
**Medical Radiation Technologists (BCAMRT Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Employment Discipline**  
**October 1991<sup>2</sup> and October 1993<sup>3</sup>**

| Health Region                | Diagnostic Radiography |             | Radiation Therapy |             | Nuclear Medicine |             | Total       |             |
|------------------------------|------------------------|-------------|-------------------|-------------|------------------|-------------|-------------|-------------|
|                              | 1991                   | 1993        | 1991              | 1993        | 1991             | 1993        | 1991        | 1993        |
| 1 East Kootenay              | n/a                    | 3.83        | n/a               | 0.00        | n/a              | 0.43        | n/a         | 4.25        |
| 2 Central Kootenay           | "                      | 3.62        | "                 | 0.00        | "                | 0.40        | "           | 4.03        |
| 4 North Okanagan             | "                      | 3.45        | "                 | 0.00        | "                | 0.29        | "           | 3.73        |
| 5 South Okanagan             | "                      | 3.27        | "                 | 0.00        | "                | 0.35        | "           | 3.62        |
| 6 South Central              | "                      | 4.04        | "                 | 0.00        | "                | 0.35        | "           | 4.39        |
| 7 Upper Fraser Valley        | "                      | 2.70        | "                 | 0.00        | "                | 0.00        | "           | 2.70        |
| 8 Central Fraser Valley      | "                      | 2.69        | "                 | 0.05        | "                | 0.05        | "           | 2.79        |
| 9 Boundary                   | "                      | 1.99        | "                 | 0.00        | "                | 0.13        | "           | 2.12        |
| 10 Simon Fraser              | "                      | 3.89        | "                 | 0.00        | "                | 0.61        | "           | 4.49        |
| 11 Coast Garibaldi           | "                      | 3.64        | "                 | 0.00        | "                | 0.00        | "           | 3.64        |
| 13 Central Vancouver Island  | "                      | 3.43        | "                 | 0.00        | "                | 0.00        | "           | 3.43        |
| 14 Upper Island              | "                      | 3.62        | "                 | 0.00        | "                | 0.00        | "           | 3.62        |
| 15 Cariboo                   | "                      | 3.80        | "                 | 0.00        | "                | 0.00        | "           | 3.80        |
| 16 Skeena                    | "                      | 3.78        | "                 | 0.00        | "                | 0.35        | "           | 4.14        |
| 17 Peace River               | "                      | 3.39        | "                 | 0.00        | "                | 0.17        | "           | 3.56        |
| 18 Northern Interior         | "                      | 2.85        | "                 | 0.00        | "                | 0.26        | "           | 3.11        |
| 20 Vancouver                 | "                      | 5.91        | "                 | 1.32        | "                | 1.08        | "           | 8.31        |
| 30 Burnaby                   | "                      | 3.44        | "                 | 0.12        | "                | 0.78        | "           | 4.34        |
| 40 North Shore               | "                      | 2.31        | "                 | 0.12        | "                | 0.55        | "           | 2.98        |
| 50 Richmond                  | "                      | 1.96        | "                 | 0.23        | "                | 0.08        | "           | 2.27        |
| 60 Capital Regional District | "                      | 3.76        | "                 | 0.64        | "                | 0.64        | "           | 5.04        |
| <b>TOTAL</b>                 | <b>3.42</b>            | <b>3.52</b> | <b>0.23</b>       | <b>0.27</b> | <b>0.42</b>      | <b>0.41</b> | <b>4.06</b> | <b>4.20</b> |

<sup>1</sup> Membership in the B.C. Association of Medical Radiation Technologists (BCAMRT) is voluntary.

<sup>2</sup> Medical radiation technologists data for 1991 are not available by health region. See attached text.

<sup>3</sup> Excludes 2 medical radiation technologists with unknown address.

**Table 1c**  
**Average Annual Rate of Change<sup>1</sup>: Medical Radiation Technologists (BCAMRT Members)<sup>2</sup>**  
**in British Columbia by Health Region by Employment Discipline**  
**October 1991 and October 1993**

| Health Region                | Diagnostic Radiography |             | Radiation Therapy   |             | Nuclear Medicine    |              | Total               |             |
|------------------------------|------------------------|-------------|---------------------|-------------|---------------------|--------------|---------------------|-------------|
|                              | Number <sup>3</sup>    | Ratio*      | Number <sup>3</sup> | Ratio*      | Number <sup>3</sup> | Ratio*       | Number <sup>3</sup> | Ratio*      |
| 1 East Kootenay              | n/a                    | n/a         | n/a                 | n/a         | n/a                 | n/a          | n/a                 | n/a         |
| 2 Central Kootenay           | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 4 North Okanagan             | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 5 South Okanagan             | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 6 South Central              | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 7 Upper Fraser Valley        | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 8 Central Fraser Valley      | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 9 Boundary                   | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 10 Simon Fraser              | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 11 Coast Garibaldi           | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 13 Central Vancouver Island  | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 14 Upper Island              | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 15 Cariboo                   | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 16 Skeena                    | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 17 Peace River               | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 18 Northern Interior         | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 20 Vancouver                 | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 30 Burnaby                   | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 40 North Shore               | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 50 Richmond                  | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| 60 Capital Regional District | "                      | "           | "                   | "           | "                   | "            | "                   | "           |
| <b>TOTAL</b>                 | <b>4.28</b>            | <b>1.57</b> | <b>12.11</b>        | <b>9.20</b> | <b>0.72</b>         | <b>-1.90</b> | <b>4.36</b>         | <b>1.65</b> |

<sup>1</sup> Rate of change for medical radiation technologists is not available by health region. See attached text.

<sup>2</sup> Membership in the B.C. Association of Medical Radiation Technologists (BCAMRT) is voluntary.

<sup>3</sup> Rate of change (in percent) in the number.

\* Rate of change (in percent) in the number per 10,000 population.

**Table 2**  
**Medical Radiation Technologists (BCAMRT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Age**  
**October 1993**

| Health Region                | < 25      | 25-34      | 35-44      | 45-54      | 55-64     | 65 +     | Subtotal     | Unknown    | Total        |
|------------------------------|-----------|------------|------------|------------|-----------|----------|--------------|------------|--------------|
| 1 East Kootenay              | 2         | 8          | 7          | 5          | 2         | 0        | 24           | 6          | 30           |
| 2 Central Kootenay           | 1         | 9          | 11         | 4          | 1         | 0        | 26           | 4          | 30           |
| 4 North Okanagan             | 1         | 8          | 15         | 6          | 1         | 0        | 31           | 8          | 39           |
| 5 South Okanagan             | 5         | 19         | 13         | 15         | 3         | 0        | 55           | 17         | 72           |
| 6 South Central              | 2         | 18         | 11         | 13         | 1         | 0        | 45           | 5          | 50           |
| 7 Upper Fraser Valley        | 4         | 13         | 14         | 1          | 1         | 0        | 33           | 13         | 46           |
| 8 Central Fraser Valley      | 2         | 9          | 17         | 14         | 3         | 0        | 45           | 8          | 53           |
| 9 Boundary                   | 3         | 24         | 25         | 16         | 2         | 0        | 70           | 10         | 80           |
| 10 Simon Fraser              | 3         | 30         | 25         | 19         | 1         | 0        | 78           | 11         | 89           |
| 11 Coast Garibaldi           | 0         | 9          | 8          | 4          | 0         | 0        | 21           | 2          | 23           |
| 13 Central Vancouver Island  | 1         | 10         | 23         | 15         | 5         | 0        | 54           | 17         | 71           |
| 14 Upper Island              | 0         | 9          | 11         | 7          | 1         | 0        | 28           | 9          | 37           |
| 15 Cariboo                   | 0         | 4          | 10         | 6          | 0         | 0        | 20           | 5          | 25           |
| 16 Skeena                    | 2         | 11         | 3          | 6          | 0         | 0        | 22           | 13         | 35           |
| 17 Peace River               | 2         | 7          | 6          | 1          | 2         | 0        | 18           | 3          | 21           |
| 18 Northern Interior         | 1         | 8          | 9          | 7          | 3         | 0        | 28           | 8          | 36           |
| 20 Vancouver                 | 19        | 142        | 105        | 53         | 12        | 0        | 331          | 78         | 409          |
| 30 Burnaby                   | 6         | 18         | 19         | 13         | 1         | 0        | 57           | 15         | 72           |
| 40 North Shore               | 1         | 16         | 11         | 11         | 3         | 0        | 42           | 7          | 49           |
| 50 Richmond                  | 0         | 6          | 5          | 10         | 1         | 0        | 22           | 8          | 30           |
| 60 Capital Regional District | 11        | 40         | 46         | 31         | 7         | 0        | 135          | 22         | 157          |
| <b>TOTAL</b>                 | <b>66</b> | <b>418</b> | <b>394</b> | <b>257</b> | <b>50</b> | <b>0</b> | <b>1,185</b> | <b>269</b> | <b>1,454</b> |

<sup>1</sup> Membership in the B.C. Association of Medical Radiation Technologists (BCAMRT) is voluntary.

**Table 3**  
**Medical Radiation Technologists (BCAMRT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Setting**  
**October 1993**

| Health Region                | Hospital     | Laboratory/<br>Clinic | Other <sup>2</sup> | Unknown    | Total        |
|------------------------------|--------------|-----------------------|--------------------|------------|--------------|
| 1 East Kootenay              | 26           | 2                     | 0                  | 2          | 30           |
| 2 Central Kootenay           | 24           | 3                     | 1                  | 2          | 30           |
| 4 North Okanagan             | 30           | 4                     | 0                  | 5          | 39           |
| 5 South Okanagan             | 55           | 10                    | 0                  | 7          | 72           |
| 6 South Central              | 39           | 3                     | 1                  | 7          | 50           |
| 7 Upper Fraser Valley        | 22           | 12                    | 2                  | 10         | 46           |
| 8 Central Fraser Valley      | 31           | 6                     | 1                  | 15         | 53           |
| 9 Boundary                   | 55           | 10                    | 3                  | 12         | 80           |
| 10 Simon Fraser              | 68           | 9                     | 0                  | 12         | 89           |
| 11 Coast Garibaldi           | 19           | 1                     | 0                  | 3          | 23           |
| 13 Central Vancouver Island  | 51           | 8                     | 2                  | 10         | 71           |
| 14 Upper Island              | 32           | 0                     | 0                  | 5          | 37           |
| 15 Cariboo                   | 21           | 0                     | 0                  | 4          | 25           |
| 16 Skeena                    | 29           | 0                     | 0                  | 6          | 35           |
| 17 Peace River               | 19           | 1                     | 0                  | 1          | 21           |
| 18 Northern Interior         | 27           | 5                     | 1                  | 3          | 36           |
| 20 Vancouver                 | 335          | 48                    | 6                  | 20         | 409          |
| 30 Burnaby                   | 36           | 12                    | 12                 | 12         | 72           |
| 40 North Shore               | 34           | 7                     | 2                  | 6          | 49           |
| 50 Richmond                  | 14           | 5                     | 4                  | 7          | 30           |
| 60 Capital Regional District | 111          | 22                    | 1                  | 23         | 157          |
| <b>TOTAL</b>                 | <b>1,078</b> | <b>168</b>            | <b>36</b>          | <b>172</b> | <b>1,454</b> |

<sup>1</sup> Membership in the B.C. Association of Medical Radiation Technologists (BCAMRT) is voluntary.

<sup>2</sup> Includes 16 medical radiation technologists employed at educational/research facilities, 3 in government, 3 at Workers' Compensation Board and 14 others.

## RESPIRATORY THERAPISTS

**Definition:** A respiratory therapist

...assists physicians in the diagnosis, treatment, and care of patients with respiratory and cardiopulmonary disorders.

Respiratory therapists perform some or all of the following duties:

- (a) perform diagnostic tests, such as arterial blood gas analysis and cardiopulmonary functions tests;
- (b) operate and monitor respiratory equipment to administer treatments such as oxygen, oxygen-air mixtures, humidified air, or medications;
- (c) perform artificial respiration and external cardiac massage;
- (d) maintain and test diagnostic and therapeutic equipment;
- (e) supervise and train student or other respiratory therapists;
- (f) participate in research related to cardiac and pulmonary disorders.<sup>1</sup>

**Governing Statute:** None. Compulsory registration and/or licensure do not exist. Membership in British Columbia Society of Respiratory Therapists is voluntary. However, registered members have exclusive use of the titles: *Registered Respiratory Therapist*, *Registered Respiratory Technologist* or *RRT*.

**Governing Body:** None.

**Date of Record:** January 1992 and November 1993.

**Source of Data:** The British Columbia Society of Respiratory Therapists (BCSRT).

### Preparation and Updating:

The tables are derived from the membership roster of the BCSRT and include active members of the BCSRT who reported a British Columbia address at the date of record. Data presented in the tables are based on home address for all respiratory therapists.

### Definitions of Terms:

#### 1. Respiratory Therapists

Table 1 shows the number, number per 10,000 population, and average annual rates of change in these numbers of respiratory therapists in British Columbia at the date of record. The average annual rates of change are included, but should be interpreted with caution, as the increase in number appears to be the result of an increase in the membership of the BCSRT, which underwent a membership drive in 1993.

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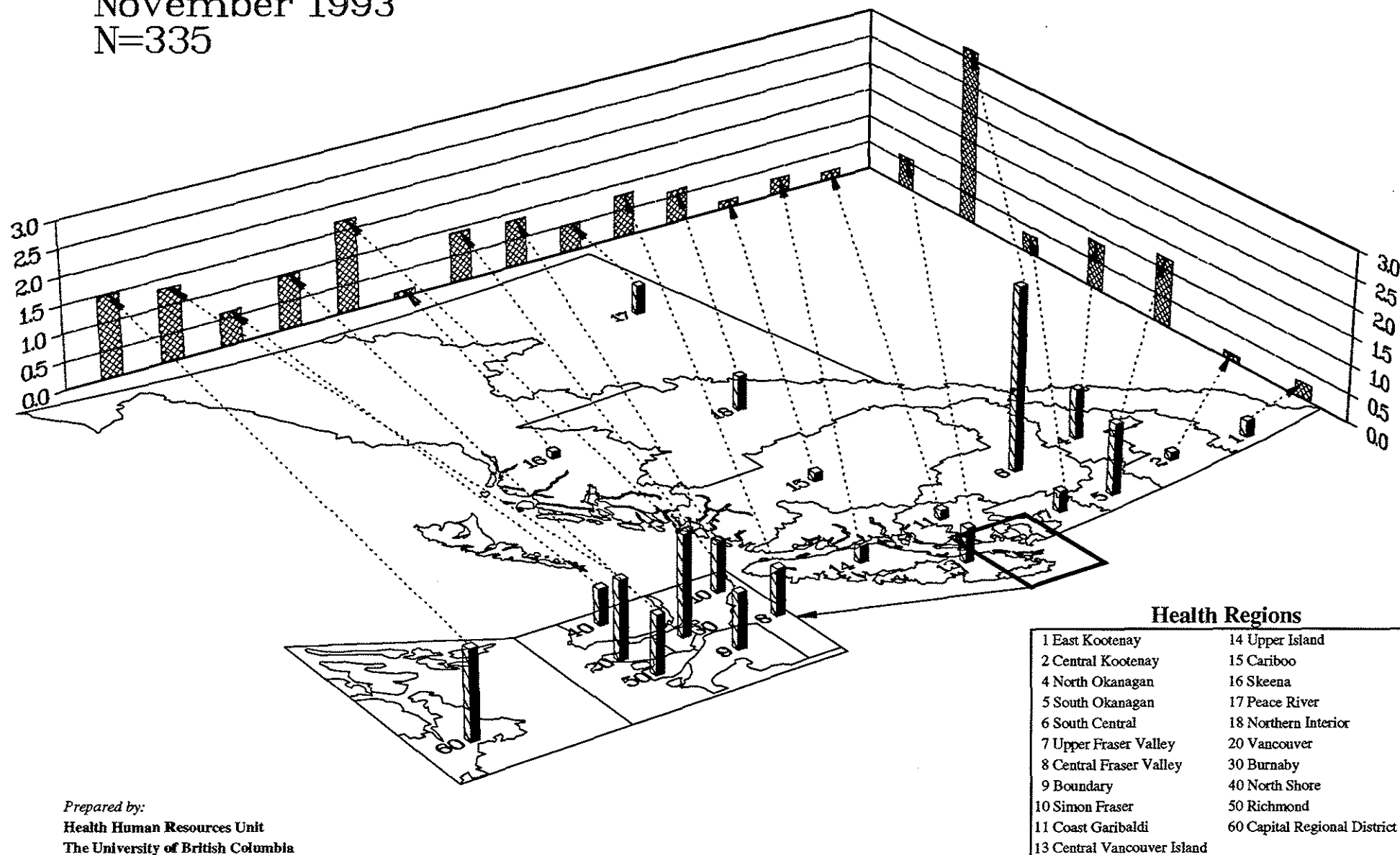
<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3214, Ottawa: Employment and Immigration Canada.

## **2. Employment Setting**

Table 2 presents respiratory therapists by employment setting using the following categories:

- (a) Hospital;
- (b) Private firm;
- (c) Educational institution;
- (d) Unknown.

# Respiratory Therapists (BCSRT Members) per 10,000 Population by Health Region November 1993 N=335



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Respiratory Therapists (BCSRT Members)<sup>1</sup> in British Columbia**  
**by Health Region**  
**January 1992 and November 1993**

| Health Region                | Number     |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|------------|------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1992       | 1993       | 1992                            | 1993        | Number <sup>2</sup>              | Ratio <sup>3</sup> |
| 1 East Kootenay              | 2          | 2          | 0.29                            | 0.28        | *                                | *                  |
| 2 Central Kootenay           | 1          | 1          | 0.14                            | 0.13        | *                                | *                  |
| 4 North Okanagan             | 7          | 9          | 0.72                            | 0.86        | *                                | *                  |
| 5 South Okanagan             | 21         | 24         | 1.18                            | 1.21        | 7.56                             | 1.37               |
| 6 South Central              | 24         | 36         | 2.21                            | 3.16        | 24.75                            | 21.70              |
| 7 Upper Fraser Valley        | 2          | 6          | 0.13                            | 0.35        | *                                | *                  |
| 8 Central Fraser Valley      | 10         | 15         | 0.57                            | 0.79        | 24.75                            | 19.80              |
| 9 Boundary                   | 25         | 35         | 0.71                            | 0.93        | 20.15                            | 15.59              |
| 10 Simon Fraser              | 15         | 17         | 0.82                            | 0.86        | 7.07                             | 2.68               |
| 11 Coast Garibaldi           | 1          | 1          | 0.17                            | 0.16        | *                                | *                  |
| 13 Central Vancouver Island  | 10         | 12         | 0.52                            | 0.58        | 10.46                            | 6.65               |
| 14 Upper Island              | 2          | 3          | 0.21                            | 0.29        | *                                | *                  |
| 15 Cariboo                   | 1          | 1          | 0.15                            | 0.15        | *                                | *                  |
| 16 Skeena                    | 1          | 1          | 0.12                            | 0.12        | *                                | *                  |
| 17 Peace River               | 2          | 3          | 0.34                            | 0.51        | *                                | *                  |
| 18 Northern Interior         | 5          | 7          | 0.44                            | 0.60        | *                                | *                  |
| 20 Vancouver                 | 43         | 65         | 0.90                            | 1.32        | 25.28                            | 23.24              |
| 30 Burnaby                   | 13         | 28         | 0.82                            | 1.69        | 51.97                            | 48.51              |
| 40 North Shore               | 2          | 10         | 0.13                            | 0.61        | *                                | *                  |
| 50 Richmond                  | 8          | 13         | 0.63                            | 0.98        | *                                | *                  |
| 60 Capital Regional District | 47         | 46         | 1.57                            | 1.48        | -1.17                            | -3.23              |
| <b>TOTAL</b>                 | <b>242</b> | <b>335</b> | <b>0.74</b>                     | <b>0.97</b> | <b>19.41</b>                     | <b>16.03</b>       |

<sup>1</sup> Membership in the B.C. Society of Respiratory Therapists (BCSRT) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

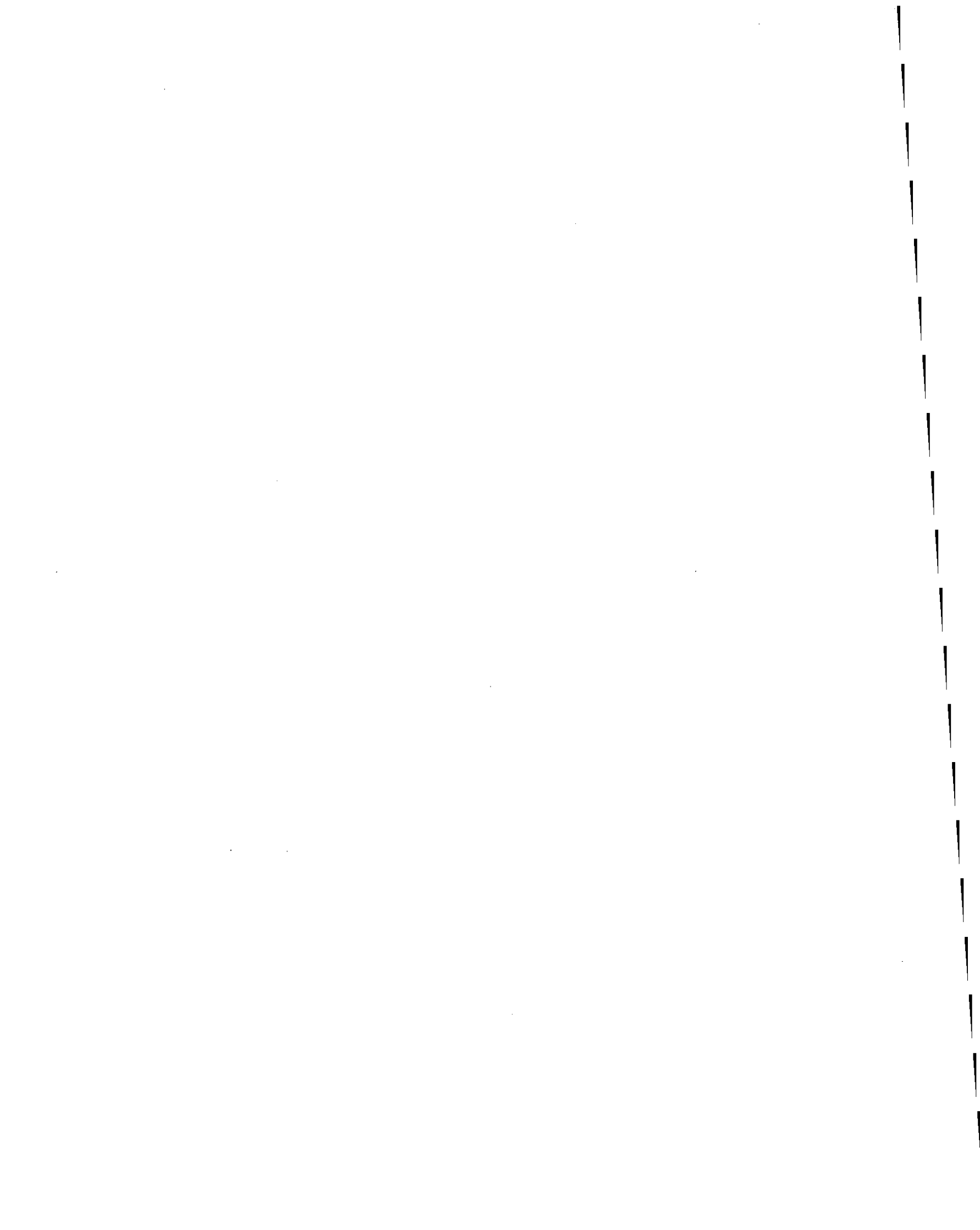
\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Respiratory Therapists (BCSRT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Setting**  
**November 1993**

| Health Region                | Hospital   | Private Firm | Educational<br>Institution | Unknown   | Total      |
|------------------------------|------------|--------------|----------------------------|-----------|------------|
| 1 East Kootenay              | 0          | 1            | 0                          | 1         | 2          |
| 2 Central Kootenay           | 1          | 0            | 0                          | 0         | 1          |
| 4 North Okanagan             | 6          | 1            | 0                          | 2         | 9          |
| 5 South Okanagan             | 21         | 2            | 0                          | 1         | 24         |
| 6 South Central              | 22         | 3            | 8                          | 3         | 36         |
| 7 Upper Fraser Valley        | 4          | 0            | 0                          | 2         | 6          |
| 8 Central Fraser Valley      | 11         | 1            | 0                          | 3         | 15         |
| 9 Boundary                   | 27         | 5            | 0                          | 3         | 35         |
| 10 Simon Fraser              | 11         | 2            | 0                          | 4         | 17         |
| 11 Coast Garibaldi           | 1          | 0            | 0                          | 0         | 1          |
| 13 Central Vancouver Island  | 6          | 3            | 0                          | 3         | 12         |
| 14 Upper Island              | 0          | 1            | 0                          | 2         | 3          |
| 15 Cariboo                   | 1          | 0            | 0                          | 0         | 1          |
| 16 Skeena                    | 0          | 0            | 0                          | 1         | 1          |
| 17 Peace River               | 3          | 0            | 0                          | 0         | 3          |
| 18 Northern Interior         | 6          | 0            | 0                          | 1         | 7          |
| 20 Vancouver                 | 57         | 1            | 0                          | 7         | 65         |
| 30 Burnaby                   | 22         | 0            | 0                          | 6         | 28         |
| 40 North Shore               | 7          | 2            | 0                          | 1         | 10         |
| 50 Richmond                  | 12         | 1            | 0                          | 0         | 13         |
| 60 Capital Regional District | 35         | 4            | 0                          | 7         | 46         |
| <b>TOTAL</b>                 | <b>253</b> | <b>27</b>    | <b>8</b>                   | <b>47</b> | <b>335</b> |

<sup>1</sup> Membership in the B.C. Society of Respiratory Therapists (BCSRT) is voluntary.

## **V. MEDICAL & TREATMENT SERVICES**



## CHIROPRACTORS

**Definition:** A chiropractor

...diagnoses and treats patients' disorders of the spine and other body joints by adjusting the spinal column or through other corrective manipulation.

Chiropractors perform some or all of the following duties:

- (a) take patients' case history, conduct examinations, observe patients, and perform or order x-rays and other tests to diagnose patients' conditions;
- (b) diagnose disorders of the spine and other body joints;
- (c) treat those patients whose symptoms result from abnormal musculoskeletal conditions or joint mechanics through the corrective manipulation of the spinal column or other joints and may use such additional treatments as heat, light and massage;
- (d) advise patients on corrective exercises, lifestyle, and nutrition.<sup>1</sup>

**Governing Statute:** Chiropractors Act, Revised Statutes of British Columbia, 1979, Chapter 50; Health Professions Amendment Act, 1989, Chapter 29, Sections 1-6; Health Statutes Amendment Act, 1990, Chapter 51, Sections 1-2; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 1-6; administered by the Ministry of Health.

**Governing Body:** British Columbia College of Chiropractors. In order to practise as a Chiropractor in British Columbia, it is necessary to hold a certificate of registration from the British Columbia College of Chiropractors.

**Date of Record:** October 1991 and February 1994.

**Source of Data:** The British Columbia College of Chiropractors.

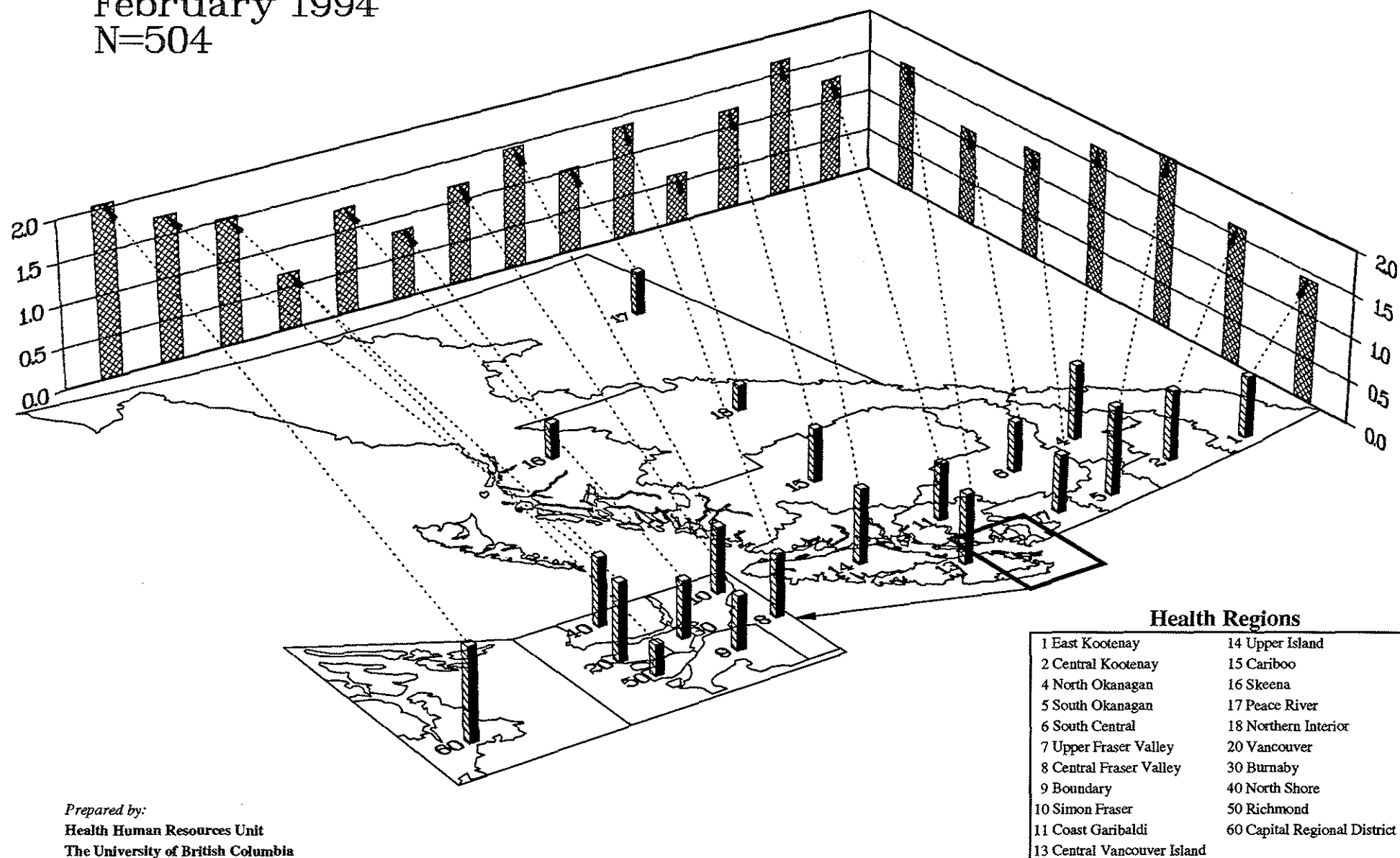
### Preparation and Updating:

The table, derived from the *Register* of the British Columbia College of Chiropractors, includes registered chiropractors who reported a British Columbia address at the date of record. Data presented in the table are based on employment address for the majority of chiropractors. Precise percentages of home vs. employment or other address are not known.

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<sup>1</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3122, Ottawa: Employment and Immigration Canada.

Registered Chiropractors  
per 10,000 Population  
by Health Region  
February 1994  
N=504



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Registered Chiropractors in British Columbia**  
**by Health Region**  
**October 1991 and February 1994**

| Health Region                | Number     |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|------------|------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991       | 1994       | 1991                            | 1994        | Number <sup>1</sup>              | Ratio <sup>2</sup> |
| 1 East Kootenay              | 9          | 10         | 1.29                            | 1.42        | *                                | *                  |
| 2 Central Kootenay           | 10         | 12         | 1.39                            | 1.61        | 8.13                             | 6.50               |
| 4 North Okanagan             | 15         | 18         | 1.55                            | 1.72        | 8.13                             | 4.55               |
| 5 South Okanagan             | 31         | 40         | 1.74                            | 2.01        | 11.54                            | 6.47               |
| 6 South Central              | 11         | 13         | 1.01                            | 1.14        | 7.42                             | 5.35               |
| 7 Upper Fraser Valley        | 21         | 22         | 1.35                            | 1.29        | 2.01                             | -1.76              |
| 8 Central Fraser Valley      | 21         | 26         | 1.19                            | 1.37        | 9.59                             | 6.15               |
| 9 Boundary                   | 44         | 45         | 1.25                            | 1.19        | 0.97                             | -2.05              |
| 10 Simon Fraser              | 30         | 29         | 1.63                            | 1.46        | -1.44                            | -4.63              |
| 11 Coast Garibaldi           | 10         | 8          | 1.68                            | 1.27        | -9.12                            | -11.33             |
| 13 Central Vancouver Island  | 25         | 32         | 1.29                            | 1.55        | 11.16                            | 8.14               |
| 14 Upper Island              | 14         | 17         | 1.45                            | 1.66        | 8.68                             | 6.19               |
| 15 Cariboo                   | 9          | 8          | 1.39                            | 1.22        | *                                | *                  |
| 16 Skeena                    | 7          | 7          | 0.84                            | 0.83        | *                                | *                  |
| 17 Peace River               | 5          | 6          | 0.85                            | 1.02        | *                                | *                  |
| 18 Northern Interior         | 7          | 7          | 0.61                            | 0.60        | *                                | *                  |
| 20 Vancouver                 | 82         | 85         | 1.72                            | 1.73        | 1.55                             | 0.25               |
| 30 Burnaby                   | 22         | 21         | 1.38                            | 1.27        | -1.97                            | -3.73              |
| 40 North Shore               | 24         | 25         | 1.52                            | 1.52        | 1.76                             | 0.08               |
| 50 Richmond                  | 9          | 9          | 0.71                            | 0.68        | *                                | *                  |
| 60 Capital Regional District | 53         | 64         | 1.77                            | 2.05        | 8.42                             | 6.63               |
| <b>TOTAL</b>                 | <b>459</b> | <b>504</b> | <b>1.40</b>                     | <b>1.46</b> | <b>4.09</b>                      | <b>1.77</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.





## EMERGENCY MEDICAL ASSISTANTS

**Definition:** An emergency medical assistant

...provides first aid, nursing, and medical services to minimise disability or loss of life in emergency situations. An emergency medical assistant (EMA) will be skilled in the areas of first aid, general ambulance practices and procedures, basic nursing, patient assessment, specialised diagnostics, and treatments.

An Emergency Medical Assistant First Responder (EMA FR) may be employed with a police force, a fire department, or an agency approved by the Emergency Health Services Commission (EHSC) such as a Native Band Council. All other EMAs are employed either with the EHSC or with a contractor who has a contract for service with the Commission.

Emergency medical assistants are categorised as follows:

- (a) *Emergency Medical Assistant First Responder (EMA FR)*  
Receive 4 to 32 hours of training. Acting as an EMA is generally not a primary duty.
- (b) *Emergency Medical Assistant First Aid (EMA FA)*  
Receive approximately 70 hours of training. Many EMA FAs eventually receive the necessary training, mostly related to ambulance operation, to move to EMA 1 status.
- (c) *Emergency Medical Assistant 1 (EMA 1)*  
Receive approximately 80 hours of training. An EMA 1 candidate must have a secondary school education and an Industrial First Aid (IFA) certificate. An EMA 1 is expected to work to strict protocol. He/she will make only limited decisions about patient management.
- (d) *Emergency Medical Assistant 2 (EMA 2)*  
Receive 240 hours of training. An EMA 2 candidate must have successfully completed EMA 1 training. EMA 2 training is focused on developing patient assessment skills to a level where the attendant knows why certain measures are taken, and how certain conditions can worsen or improve depending on actions taken. These improved assessment skills assist the EMA 2 in revealing underlying conditions which may not otherwise be discovered.
- (e) *Emergency Medical Assistant 3 - Advanced Life Support (EMA 3 (ALS))*  
Receive 56 weeks of training. A candidate for EMA 3 (ALS) must have an EMA 2 licence and 3 years of full-time ambulance experience.
- (f) *Emergency Medical Assistant 3 - Infant Transport Team (EMA 3 (ITT))*  
Receive 18 months of training. An EMA 3 (ITT) candidate must have an EMA 2 licence and three years of full-time ambulance experience. EMA ITTs are only employed in Vancouver, and are mostly involved in hospital to hospital transport.<sup>1</sup>

**Governing Statute:** Health Emergency Act, Revised Statutes of British Columbia, 1979, Chapter 162; Health Statutes Amendment Act, 1989, Chapter 48, Sections 14-17; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 17-19; administered by the Ministry of Health.

<sup>1</sup> Adapted from the Health Emergency Act, Revised Statutes of British Columbia, 1979, Chapter 162, and from information provided by the Emergency Medical Assistants Licensing Branch, Ministry of Health, Province of British Columbia, January 1994.

**Governing Body:** Emergency Medical Assistants Licensing Board (EMALB). In order to practise as an emergency medical assistant in British Columbia, it is necessary to be licensed by the Emergency Medical Assistants Licensing Board. Licensed emergency medical assistants have exclusive use of the title: Emergency Medical Assistant.

**Date of Record:** December 1991 and January 1994.

**Source of Data:** Emergency Medical Assistants Licensing Board (EMALB), Ministry of Health.

**Preparation and Updating:**

The tables, derived from the register of the EMALB, include only licensed emergency medical assistants who reported a British Columbia address at the date of record. Data presented in the tables are based on employment address for all emergency medical assistants.

**Definition of Terms:**

**A) Emergency Medical Assistants**

**1. Licence Category**

Tables 1a and 1b show the total number of EMAs and the number of EMAs per 10,000 population in British Columbia based on their licence category, excluding the category EMA FR. The tables include EMAs who were British Columbia residents at the date of record. Licence categories are as follows:

- (a) Emergency Medical Assistant - First Aid (EMA FA)
- (b) Emergency Medical Assistant 1 (EMA 1)
- (c) Emergency Medical Assistant 2 (EMA 2)
- (d) Emergency Medical Assistant 3 - Advanced Life Support (EMA 3 (ALS))
- (e) Emergency Medical Assistant 3 - Infant Transport Team (EMA 3 (ITT))

Table 1c reports the average annual rates of change in the number of EMAs and in the number of EMAs per 10,000 population in British Columbia.

**2. Age and Sex**

Age and sex information on emergency medical assistants, derived from the registration database of the Emergency Medical Assistants Licensing Board, is reported in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

**3. Employment Status**

Table 3 presents employment status of Emergency Medical Assistants as reported to the EMALB.

## B) Emergency Medical Assistant - First Responders

### 1. Licence Category

Tables 1a and 1b present the number and number per 10,000 of EMA-FRs in British Columbia by level of training. *ROLLCALL 93* is the first time EMA FRs have been shown this way, so no rates of change are presented. There were 2,450 EMA FRs in the province in 1992. The required skills for the three levels of training are as follows:

(a) *Level 1*

Basic initial assessment and management, including scene assessment, spine immobilisation, opening and maintaining an airway, assessment of breathing adequacy and ventilation by mouth to pocket mask, management of head and neck injuries, chest injuries, and fractures and dislocations, until more qualified EMA help becomes available.

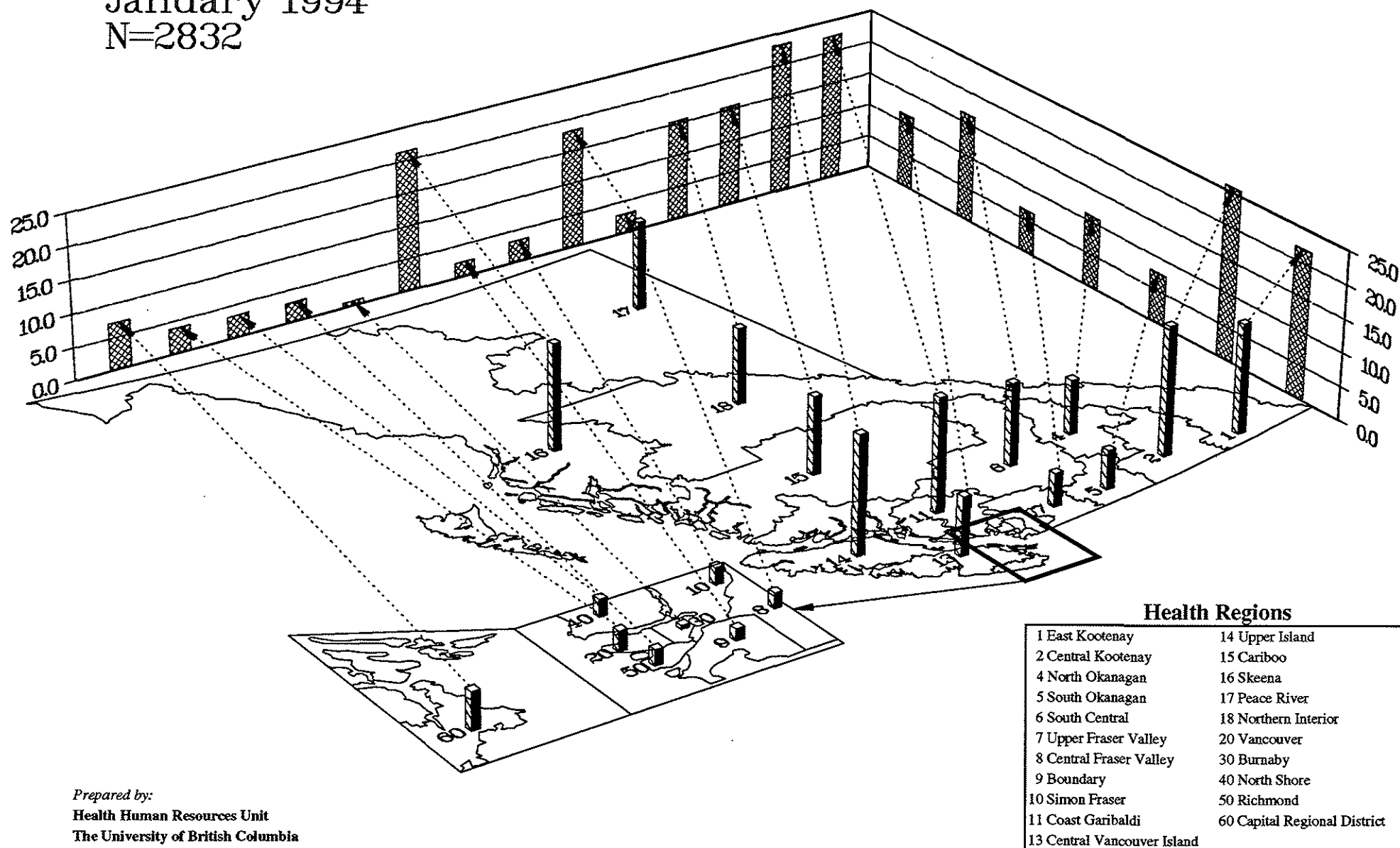
(b) *Level 2*

Level 1 plus recognition and treatment of abdominal and burn injuries, and knowledge and skill in more advanced spine, airway, and breathing management techniques.

(c) *Level 3*

Levels 1 and 2 plus knowledge and skill in handling medical and environmental emergencies.

# Emergency Medical Assistants per 10,000 Population by Health Region January 1994 N=2832



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Emergency Medical Assistants in British Columbia**  
**by Health Region by Licence Category**  
**December 1991 and January 1994<sup>1</sup>**

| Health Region                | EMA FA            |            | EMA 1             |              | EMA 2             |            | EMA 3 (ALS) |            | EMA 3 (ITT) |           | Total        |              |
|------------------------------|-------------------|------------|-------------------|--------------|-------------------|------------|-------------|------------|-------------|-----------|--------------|--------------|
|                              | 1991 <sup>2</sup> | 1994       | 1991 <sup>2</sup> | 1994         | 1991 <sup>2</sup> | 1994       | 1991        | 1994       | 1991        | 1994      | 1991         | 1994         |
| 1 East Kootenay              | 34                | 17         | 83                | 100          | 27                | 38         | 0           | 0          | 0           | 0         | 144          | 155          |
| 2 Central Kootenay           | 49                | 32         | 88                | 120          | 22                | 40         | 0           | 0          | 0           | 0         | 159          | 192          |
| 4 North Okanagan             | 25                | 10         | 78                | 76           | 26                | 28         | 0           | 0          | 0           | 0         | 129          | 114          |
| 5 South Okanagan             | 34                | 14         | 65                | 87           | 38                | 38         | 12          | 14         | 0           | 0         | 149          | 153          |
| 6 South Central              | 55                | 38         | 69                | 99           | 43                | 36         | 12          | 14         | 0           | 0         | 179          | 187          |
| 7 Upper Fraser Valley        | 5                 | 7          | 37                | 57           | 35                | 39         | 6           | 8          | 0           | 0         | 83           | 111          |
| 8 Central Fraser Valley      | 2                 | 2          | 24                | 16           | 30                | 39         | 0           | 0          | 0           | 0         | 56           | 57           |
| 9 Boundary                   | 4                 | 0          | 29                | 12           | 44                | 65         | 10          | 10         | 0           | 0         | 87           | 87           |
| 10 Simon Fraser              | 1                 | 0          | 14                | 15           | 38                | 42         | 8           | 10         | 0           | 0         | 61           | 67           |
| 11 Coast Garibaldi           | 33                | 25         | 68                | 88           | 28                | 29         | 0           | 0          | 0           | 0         | 129          | 142          |
| 13 Central Vancouver Island  | 60                | 24         | 106               | 146          | 42                | 66         | 0           | 0          | 0           | 0         | 208          | 236          |
| 14 Upper Island              | 74                | 65         | 117               | 135          | 21                | 37         | 0           | 0          | 0           | 0         | 212          | 237          |
| 15 Cariboo                   | 27                | 21         | 47                | 59           | 25                | 22         | 0           | 0          | 0           | 0         | 99           | 102          |
| 16 Skeena                    | 61                | 33         | 97                | 131          | 17                | 17         | 0           | 0          | 0           | 0         | 175          | 181          |
| 17 Peace River               | 30                | 19         | 50                | 69           | 20                | 19         | 0           | 0          | 0           | 0         | 100          | 107          |
| 18 Northern Interior         | 28                | 36         | 92                | 100          | 38                | 34         | 7           | 8          | 0           | 0         | 165          | 178          |
| 20 Vancouver                 | 2                 | 2          | 33                | 20           | 119               | 116        | 32          | 34         | 25          | 22        | 211          | 194          |
| 30 Burnaby                   | 0                 | 0          | 3                 | 1            | 8                 | 11         | 0           | 0          | 0           | 0         | 11           | 12           |
| 40 North Shore               | 6                 | 0          | 23                | 14           | 20                | 33         | 9           | 9          | 0           | 0         | 58           | 56           |
| 50 Richmond                  | 5                 | 0          | 19                | 6            | 11                | 25         | 6           | 9          | 0           | 0         | 41           | 40           |
| 60 Capital Regional District | 48                | 23         | 75                | 96           | 72                | 73         | 25          | 32         | 0           | 0         | 220          | 224          |
| <b>TOTAL</b>                 | <b>583</b>        | <b>368</b> | <b>1,217</b>      | <b>1,447</b> | <b>724</b>        | <b>847</b> | <b>127</b>  | <b>148</b> | <b>25</b>   | <b>22</b> | <b>2,676</b> | <b>2,832</b> |

<sup>1</sup> Excludes 6 emergency medical assistants with unknown address.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

**Table 1b**  
**Emergency Medical Assistants in British Columbia**  
**per 10,000 Population by Health Region by Licence Category**  
**December 1991 and January 1994<sup>1</sup>**

| Health Region                | EMA FA      |             | EMA 1       |             | EMA 2       |             | EMA 3 (ALS) |             | EMA 3 (ITT) |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                              | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        | 1991        | 1994        |
| 1 East Kootenay              | 4.89        | 2.41        | 11.93       | 14.17       | 3.88        | 5.39        | 0.00        | 0.00        | 0.00        | 0.00        | 20.71       | 21.97       |
| 2 Central Kootenay           | 6.81        | 4.29        | 12.23       | 16.10       | 3.06        | 5.37        | 0.00        | 0.00        | 0.00        | 0.00        | 22.10       | 25.76       |
| 4 North Okanagan             | 2.59        | 0.96        | 8.08        | 7.28        | 2.69        | 2.68        | 0.00        | 0.00        | 0.00        | 0.00        | 13.36       | 10.91       |
| 5 South Okanagan             | 1.90        | 0.70        | 3.64        | 4.37        | 2.13        | 1.91        | 0.67        | 0.70        | 0.00        | 0.00        | 8.35        | 7.69        |
| 6 South Central              | 5.05        | 3.34        | 6.34        | 8.69        | 3.95        | 3.16        | 1.10        | 1.23        | 0.00        | 0.00        | 16.45       | 16.42       |
| 7 Upper Fraser Valley        | 0.32        | 0.41        | 2.37        | 3.35        | 2.24        | 2.29        | 0.38        | 0.47        | 0.00        | 0.00        | 5.32        | 6.51        |
| 8 Central Fraser Valley      | 0.11        | 0.11        | 1.36        | 0.84        | 1.70        | 2.05        | 0.00        | 0.00        | 0.00        | 0.00        | 3.18        | 3.00        |
| 9 Boundary                   | 0.11        | 0.00        | 0.83        | 0.32        | 1.25        | 1.72        | 0.28        | 0.27        | 0.00        | 0.00        | 2.48        | 2.31        |
| 10 Simon Fraser              | 0.05        | 0.00        | 0.76        | 0.76        | 2.07        | 2.12        | 0.44        | 0.50        | 0.00        | 0.00        | 3.32        | 3.38        |
| 11 Coast Garibaldi           | 5.53        | 3.96        | 11.40       | 13.93       | 4.69        | 4.59        | 0.00        | 0.00        | 0.00        | 0.00        | 21.62       | 22.47       |
| 13 Central Vancouver Island  | 3.09        | 1.16        | 5.46        | 7.06        | 2.17        | 3.19        | 0.00        | 0.00        | 0.00        | 0.00        | 10.72       | 11.41       |
| 14 Upper Island              | 7.65        | 6.36        | 12.09       | 13.22       | 2.17        | 3.62        | 0.00        | 0.00        | 0.00        | 0.00        | 21.91       | 23.20       |
| 15 Cariboo                   | 4.17        | 3.19        | 7.25        | 8.96        | 3.86        | 3.34        | 0.00        | 0.00        | 0.00        | 0.00        | 15.28       | 15.50       |
| 16 Skeena                    | 7.35        | 3.90        | 11.68       | 15.48       | 2.05        | 2.01        | 0.00        | 0.00        | 0.00        | 0.00        | 21.08       | 21.39       |
| 17 Peace River               | 5.13        | 3.22        | 8.55        | 11.71       | 3.42        | 3.22        | 0.00        | 0.00        | 0.00        | 0.00        | 17.10       | 18.15       |
| 18 Northern Interior         | 2.46        | 3.11        | 8.08        | 8.64        | 3.34        | 2.94        | 0.61        | 0.69        | 0.00        | 0.00        | 14.49       | 15.38       |
| 20 Vancouver                 | 0.04        | 0.04        | 0.69        | 0.41        | 2.49        | 2.36        | 0.67        | 0.69        | 0.52        | 0.45        | 4.42        | 3.94        |
| 30 Burnaby                   | 0.00        | 0.00        | 0.19        | 0.06        | 0.50        | 0.66        | 0.00        | 0.00        | 0.00        | 0.00        | 0.69        | 0.72        |
| 40 North Shore               | 0.38        | 0.00        | 1.45        | 0.85        | 1.26        | 2.00        | 0.57        | 0.55        | 0.00        | 0.00        | 3.66        | 3.40        |
| 50 Richmond                  | 0.39        | 0.00        | 1.50        | 0.45        | 0.87        | 1.89        | 0.47        | 0.68        | 0.00        | 0.00        | 3.24        | 3.02        |
| 60 Capital Regional District | 1.60        | 0.74        | 2.50        | 3.08        | 2.40        | 2.34        | 0.83        | 1.03        | 0.00        | 0.00        | 7.34        | 7.19        |
| <b>TOTAL</b>                 | <b>1.77</b> | <b>1.06</b> | <b>3.71</b> | <b>4.18</b> | <b>2.20</b> | <b>2.45</b> | <b>0.39</b> | <b>0.43</b> | <b>0.08</b> | <b>0.06</b> | <b>8.15</b> | <b>8.18</b> |

<sup>1</sup> Excludes 6 emergency medical assistants with unknown address.

**Table 1c**  
**Average Annual Rate of Change: Emergency Medical Assistants in British Columbia**  
**by Health Region by Licence Category**  
**December 1991 to January 1994**

| Health Region                | EMA FA              |                    | EMA 1               |                    | EMA 2               |                    | EMA 3 (ALS)         |                    | EMA 3 (ITT)         |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | -29.29              | -29.80             | 9.76                | 8.97               | 18.63               | 17.77              | *                   | *                  | *                   | *                  | 3.75                | 3.00               |
| 2 Central Kootenay           | -19.19              | -20.60             | 16.77               | 14.73              | 34.84               | 32.48              | *                   | *                  | *                   | *                  | 9.89                | 7.97               |
| 4 North Okanagan             | -36.75              | -39.19             | -1.29               | -5.09              | 3.77                | -0.22              | *                   | *                  | *                   | *                  | -5.99               | -9.61              |
| 5 South Okanagan             | -35.83              | -39.22             | 15.69               | 9.58               | 0.00                | -5.29              | 8.01                | 2.30               | *                   | *                  | 1.33                | -4.02              |
| 6 South Central              | -16.88              | -18.74             | 19.78               | 17.09              | -8.50               | -10.55             | 8.01                | 5.59               | *                   | *                  | 2.21                | -0.08              |
| 7 Upper Fraser Valley        | *                   | *                  | 24.12               | 18.78              | 5.56                | 1.02               | *                   | *                  | *                   | *                  | 15.64               | 10.67              |
| 8 Central Fraser Valley      | *                   | *                  | -18.35              | -21.33             | 14.02               | 9.86               | *                   | *                  | *                   | *                  | 0.89                | -2.79              |
| 9 Boundary                   | *                   | *                  | -35.67              | -37.91             | 21.54               | 17.31              | 0.00                | -3.48              | *                   | *                  | 0.00                | -3.48              |
| 10 Simon Fraser              | *                   | *                  | 3.51                | -0.38              | 5.13                | 1.18               | *                   | *                  | *                   | *                  | 4.80                | 0.86               |
| 11 Coast Garibaldi           | -12.96              | -15.42             | 13.76               | 10.54              | 1.77                | -1.11              | *                   | *                  | *                   | *                  | 4.92                | 1.95               |
| 13 Central Vancouver Island  | -36.75              | -38.75             | 17.36               | 13.65              | 25.36               | 21.39              | *                   | *                  | *                   | *                  | 6.52                | 3.15               |
| 14 Upper Island              | -6.28               | -8.78              | 7.42                | 4.55               | 32.74               | 29.20              | *                   | *                  | *                   | *                  | 5.73                | 2.91               |
| 15 Cariboo                   | -11.81              | -12.50             | 12.04               | 11.16              | -6.19               | -6.93              | *                   | *                  | *                   | *                  | 1.50                | 0.71               |
| 16 Skeena                    | -26.45              | -27.14             | 16.21               | 15.12              | 0.00                | -0.94              | *                   | *                  | *                   | *                  | 1.70                | 0.74               |
| 17 Peace River               | -20.42              | -20.73             | 17.47               | 17.01              | -2.53               | -2.91              | *                   | *                  | *                   | *                  | 3.44                | 3.04               |
| 18 Northern Interior         | 13.39               | 12.48              | 4.26                | 3.42               | -5.41               | -6.17              | *                   | *                  | *                   | *                  | 3.86                | 3.03               |
| 20 Vancouver                 | *                   | *                  | -22.15              | -23.31             | -1.27               | -2.74              | 3.08                | 1.54               | -6.19               | -7.59              | -4.11               | -5.54              |
| 30 Burnaby                   | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  | 4.45                | 2.26               |
| 40 North Shore               | *                   | *                  | -21.98              | -23.49             | 28.45               | 25.97              | *                   | *                  | *                   | *                  | -1.74               | -3.64              |
| 50 Richmond                  | *                   | *                  | -43.80              | -45.03             | 50.76               | 47.46              | *                   | *                  | *                   | *                  | -1.23               | -3.39              |
| 60 Capital Regional District | -30.78              | -32.10             | 13.14               | 10.97              | 0.69                | -1.24              | 13.14               | 10.97              | *                   | *                  | 0.90                | -1.03              |
| <b>TOTAL</b>                 | <b>-20.55</b>       | <b>-22.61</b>      | <b>9.04</b>         | <b>6.21</b>        | <b>8.16</b>         | <b>5.35</b>        | <b>7.95</b>         | <b>5.15</b>        | <b>-6.19</b>        | <b>-8.63</b>       | <b>2.87</b>         | <b>0.20</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Emergency Medical Assistants in British Columbia**  
**by Health Region by Age and Sex**  
**January 1994**

| Health Region                | < 25       |           | 25-34      |            | 35-44      |            | 45-54      |           | 55-64     |           | 65 +     |          | Subtotal     |            | Unknown   | Total        |
|------------------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|-----------|-----------|----------|----------|--------------|------------|-----------|--------------|
|                              | M          | F         | M          | F          | M          | F          | M          | F         | M         | F         | M        | F        | M            | F          |           |              |
| 1 East Kootenay              | 12         | 9         | 40         | 18         | 43         | 12         | 16         | 2         | 3         | 0         | 0        | 0        | 114          | 41         | 0         | 155          |
| 2 Central Kootenay           | 8          | 10        | 49         | 12         | 53         | 24         | 28         | 4         | 1         | 3         | 0        | 0        | 139          | 53         | 0         | 192          |
| 4 North Okanagan             | 6          | 3         | 24         | 9          | 28         | 15         | 19         | 5         | 2         | 2         | 0        | 0        | 79           | 34         | 1         | 114          |
| 5 South Okanagan             | 11         | 6         | 38         | 10         | 40         | 15         | 22         | 3         | 7         | 1         | 0        | 0        | 118          | 35         | 0         | 153          |
| 6 South Central              | 11         | 4         | 54         | 26         | 39         | 18         | 19         | 5         | 9         | 1         | 1        | 0        | 133          | 54         | 0         | 187          |
| 7 Upper Fraser Valley        | 10         | 4         | 33         | 6          | 44         | 2          | 9          | 0         | 2         | 1         | 0        | 0        | 98           | 13         | 0         | 111          |
| 8 Central Fraser Valley      | 2          | 1         | 12         | 5          | 20         | 0          | 13         | 1         | 3         | 0         | 0        | 0        | 50           | 7          | 0         | 57           |
| 9 Boundary                   | 4          | 0         | 23         | 3          | 32         | 5          | 15         | 0         | 5         | 0         | 0        | 0        | 79           | 8          | 0         | 87           |
| 10 Simon Fraser              | 4          | 0         | 20         | 4          | 23         | 2          | 10         | 0         | 4         | 0         | 0        | 0        | 61           | 6          | 0         | 67           |
| 11 Coast Garibaldi           | 15         | 4         | 39         | 16         | 26         | 14         | 13         | 7         | 5         | 2         | 0        | 0        | 98           | 43         | 1         | 142          |
| 13 Central Vancouver Island  | 21         | 8         | 60         | 29         | 48         | 18         | 33         | 9         | 8         | 1         | 0        | 0        | 170          | 65         | 1         | 236          |
| 14 Upper Island              | 10         | 10        | 50         | 25         | 56         | 35         | 25         | 14        | 5         | 3         | 0        | 0        | 146          | 87         | 4         | 237          |
| 15 Cariboo                   | 11         | 6         | 11         | 14         | 23         | 14         | 12         | 6         | 5         | 0         | 0        | 0        | 62           | 40         | 0         | 102          |
| 16 Skeena                    | 10         | 11        | 49         | 25         | 31         | 26         | 19         | 6         | 2         | 1         | 0        | 0        | 111          | 69         | 1         | 181          |
| 17 Peace River               | 6          | 6         | 17         | 14         | 31         | 17         | 9          | 4         | 0         | 0         | 0        | 0        | 63           | 41         | 3         | 107          |
| 18 Northern Interior         | 13         | 9         | 57         | 16         | 46         | 10         | 13         | 7         | 2         | 3         | 0        | 0        | 131          | 45         | 2         | 178          |
| 20 Vancouver                 | 2          | 1         | 70         | 12         | 76         | 12         | 19         | 1         | 1         | 0         | 0        | 0        | 168          | 26         | 0         | 194          |
| 30 Burnaby                   | 0          | 0         | 9          | 0          | 3          | 0          | 0          | 0         | 0         | 0         | 0        | 0        | 12           | 0          | 0         | 12           |
| 40 North Shore               | 1          | 1         | 24         | 2          | 16         | 1          | 8          | 1         | 1         | 0         | 0        | 0        | 50           | 5          | 1         | 56           |
| 50 Richmond                  | 1          | 1         | 12         | 5          | 16         | 0          | 4          | 0         | 1         | 0         | 0        | 0        | 34           | 6          | 0         | 40           |
| 60 Capital Regional District | 9          | 4         | 49         | 20         | 76         | 24         | 24         | 9         | 4         | 2         | 1        | 0        | 163          | 59         | 2         | 224          |
| <b>TOTAL</b>                 | <b>167</b> | <b>98</b> | <b>740</b> | <b>271</b> | <b>770</b> | <b>264</b> | <b>330</b> | <b>84</b> | <b>70</b> | <b>20</b> | <b>2</b> | <b>0</b> | <b>2,079</b> | <b>737</b> | <b>16</b> | <b>2,832</b> |

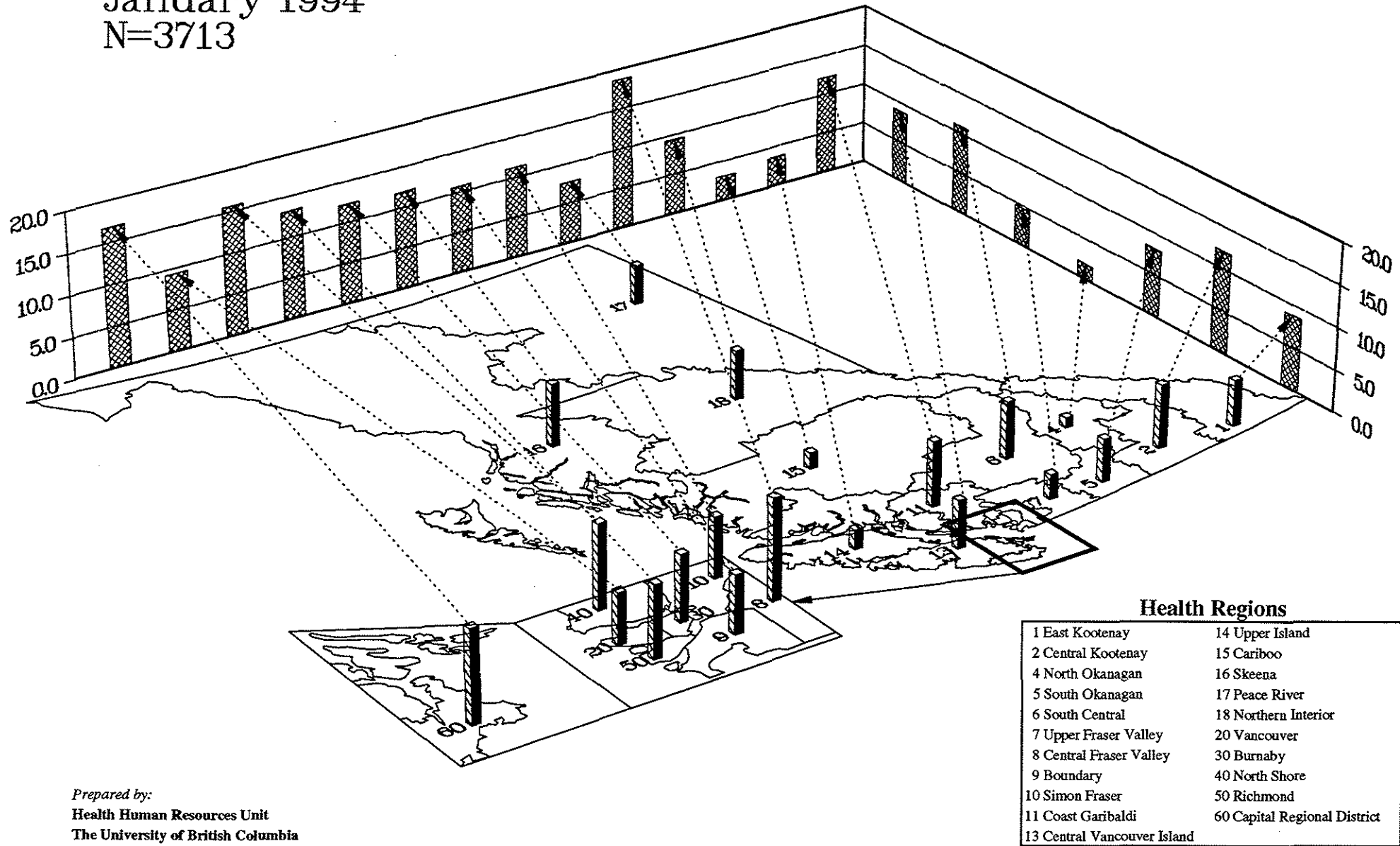


**Table 3**  
**Emergency Medical Assistants in British Columbia**  
**by Health Region by Employment Status**  
**January 1994**

| Health Region                | Full-Time  | Part-Time <sup>1</sup> | Total        |
|------------------------------|------------|------------------------|--------------|
| 1 East Kootenay              | 17         | 138                    | 155          |
| 2 Central Kootenay           | 14         | 178                    | 192          |
| 4 North Okanagan             | 19         | 95                     | 114          |
| 5 South Okanagan             | 37         | 116                    | 153          |
| 6 South Central              | 39         | 148                    | 187          |
| 7 Upper Fraser Valley        | 37         | 74                     | 111          |
| 8 Central Fraser Valley      | 31         | 26                     | 57           |
| 9 Boundary                   | 59         | 28                     | 87           |
| 10 Simon Fraser              | 47         | 20                     | 67           |
| 11 Coast Garibaldi           | 19         | 123                    | 142          |
| 13 Central Vancouver Island  | 42         | 194                    | 236          |
| 14 Upper Island              | 14         | 223                    | 237          |
| 15 Cariboo                   | 12         | 90                     | 102          |
| 16 Skeena                    | 12         | 169                    | 181          |
| 17 Peace River               | 8          | 99                     | 107          |
| 18 Northern Interior         | 23         | 155                    | 178          |
| 20 Vancouver                 | 161        | 33                     | 194          |
| 30 Burnaby                   | 10         | 2                      | 12           |
| 40 North Shore               | 32         | 24                     | 56           |
| 50 Richmond                  | 27         | 13                     | 40           |
| 60 Capital Regional District | 95         | 129                    | 224          |
| <b>TOTAL</b>                 | <b>755</b> | <b>2,077</b>           | <b>2,832</b> |

<sup>1</sup> Includes 1 emergency medical assistant employed on a casual basis.

# Emergency Medical Assistants – First Responders per 10,000 Population by Health Region January 1994 N=3713



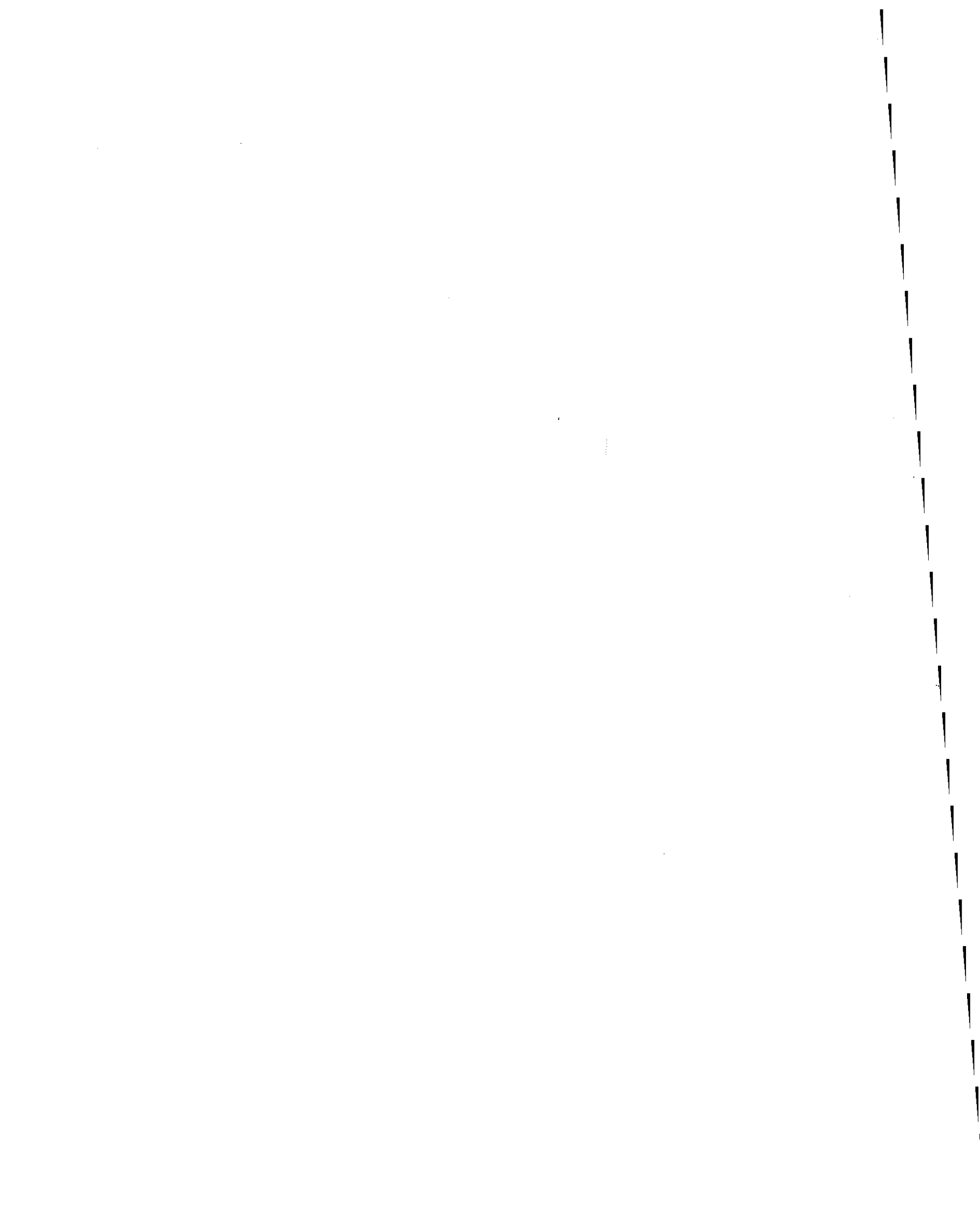
Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Emergency Medical Assistants - First Responders in British Columbia**  
**by Health Region by Level of Training**  
**January 1994**

| <u>Health Region</u>         | <u>FR-1</u> | <u>FR-2</u> | <u>FR-3</u>  | <u>Unknown</u> | <u>Total</u> |
|------------------------------|-------------|-------------|--------------|----------------|--------------|
| 1 East Kootenay              | 6           | 12          | 44           | 0              | 62           |
| 2 Central Kootenay           | 19          | 13          | 58           | 0              | 90           |
| 4 North Okanagan             | 0           | 0           | 20           | 0              | 20           |
| 5 South Okanagan             | 0           | 0           | 162          | 0              | 162          |
| 6 South Central              | 1           | 23          | 100          | 0              | 124          |
| 7 Upper Fraser Valley        | 16          | 26          | 37           | 0              | 79           |
| 8 Central Fraser Valley      | 32          | 78          | 245          | 0              | 355          |
| 9 Boundary                   | 90          | 151         | 163          | 0              | 404          |
| 10 Simon Fraser              | 21          | 25          | 177          | 0              | 223          |
| 11 Coast Garibaldi           | 0           | 7           | 70           | 0              | 77           |
| 13 Central Vancouver Island  | 0           | 17          | 167          | 0              | 184          |
| 14 Upper Island              | 0           | 0           | 37           | 0              | 37           |
| 15 Cariboo                   | 0           | 17          | 3            | 0              | 20           |
| 16 Skeena                    | 4           | 23          | 74           | 0              | 101          |
| 17 Peace River               | 0           | 11          | 34           | 0              | 45           |
| 18 Northern Interior         | 0           | 27          | 82           | 0              | 109          |
| 20 Vancouver                 | 197         | 1           | 264          | 0              | 462          |
| 30 Burnaby                   | 7           | 0           | 196          | 0              | 203          |
| 40 North Shore               | 19          | 15          | 224          | 0              | 258          |
| 50 Richmond                  | 0           | 0           | 175          | 0              | 175          |
| 60 Capital Regional District | 174         | 57          | 290          | 2              | 523          |
| <b>TOTAL</b>                 | <b>586</b>  | <b>503</b>  | <b>2,622</b> | <b>2</b>       | <b>3,713</b> |

**Table 1b**  
**Emergency Medical Assistants - First Responders in British Columbia**  
**per 10,000 Population by Health Region by Level of Training**  
**January 1994**

| Health Region                | FR-1        | FR-2        | FR-3        | Unknown     | Total        |
|------------------------------|-------------|-------------|-------------|-------------|--------------|
| 1 East Kootenay              | 0.85        | 1.70        | 6.24        | 0.00        | 8.79         |
| 2 Central Kootenay           | 2.55        | 1.74        | 7.78        | 0.00        | 12.08        |
| 4 North Okanagan             | 0.00        | 0.00        | 1.91        | 0.00        | 1.91         |
| 5 South Okanagan             | 0.00        | 0.00        | 8.14        | 0.00        | 8.14         |
| 6 South Central              | 0.09        | 2.02        | 8.78        | 0.00        | 10.89        |
| 7 Upper Fraser Valley        | 0.94        | 1.53        | 2.17        | 0.00        | 4.64         |
| 8 Central Fraser Valley      | 1.69        | 4.11        | 12.90       | 0.00        | 18.69        |
| 9 Boundary                   | 2.39        | 4.00        | 4.32        | 0.00        | 10.71        |
| 10 Simon Fraser              | 1.06        | 1.26        | 8.93        | 0.00        | 11.26        |
| 11 Coast Garibaldi           | 0.00        | 1.11        | 11.08       | 0.00        | 12.19        |
| 13 Central Vancouver Island  | 0.00        | 0.82        | 8.07        | 0.00        | 8.90         |
| 14 Upper Island              | 0.00        | 0.00        | 3.62        | 0.00        | 3.62         |
| 15 Cariboo                   | 0.00        | 2.58        | 0.46        | 0.00        | 3.04         |
| 16 Skeena                    | 0.47        | 2.72        | 8.74        | 0.00        | 11.94        |
| 17 Peace River               | 0.00        | 1.87        | 5.77        | 0.00        | 7.63         |
| 18 Northern Interior         | 0.00        | 2.33        | 7.08        | 0.00        | 9.42         |
| 20 Vancouver                 | 4.00        | 0.02        | 5.36        | 0.00        | 9.38         |
| 30 Burnaby                   | 0.42        | 0.00        | 11.83       | 0.00        | 12.25        |
| 40 North Shore               | 1.15        | 0.91        | 13.60       | 0.00        | 15.67        |
| 50 Richmond                  | 0.00        | 0.00        | 13.22       | 0.00        | 13.22        |
| 60 Capital Regional District | 5.58        | 1.83        | 9.31        | 0.06        | 16.79        |
| <b>TOTAL</b>                 | <b>1.69</b> | <b>1.45</b> | <b>7.57</b> | <b>0.01</b> | <b>10.73</b> |



## NATUROPATHIC PHYSICIANS

**Definition:** A naturopathic physician

...is a primary care practitioner who utilises various methods of diagnostic testing to assist in the treatment and prevention of disease.<sup>1</sup>

Common therapeutic modalities utilised by naturopaths include, but are not limited to:

- (a) *Nutritional Counselling*  
Specific individual diets including vitamins, mineral and other nutritional supplements to strengthen the body.
- (b) *Botanical (herbal) Medicine*  
Plant substances for their healing effects and nutritional value.
- (c) *Homeopathy*  
Minute amounts of natural substances to stimulate the body's self-healing abilities.
- (d) *Manipulation*  
Corrections of stress or trauma-induced misalignments of muscle, connective tissue, and the skeletal system.
- (e) *Physical Medicine*  
The therapeutic use of water, light, electricity, ultra-sound, massage and exercise.
- (f) *Chinese Medicine*  
Includes the use of acupuncture, electrodiagnosis and Chinese herbology.
- (g) *Psychological Services*  
Counselling, hypnotherapy, emotional support and biofeedback.<sup>2</sup>

**Governing Statute:** Naturopaths Act, Revised Statutes of British Columbia, 1979, Chapter 297; Health Statutes Amendment Act, 1990, Chapter 51, Section 29; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 29-32; administered by the Ministry of Health.

**Governing Body:** The Association of Naturopathic Physicians of British Columbia. In order to practise as a Naturopathic Physician in British Columbia, it is necessary to be registered by the Association.

**Date of Record:** December 1991 and January 1994.

**Source of Data:** Association of Naturopathic Physicians of British Columbia (ANPBC).

### Preparation and Updating:

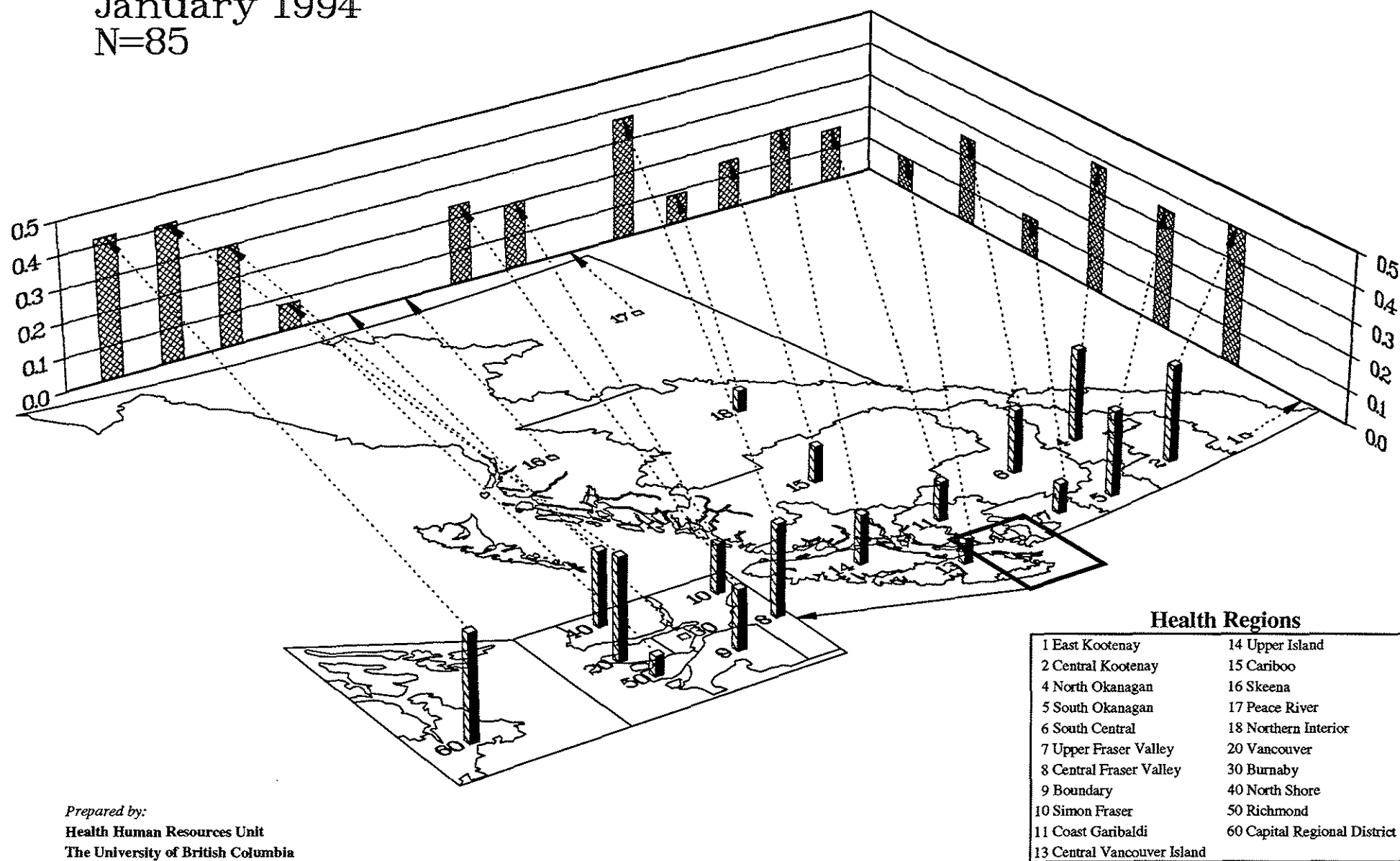
The table, derived from the *Register* supplied by the ANPBC, includes only registered naturopaths in active practice in British Columbia at the date of record. Associate ANPBC members have been excluded from the table since they are not involved in active practice in the province. Data presented in

<sup>1</sup>From information provided by the Association of Naturopathic Physicians of British Columbia.

<sup>2</sup>*Questions and Answers about Naturopathic Medicine and Naturopathic Physicians*. See also *National Occupational Classification 1992*, Major Group 31, No. 3123, Ottawa: Employment and Immigration Canada.

the tables are based on employment address for the majority of naturopathic physicians. Precise percentages of home vs. employment or other address are not known.

# Registered Active Naturopathic Physicians per 10,000 Population by Health Region January 1994 N=85



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Registered Active Naturopathic Physicians in British Columbia**  
**by Health Region**  
**December 1991 and January 1994**

| Health Region                | Number    |           | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|-----------|-----------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991      | 1994      | 1991                            | 1994        | Number <sup>1</sup>              | Ratio <sup>2</sup> |
| 1 East Kootenay              | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 2 Central Kootenay           | 2         | 3         | 0.28                            | 0.40        | *                                | *                  |
| 4 North Okanagan             | 1         | 4         | 0.10                            | 0.38        | *                                | *                  |
| 5 South Okanagan             | 6         | 7         | 0.34                            | 0.35        | *                                | *                  |
| 6 South Central              | 3         | 3         | 0.28                            | 0.26        | *                                | *                  |
| 7 Upper Fraser Valley        | 2         | 2         | 0.13                            | 0.12        | *                                | *                  |
| 8 Central Fraser Valley      | 7         | 7         | 0.40                            | 0.37        | *                                | *                  |
| 9 Boundary                   | 8         | 9         | 0.23                            | 0.24        | *                                | *                  |
| 10 Simon Fraser              | 4         | 4         | 0.22                            | 0.20        | *                                | *                  |
| 11 Coast Garibaldi           | 0         | 1         | 0.00                            | 0.16        | *                                | *                  |
| 13 Central Vancouver Island  | 3         | 2         | 0.15                            | 0.10        | *                                | *                  |
| 14 Upper Island              | 1         | 2         | 0.10                            | 0.20        | *                                | *                  |
| 15 Cariboo                   | 0         | 1         | 0.00                            | 0.15        | *                                | *                  |
| 16 Skeena                    | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 17 Peace River               | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 18 Northern Interior         | 1         | 1         | 0.09                            | 0.09        | *                                | *                  |
| 20 Vancouver                 | 12        | 20        | 0.25                            | 0.41        | 29.10                            | 27.18              |
| 30 Burnaby                   | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 40 North Shore               | 5         | 5         | 0.32                            | 0.30        | *                                | *                  |
| 50 Richmond                  | 1         | 1         | 0.08                            | 0.08        | *                                | *                  |
| 60 Capital Regional District | 12        | 13        | 0.40                            | 0.42        | 4.08                             | 2.09               |
| <b>TOTAL</b>                 | <b>68</b> | <b>85</b> | <b>0.21</b>                     | <b>0.25</b> | <b>11.80</b>                     | <b>8.90</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.



## OPTOMETRISTS

**Definition:** An optometrist is

...an independent primary-care health professional who specialises in the diagnosis and treatment of the visual system. Patient management includes: prescribing glasses, contact lenses, vision therapy (orthoptics), low vision aids and monitoring the ocular effects of systemic disease, systemic drugs and therapy and referral for consultation to the appropriate practitioner for the treatment of ocular or systemic disease, or eye surgery.<sup>1</sup>

**Governing Statute:** Optometrists Act, Revised Statutes of British Columbia, 1979, Chapter 307; Health Professions Amendment Act, 1989, Chapter 29, Sections 7-8; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 47-50; administered by the Ministry of Health.

**Governing Body:** British Columbia Association of Optometrists. In order to practise optometry in British Columbia, it is necessary to hold a current and valid licence from The Board of Examiners in Optometry.

**Date of Record:** December 1991 and December 1993.

**Source of Data:** The British Columbia Association of Optometrists.

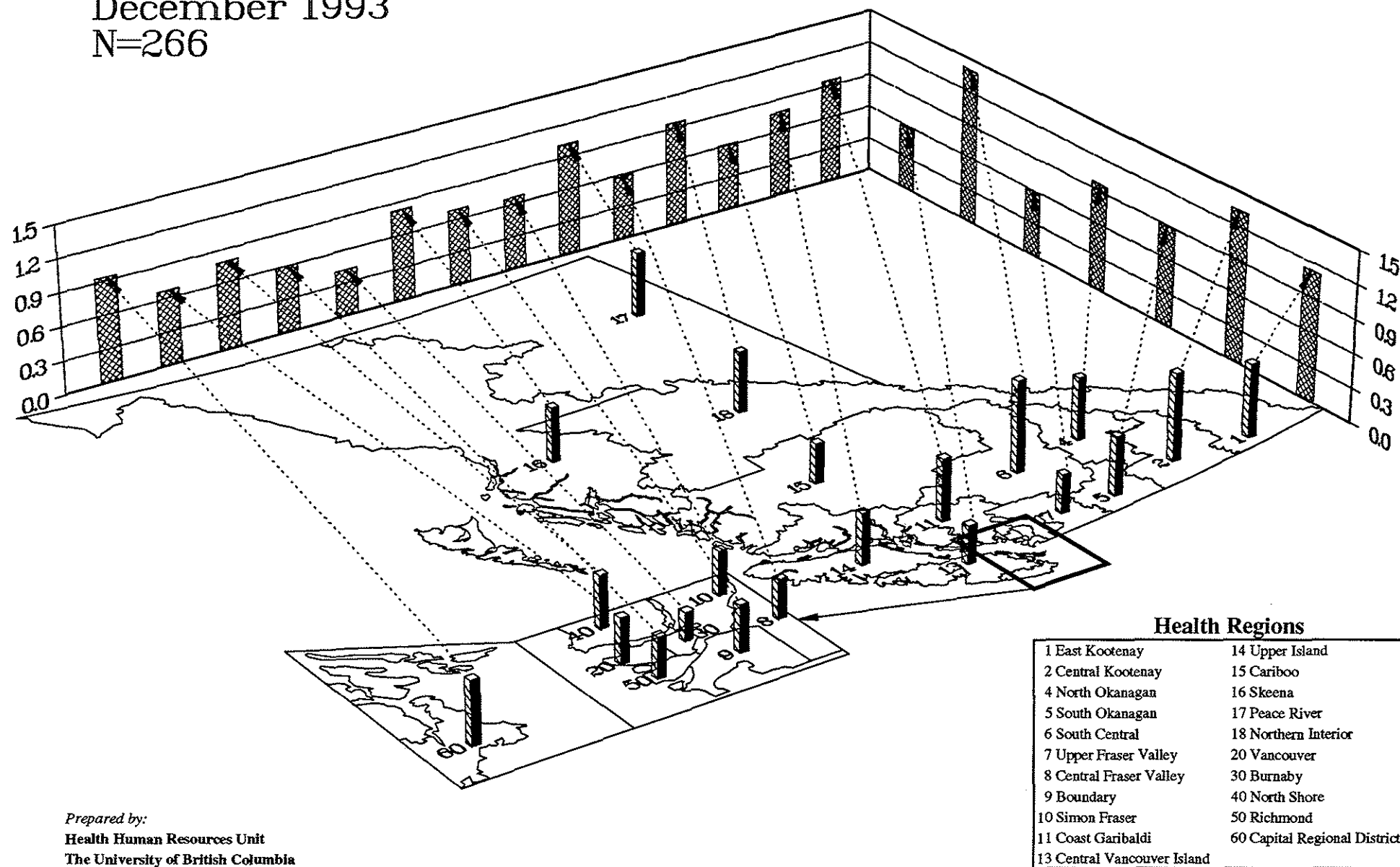
**Preparation and Updating:**

The table, derived from the *Association Roll* supplied by the British Columbia Association of Optometrists, includes licensed optometrists who reported a British Columbia address at the date of record. Data presented in the table are based on employment address for the majority of optometrists. Precise percentages of home vs. employment or other address are not known.

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<sup>1</sup>Adapted from information provided by the British Columbia Association of Optometrists. See also *National Occupational Classification 1992*, Major Group 31, No. 3121, Ottawa: Employment and Immigration Canada.

Optometrists  
per 10,000 Population  
by Health Region  
December 1993  
N=266



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Optometrists in British Columbia**  
**by Health Region**  
**December 1991 and December 1993**

| Health Region                | Number     |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|------------|------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991       | 1993       | 1991                            | 1993        | Number <sup>1</sup>              | Ratio <sup>2</sup> |
| 1 East Kootenay              | 8          | 8          | 1.15                            | 1.13        | *                                | *                  |
| 2 Central Kootenay           | 10         | 10         | 1.39                            | 1.34        | 0.00                             | -1.75              |
| 4 North Okanagan             | 10         | 10         | 1.04                            | 0.96        | 0.00                             | -3.85              |
| 5 South Okanagan             | 12         | 18         | 0.67                            | 0.90        | 22.47                            | 16.00              |
| 6 South Central              | 14         | 16         | 1.29                            | 1.40        | 6.90                             | 4.51               |
| 7 Upper Fraser Valley        | 8          | 10         | 0.51                            | 0.59        | *                                | *                  |
| 8 Central Fraser Valley      | 8          | 11         | 0.45                            | 0.58        | *                                | *                  |
| 9 Boundary                   | 20         | 26         | 0.57                            | 0.69        | 14.02                            | 10.05              |
| 10 Simon Fraser              | 14         | 13         | 0.76                            | 0.66        | -3.64                            | -7.26              |
| 11 Coast Garibaldi           | 3          | 6          | 0.50                            | 0.95        | *                                | *                  |
| 13 Central Vancouver Island  | 13         | 12         | 0.67                            | 0.58        | -3.92                            | -6.96              |
| 14 Upper Island              | 8          | 8          | 0.83                            | 0.78        | *                                | *                  |
| 15 Cariboo                   | 4          | 4          | 0.62                            | 0.61        | *                                | *                  |
| 16 Skeena                    | 6          | 7          | 0.72                            | 0.83        | *                                | *                  |
| 17 Peace River               | 5          | 6          | 0.85                            | 1.02        | *                                | *                  |
| 18 Northern Interior         | 10         | 11         | 0.88                            | 0.95        | 4.88                             | 4.04               |
| 20 Vancouver                 | 38         | 33         | 0.80                            | 0.67        | -6.81                            | -8.20              |
| 30 Burnaby                   | 7          | 7          | 0.44                            | 0.42        | *                                | *                  |
| 40 North Shore               | 10         | 13         | 0.63                            | 0.79        | 14.02                            | 11.82              |
| 50 Richmond                  | 6          | 8          | 0.47                            | 0.60        | *                                | *                  |
| 60 Capital Regional District | 28         | 29         | 0.93                            | 0.93        | 1.77                             | -0.18              |
| <b>TOTAL</b>                 | <b>242</b> | <b>266</b> | <b>0.74</b>                     | <b>0.77</b> | <b>4.84</b>                      | <b>2.12</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

## PHARMACISTS

**Definition:** A pharmacist

...is responsible for the compounding, preparation and dispensing of a prescribed drug, the monitoring of drug therapy and use, the release of the drug to the patient with appropriate consultation, the safe and proper storage of the drug both within and without the pharmacy, and the distribution of specified non-prescription medications.<sup>1</sup>

**Governing Statute:** Pharmacists Act, Revised Statutes of British Columbia, 1979, Chapter 326, Sections 1-48 and 56-66; administered by the Ministry of Health.

**Governing Body:** The College of Pharmacists of British Columbia (CPBC). In order to practise as a pharmacist in British Columbia, it is necessary to be registered by the College.

**Date of Record:** December 1991 and September 1993.

**Source of Data:** The College of Pharmacists of British Columbia (CPBC).

### **Preparation and Updating:**

The tables that follow have been prepared from registration data maintained by the CPBC and include licensed pharmacists who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when pharmacists report employment in pharmacy. In both 1991 and 1993, employment address was available for 100% of pharmacists employed in pharmacy. Home address is used for pharmacists not employed in pharmacy.

### **Definition of Terms:**

#### **1. Pharmacists**

Table 1 reports the number of pharmacists in British Columbia, the number of pharmacists per 10,000 population in the province, and the average annual rates of change in these figures.

#### **2. Age and Sex**

Age and sex information for pharmacists is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

#### **3. Employment Status and Type of Employer**

Employment status for pharmacists is reported based on type of principal employer in Table 3 using the following categories:

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<sup>1</sup> Adapted from information provided by the College of Pharmacists of British Columbia. See also *National Occupational Classification 1992*, Major Group 31, No. 3131, Ottawa: Employment and Immigration Canada.

- (a) Employed in Pharmacy;
  - in a community pharmacy
  - in a hospital pharmacy
  - in other settings
- (b) Not Employed in Pharmacy.

#### 4. Employment Status and Type of Position

In Table 4, pharmacists are displayed by type of position using the following categories:

- (a) Employed in Pharmacy;
  - (i) Dispensing - Manager
    - who have and can confer upon others narcotic signing authority
  - (ii) Dispensing - Non-manager
    - who may have narcotic signing authority but who cannot confer it upon others
- (b) Employed in Pharmacy - other position;
- (c) Not Employed in Pharmacy.

#### 5. Analysis of Change

Table 5 illustrates the sources of change which affected the stock of pharmacists from December 1991 to September 1993.

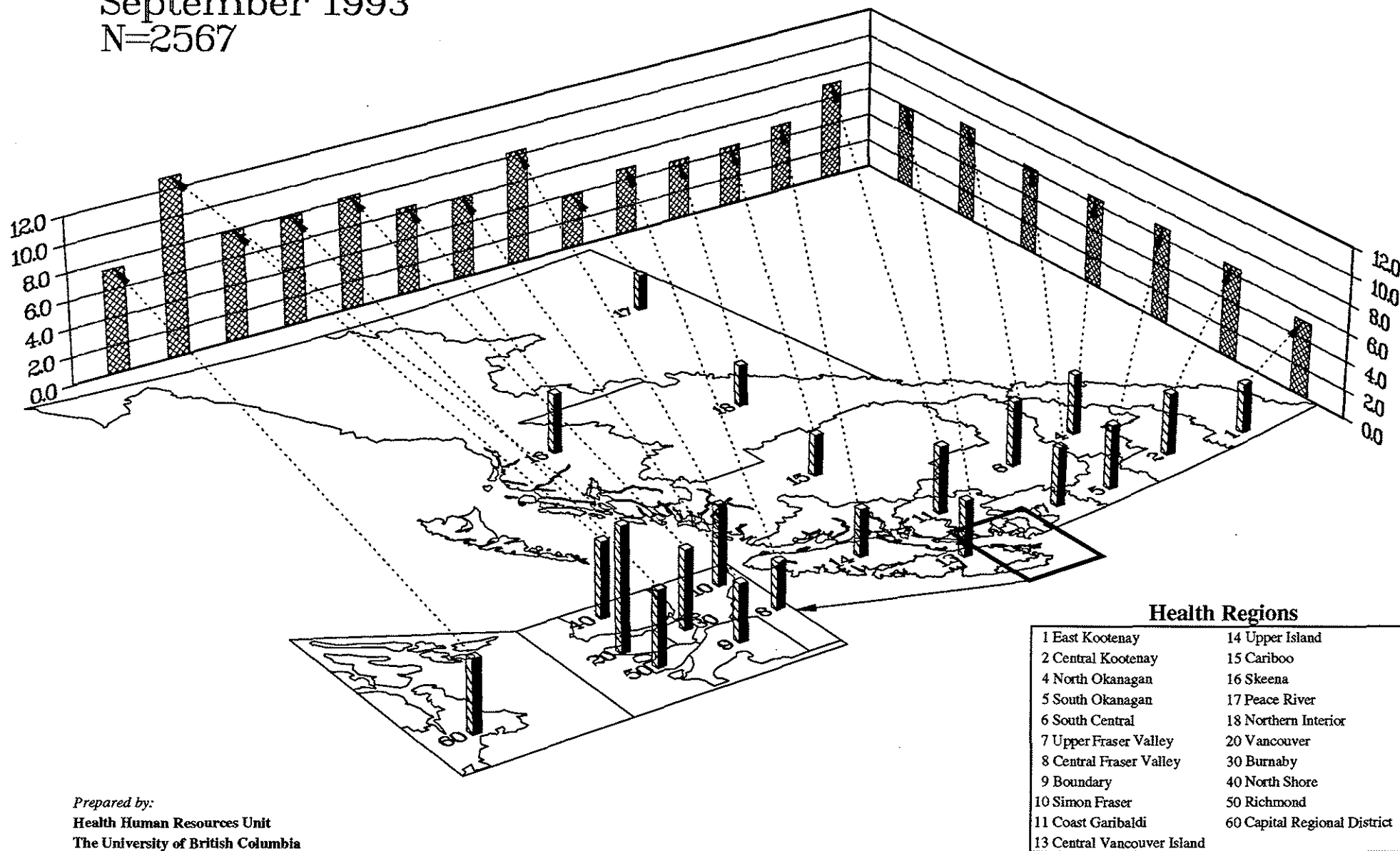
*New registrants* are pharmacists included in the September 1993 stock who registered with the College of Pharmacists of British Columbia *for the first time* subsequent to December 1991. New registrants are recorded according to their place of graduation: i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent pharmacists who were not licensed in British Columbia in December 1991, but were licensed in the province in September 1993, and whose date of initial registration was before December 1991. Also included are licensed pharmacists who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in September 1993.

*Attrition* describes pharmacists who were included in the December 1991 stock but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of licence were not included in the September 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration: it records the flow of pharmacists among different Health Regions. The net migration total is therefore zero.

Pharmacists  
per 10,000 Population  
by Health Region  
September 1993  
N=2567



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Pharmacists in British Columbia**  
**by Health Region**  
**December 1991 and September 1993**

| Health Region                | Number            |              | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|-------------------|--------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991 <sup>1</sup> | 1993         | 1991                            | 1993        | Number <sup>2</sup>              | Ratio <sup>3</sup> |
| 1 East Kootenay              | 34                | 37           | 4.89                            | 5.24        | 4.95                             | 4.08               |
| 2 Central Kootenay           | 45                | 49           | 6.26                            | 6.57        | 4.99                             | 2.89               |
| 4 North Okanagan             | 59                | 67           | 6.11                            | 6.41        | 7.54                             | 2.82               |
| 5 South Okanagan             | 113               | 135          | 6.33                            | 6.78        | 10.70                            | 4.04               |
| 6 South Central              | 78                | 79           | 7.17                            | 6.94        | 0.73                             | -1.85              |
| 7 Upper Fraser Valley        | 95                | 106          | 6.09                            | 6.22        | 6.46                             | 1.24               |
| 8 Central Fraser Valley      | 89                | 93           | 5.05                            | 4.90        | 2.54                             | -1.72              |
| 9 Boundary                   | 199               | 226          | 5.66                            | 5.99        | 7.54                             | 3.27               |
| 10 Simon Fraser              | 160               | 165          | 8.72                            | 8.33        | 1.77                             | -2.58              |
| 11 Coast Garibaldi           | 44                | 45           | 7.37                            | 7.12        | 1.29                             | -1.97              |
| 13 Central Vancouver Island  | 126               | 121          | 6.50                            | 5.85        | -2.29                            | -5.81              |
| 14 Upper Island              | 51                | 51           | 5.27                            | 4.99        | 0.00                             | -3.04              |
| 15 Cariboo                   | 30                | 29           | 4.63                            | 4.41        | -1.92                            | -2.80              |
| 16 Skeena                    | 48                | 54           | 5.78                            | 6.38        | 6.96                             | 5.81               |
| 17 Peace River               | 27                | 23           | 4.62                            | 3.90        | -8.76                            | -9.16              |
| 18 Northern Interior         | 51                | 51           | 4.48                            | 4.41        | 0.00                             | -0.92              |
| 20 Vancouver                 | 629               | 634          | 13.17                           | 12.88       | 0.45                             | -1.26              |
| 30 Burnaby                   | 113               | 136          | 7.11                            | 8.21        | 11.17                            | 8.52               |
| 40 North Shore               | 136               | 130          | 8.59                            | 7.90        | -2.55                            | -4.69              |
| 50 Richmond                  | 87                | 104          | 6.87                            | 7.86        | 10.74                            | 7.97               |
| 60 Capital Regional District | 225               | 232          | 7.51                            | 7.45        | 1.77                             | -0.46              |
| <b>TOTAL</b>                 | <b>2,439</b>      | <b>2,567</b> | <b>7.43</b>                     | <b>7.42</b> | <b>2.97</b>                      | <b>-0.08</b>       |

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number 10,000 population.

**Table 2**  
**Pharmacists in British Columbia**  
**by Health Region by Age and Sex**  
**September 1993**

| Health Region                | < 25      |           | 25-34      |            | 35-44      |            | 45-54      |            | 55-64      |           | 65 +      |           | Subtotal     |              | Unknown   | Total        |
|------------------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|--------------|--------------|-----------|--------------|
|                              | M         | F         | M          | F          | M          | F          | M          | F          | M          | F         | M         | F         | M            | F            |           |              |
| 1 East Kootenay              | 1         | 1         | 4          | 6          | 5          | 3          | 4          | 4          | 4          | 1         | 2         | 0         | 20           | 15           | 2         | 37           |
| 2 Central Kootenay           | 2         | 5         | 4          | 5          | 7          | 10         | 4          | 1          | 5          | 1         | 2         | 1         | 24           | 23           | 2         | 49           |
| 4 North Okanagan             | 1         | 2         | 14         | 9          | 12         | 9          | 10         | 1          | 5          | 0         | 2         | 0         | 44           | 21           | 2         | 67           |
| 5 South Okanagan             | 5         | 1         | 15         | 15         | 19         | 20         | 22         | 9          | 18         | 2         | 6         | 0         | 85           | 47           | 3         | 135          |
| 6 South Central              | 3         | 0         | 10         | 19         | 11         | 6          | 8          | 6          | 7          | 0         | 6         | 0         | 45           | 31           | 3         | 79           |
| 7 Upper Fraser Valley        | 0         | 4         | 18         | 19         | 21         | 12         | 8          | 8          | 11         | 1         | 3         | 1         | 61           | 45           | 0         | 106          |
| 8 Central Fraser Valley      | 3         | 0         | 11         | 19         | 21         | 14         | 6          | 4          | 10         | 1         | 2         | 1         | 53           | 39           | 1         | 93           |
| 9 Boundary                   | 5         | 9         | 34         | 46         | 39         | 30         | 17         | 16         | 17         | 0         | 5         | 3         | 117          | 104          | 5         | 226          |
| 10 Simon Fraser              | 4         | 0         | 23         | 32         | 21         | 34         | 14         | 10         | 12         | 4         | 5         | 1         | 79           | 81           | 5         | 165          |
| 11 Coast Garibaldi           | 0         | 3         | 4          | 5          | 6          | 11         | 5          | 1          | 9          | 0         | 1         | 0         | 25           | 20           | 0         | 45           |
| 13 Central Vancouver Island  | 2         | 6         | 20         | 16         | 20         | 19         | 15         | 8          | 7          | 2         | 4         | 0         | 68           | 51           | 2         | 121          |
| 14 Upper Island              | 1         | 1         | 9          | 12         | 10         | 5          | 3          | 1          | 5          | 1         | 2         | 0         | 30           | 20           | 1         | 51           |
| 15 Cariboo                   | 2         | 0         | 7          | 3          | 6          | 1          | 3          | 2          | 4          | 1         | 0         | 0         | 22           | 7            | 0         | 29           |
| 16 Skeena                    | 1         | 1         | 16         | 10         | 5          | 10         | 8          | 0          | 2          | 1         | 0         | 0         | 32           | 22           | 0         | 54           |
| 17 Peace River               | 0         | 0         | 5          | 2          | 5          | 3          | 4          | 2          | 2          | 0         | 0         | 0         | 16           | 7            | 0         | 23           |
| 18 Northern Interior         | 2         | 4         | 8          | 11         | 3          | 5          | 8          | 1          | 4          | 1         | 3         | 0         | 28           | 22           | 1         | 51           |
| 20 Vancouver                 | 11        | 25        | 79         | 167        | 101        | 114        | 38         | 44         | 16         | 12        | 16        | 3         | 261          | 365          | 8         | 634          |
| 30 Burnaby                   | 4         | 4         | 19         | 35         | 14         | 22         | 12         | 5          | 10         | 1         | 5         | 1         | 64           | 68           | 4         | 136          |
| 40 North Shore               | 1         | 1         | 12         | 29         | 20         | 19         | 15         | 10         | 15         | 3         | 0         | 1         | 63           | 63           | 4         | 130          |
| 50 Richmond                  | 2         | 5         | 9          | 19         | 19         | 25         | 8          | 5          | 7          | 3         | 0         | 0         | 45           | 57           | 2         | 104          |
| 60 Capital Regional District | 1         | 4         | 29         | 28         | 48         | 36         | 23         | 22         | 21         | 6         | 8         | 1         | 130          | 97           | 5         | 232          |
| <b>TOTAL</b>                 | <b>51</b> | <b>76</b> | <b>350</b> | <b>507</b> | <b>413</b> | <b>408</b> | <b>235</b> | <b>160</b> | <b>191</b> | <b>41</b> | <b>72</b> | <b>13</b> | <b>1,312</b> | <b>1,205</b> | <b>50</b> | <b>2,567</b> |

**Table 3**  
**Pharmacists in British Columbia**  
**by Health Region by Employment Status and Type of Employer**  
**September 1993**

| Health Region                | Employed in Pharmacy  |                      |           |              | Not Employed<br>in Pharmacy | Total        |
|------------------------------|-----------------------|----------------------|-----------|--------------|-----------------------------|--------------|
|                              | Community<br>Pharmacy | Hospital<br>Pharmacy | Other     | Subtotal     |                             |              |
| 1 East Kootenay              | 26                    | 6                    | 0         | 32           | 5                           | 37           |
| 2 Central Kootenay           | 42                    | 6                    | 0         | 48           | 1                           | 49           |
| 4 North Okanagan             | 51                    | 11                   | 0         | 62           | 5                           | 67           |
| 5 South Okanagan             | 100                   | 22                   | 0         | 122          | 13                          | 135          |
| 6 South Central              | 57                    | 17                   | 0         | 74           | 5                           | 79           |
| 7 Upper Fraser Valley        | 79                    | 13                   | 2         | 94           | 12                          | 106          |
| 8 Central Fraser Valley      | 65                    | 12                   | 7         | 84           | 9                           | 93           |
| 9 Boundary                   | 171                   | 28                   | 1         | 200          | 26                          | 226          |
| 10 Simon Fraser              | 86                    | 56                   | 4         | 146          | 19                          | 165          |
| 11 Coast Garibaldi           | 38                    | 3                    | 0         | 41           | 4                           | 45           |
| 13 Central Vancouver Island  | 101                   | 13                   | 1         | 115          | 6                           | 121          |
| 14 Upper Island              | 44                    | 7                    | 0         | 51           | 0                           | 51           |
| 15 Cariboo                   | 23                    | 5                    | 0         | 28           | 1                           | 29           |
| 16 Skeena                    | 45                    | 7                    | 0         | 52           | 2                           | 54           |
| 17 Peace River               | 17                    | 5                    | 0         | 22           | 1                           | 23           |
| 18 Northern Interior         | 37                    | 9                    | 0         | 46           | 5                           | 51           |
| 20 Vancouver                 | 308                   | 205                  | 31        | 544          | 90                          | 634          |
| 30 Burnaby                   | 93                    | 17                   | 5         | 115          | 21                          | 136          |
| 40 North Shore               | 82                    | 20                   | 9         | 111          | 19                          | 130          |
| 50 Richmond                  | 61                    | 7                    | 6         | 74           | 30                          | 104          |
| 60 Capital Regional District | 159                   | 48                   | 2         | 209          | 23                          | 232          |
| <b>TOTAL</b>                 | <b>1,685</b>          | <b>517</b>           | <b>68</b> | <b>2,270</b> | <b>297</b>                  | <b>2,567</b> |

**Table 4**  
**Pharmacists in British Columbia**  
**by Health Region by Employment Status and Type of Position**  
**September 1993**

| Health Region                | Employed in Pharmacy  |             |       |          | Not Employed<br>in Pharmacy | Total |
|------------------------------|-----------------------|-------------|-------|----------|-----------------------------|-------|
|                              | Dispensing Pharmacist |             | Other | Subtotal |                             |       |
|                              | Manager               | Non-Manager |       |          |                             |       |
| 1 East Kootenay              | 15                    | 17          | 0     | 32       | 5                           | 37    |
| 2 Central Kootenay           | 19                    | 29          | 0     | 48       | 1                           | 49    |
| 4 North Okanagan             | 20                    | 42          | 0     | 62       | 5                           | 67    |
| 5 South Okanagan             | 39                    | 83          | 0     | 122      | 13                          | 135   |
| 6 South Central              | 24                    | 50          | 0     | 74       | 5                           | 79    |
| 7 Upper Fraser Valley        | 30                    | 62          | 2     | 94       | 12                          | 106   |
| 8 Central Fraser Valley      | 24                    | 53          | 7     | 84       | 9                           | 93    |
| 9 Boundary                   | 63                    | 136         | 1     | 200      | 26                          | 226   |
| 10 Simon Fraser              | 35                    | 107         | 4     | 146      | 19                          | 165   |
| 11 Coast Garibaldi           | 18                    | 23          | 0     | 41       | 4                           | 45    |
| 13 Central Vancouver Island  | 43                    | 71          | 1     | 115      | 6                           | 121   |
| 14 Upper Island              | 18                    | 33          | 0     | 51       | 0                           | 51    |
| 15 Cariboo                   | 15                    | 13          | 0     | 28       | 1                           | 29    |
| 16 Skeena                    | 20                    | 32          | 0     | 52       | 2                           | 54    |
| 17 Peace River               | 12                    | 10          | 0     | 22       | 1                           | 23    |
| 18 Northern Interior         | 19                    | 27          | 0     | 46       | 5                           | 51    |
| 20 Vancouver                 | 136                   | 377         | 31    | 544      | 90                          | 634   |
| 30 Burnaby                   | 32                    | 78          | 5     | 115      | 21                          | 136   |
| 40 North Shore               | 28                    | 74          | 9     | 111      | 19                          | 130   |
| 50 Richmond                  | 20                    | 48          | 6     | 74       | 30                          | 104   |
| 60 Capital Regional District | 74                    | 133         | 2     | 209      | 23                          | 232   |
| TOTAL                        | 704                   | 1,498       | 68    | 2,270    | 297                         | 2,567 |

**Table 5**  
**Analysis of Change in the Number of Pharmacists in British Columbia**  
**by Health Region**  
**December 1991 to September 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |          |            | Reactivation <sup>3</sup> | Attrition* | Net Intra-provincial Migration | September 1993 |
|------------------------------|----------------------------|---|--------------|---------------|----------|------------|---------------------------|------------|--------------------------------|----------------|
|                              |                            | B.C.  | Other Canada | Other Country | Unknown  | Subtotal   |                           |            |                                |                |
| 1 East Kootenay              | 34                         | 4   | 4            | 0             | 0        | 8          | 0                         | 2          | -3                             | 37             |
| 2 Central Kootenay           | 45                         | 9   | 0            | 0             | 1        | 10         | 0                         | 3          | -3                             | 49             |
| 4 North Okanagan             | 59                         | 7   | 0            | 0             | 0        | 7          | 1                         | 3          | 3                              | 67             |
| 5 South Okanagan             | 113                        | 10  | 6            | 0             | 0        | 16         | 1                         | 5          | 10                             | 135            |
| 6 South Central              | 78                         | 6   | 0            | 0             | 1        | 7          | 1                         | 5          | -2                             | 79             |
| 7 Upper Fraser Valley        | 95                         | 7   | 2            | 1             | 0        | 10         | 2                         | 6          | 5                              | 106            |
| 8 Central Fraser Valley      | 89                         | 4   | 3            | 0             | 1        | 8          | 0                         | 2          | -2                             | 93             |
| 9 Boundary                   | 199                        | 20  | 5            | 1             | 0        | 26         | 4                         | 18         | 15                             | 226            |
| 10 Simon Fraser              | 160                        | 7   | 2            | 3             | 0        | 12         | 2                         | 13         | 4                              | 165            |
| 11 Coast Garibaldi           | 44                         | 4   | 0            | 0             | 0        | 4          | 0                         | 3          | 0                              | 45             |
| 13 Central Vancouver Island  | 126                        | 9   | 2            | 0             | 0        | 11         | 2                         | 13         | -5                             | 121            |
| 14 Upper Island              | 51                         | 4   | 3            | 0             | 0        | 7          | 0                         | 4          | -3                             | 51             |
| 15 Cariboo                   | 30                         | 4   | 0            | 0             | 0        | 4          | 1                         | 0          | -6                             | 29             |
| 16 Skeena                    | 48                         | 6   | 2            | 2             | 1        | 11         | 1                         | 1          | -5                             | 54             |
| 17 Peace River               | 27                         | 3   | 0            | 0             | 0        | 3          | 0                         | 1          | -6                             | 23             |
| 18 Northern Interior         | 51                         | 7   | 3            | 0             | 0        | 10         | 0                         | 5          | -5                             | 51             |
| 20 Vancouver                 | 629                        | 47  | 7            | 9             | 0        | 63         | 8                         | 47         | -19                            | 634            |
| 30 Burnaby                   | 113                        | 14  | 0            | 1             | 0        | 15         | 5                         | 9          | 12                             | 136            |
| 40 North Shore               | 136                        | 3   | 2            | 1             | 0        | 6          | 4                         | 14         | -2                             | 130            |
| 50 Richmond                  | 87                         | 8   | 0            | 2             | 0        | 10         | 1                         | 7          | 13                             | 104            |
| 60 Capital Regional District | 225                        | 9   | 3            | 3             | 0        | 15         | 8                         | 15         | -1                             | 232            |
| <b>TOTAL</b>                 | <b>2,439</b>               | <b>192</b>  | <b>44</b>    | <b>23</b>     | <b>4</b> | <b>263</b> | <b>41</b>                 | <b>176</b> | <b>0</b>                       | <b>2,567</b>   |

<sup>1</sup> Pharmacists who reported B.C. addresses and were registered in September 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 because of an error in the method of calculation used for ROLLCALL 91.

<sup>3</sup> Pharmacists who reported B.C. addresses and were registered in September 1993 but not in December 1991 and who were registered for the first time before December 1991.

\* Pharmacists who reported B.C. addresses and were registered in December 1991 but not in September 1993



## PHYSICIANS

**Definition:** A physician in general practice

...diagnoses and treats the diseases, physiological disorders, and injuries of patients.

Physicians in general practice perform some or all of the following duties:

- (a) examine patients, order laboratory tests, X-rays, and other diagnostic procedures and consult with other medical practitioners to evaluate patients' health;
- (b) prescribe and administer medications and treatments;
- (c) perform and assist in routine surgery;
- (d) inoculate and vaccinate patients;
- (e) deliver babies and provide pre-natal and post-natal care;
- (f) advise patients on health care;
- (g) report births, deaths, and contagious diseases to governmental authorities.<sup>1</sup>

Specialist physicians include those who practice in clinical medicine, laboratory medicine, or surgery. Specialists in clinical medicine diagnose and treat diseases and physiological or psychiatric disorders and act as consultants to other physicians. Specialists in laboratory medicine study the nature, cause, and development of diseases in humans. Specialists in surgery perform and supervise surgical procedures.<sup>2</sup>

**Governing Statute:** Medical Practitioners Act, Revised Statutes of British Columbia, 1979, Chapter 254; Health Statutes Amendment Act, 1990, Chapter 51, Sections 20-24; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 24-28; administered by the Ministry of Health.

**Governing Body:** The College of Physicians and Surgeons of British Columbia (CPSBC). CPSBC registration is a requirement of medical practice in British Columbia.

**Date of Record:** January 1992 and September 1993.

**Sources of Data:** The College of Physicians and Surgeons of British Columbia, Medical Services Commission of British Columbia (MSC), and teaching hospitals and institutions in British Columbia.

### Preparation and Updating:

The tables, derived from the CPSBC physician database, include physicians who reported a British Columbia address at the date of record. Data presented in the tables are based on employment address for the majority of physicians. Precise percentages of home vs. employment or other address are not known. Due to the unusually short period between the dates of record for physician data in comparison

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<sup>1</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3112, Ottawa; Employment and Immigration Canada.

<sup>2</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3111, Ottawa; Employment and Immigration Canada.

to that for population estimates, the average annual rates of change in the number of physicians per 10,000 population, as reported in Tables 1c and 3c, are slightly underestimated compared to rates estimated when both the numerator and denominator cover the same period.

Osteopaths diagnose disorders and injuries of the musculo-skeletal, circulatory, and nervous systems and treat patients with manipulative therapy, medications, or surgery.<sup>3</sup> Osteopaths are regulated under the Medical Practitioners Act and must be registered by the College of Physicians and Surgeons of British Columbia in order to practise in the province. There is currently only one directory active osteopath in the province; he is not included in any of the tables that follow.

## Definition of Terms:

### 1. Registration Status

Tables 1a, 1b, and 1c include those physicians who, at the date of record, were registered by the CPSBC on the full, special, or temporary registers. Physicians on these registers are designated Directory Active and licensed to practise medicine in British Columbia. The temporary register includes those who are in postgraduate training or who have a temporary licence to practise. In the tables that follow, Directory Active physicians are reported as either:

- (a) *Non-Postgraduate* - i.e. Directory Active physicians who, according to the records of the CPSBC, are not involved in postgraduate work, or;
- (b) *Postgraduate* - i.e. Directory Active Physicians who, according to the records of the CPSBC, are involved in postgraduate work. They may be fully registered or on the temporary (educational) register.

### 2. Age and Sex

Table 2 reports age and sex information on non-postgraduate physicians. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### 3. Specialty Group

Those physicians who are not in postgraduate training have been assigned to a specialty or specialty group according to the following criteria:

- (a) The MSC specialty code, based on billings volume and developed to assess practice profiles, is used unless:
  - (i) the physician has certification in *Family Medicine* from the College of Family Physicians of Canada, in which case the *specialty* is coded as *Family Practice*, or
  - (ii) the physician has no MSC specialty, in which case the most recent Royal College of Physicians and Surgeons of Canada (RCPSC) specialty will be used.

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<sup>3</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3123, Ottawa; Employment and Immigration Canada.



- (b) The MSC specialty code used may not necessarily reflect the actual MSC specialty field at the date of record. For January 1992 the MSC specialty codes from December 1991 were used, while for September 1993, the MSC specialty codes from March 1993 were used.

Tables 3a, 3b, and 3c group the physicians into broad specialty groups as follows:

- (a) *General Practice* includes:

Physicians with RCPSC certification in *Family Medicine* and the MSC specialty code:

00 General Practice

- (b) *Clinical Specialties* include all of the following:

MSC specialty codes:

01 Dermatology;  
02 Neurology;  
03 Psychiatry;  
04 Neuropsychiatry;  
14 Paediatrics;  
15 Internal Medicine;  
16 Radiology;  
18 Anaesthesia;  
20 Physical Medicine;  
21 Community Medicine;  
33 Nuclear Medicine.

RCPSC specialties:

Anaesthesia;  
Cardiology;  
Clinical Immunology and Allergy;  
Community Medicine;  
Dermatology;  
Dermatology and Syphilology;<sup>4</sup>  
Diagnostic Radiology;  
Emergency Medicine;  
Endocrinology and Metabolism;  
Gastroenterology;  
Geriatric Medicine;  
Haematology;  
Infectious Disease;  
Internal Medicine;  
Internal Medicine, TB;<sup>4</sup>  
Medical Oncology;  
Nephrology;  
Neurology;  
Nuclear Medicine;  
Paediatrics;  
Paediatric Cardiology;<sup>4</sup>  
Physical Medicine and Rehabilitation;  
Psychiatry;  
Public Health;<sup>5</sup>  
Radiation Oncology;  
Respiratory Medicine;  
Rheumatology;  
Therapeutic Radiology.<sup>4</sup>

<sup>4</sup> Program no longer offered by the RCPSC.

<sup>5</sup> Program no longer offered by the RCPSC under this designation.

(c) *Laboratory Medicine Specialties* include all of the following:

MSC specialty codes:

- 17 Pathology and Bacteriology;
- 29 Medical Microbiology.

RCPSC specialties:

- Anatomical Pathology;
- Bacteriology;<sup>4</sup>
- General Pathology;
- Haematological Pathology;
- Medical Biochemistry;
- Medical Microbiology;
- Neuropathology;
- Pathology.<sup>4</sup>

(d) *Surgical Specialties* include all of the following:

MSC specialty codes:

- 05 Obstetrics and Gynaecology;
- 06 Ophthalmology;
- 07 Otolaryngology;
- 08 General Surgery;
- 09 Neurosurgery;
- 10 Orthopaedic Surgery;
- 11 Plastic Surgery;
- 12 Thoracic and Cardiovascular Surgery;
- 13 Urology.

RCPSC specialties:

- Obstetrics and Gynaecology;
- Ophthalmology;
- Otolaryngology;
- General Surgery;
- Neurosurgery;
- Orthopaedic Surgery;
- Plastic Surgery;
- Thoracic and Cardiovascular Surgery;
- Urology;
- Paediatric General Surgery;
- Thoracic Surgery;
- Vascular Surgery.

#### 4. Specialty Group and Sex

Table 4 presents the non-postgraduate physician population by specialty group and sex.

#### 5. MSC Specialty

Tables 5a and 5b disaggregate physicians into specific MSC specialties as follows:

- (a) General Practice;
- (b) Family Practice;
- (c) Anaesthesia;
- (d) Community Medicine;<sup>6</sup>
- (e) Dermatology;<sup>7</sup>
- (f) Emergency Medicine;<sup>8</sup>
- (g) General Surgery;<sup>9</sup>

<sup>6</sup> Includes the old specialty designation Public Health and the RCPSC specialty Occupational Medicine.

<sup>7</sup> Includes the old specialty designation Dermatology and Syphilology.

<sup>8</sup> Comprises the RCPSC specialty Emergency Medicine.

<sup>9</sup> Includes Paediatric General Surgery.

- (h) Internal Medicine;<sup>10</sup>
- (i) Medical Microbiology;
- (j) Neurology;
- (k) Neuropsychiatry;
- (l) Neurosurgery;
- (m) Nuclear Medicine;
- (n) Obstetrics and Gynaecology;
- (o) Ophthalmology;
- (p) Orthopaedic Surgery;
- (q) Otolaryngology;
- (r) Paediatrics;<sup>11</sup>
- (s) Pathology;<sup>12</sup>
- (t) Physical Medicine;
- (u) Plastic Surgery;
- (v) Psychiatry;
- (w) Radiology;<sup>13</sup>
- (x) Thoracic Surgery;<sup>14</sup>
- (y) Urology;
- (z) Vascular Surgery.

## 6. Analysis of Change

Table 6 illustrates the sources of change which affected the stock of non-postgraduate physicians from January 1992 to September 1993.

*New registrants* include physicians who registered for the first time with the CPSBC subsequent to January 1992 and held Directory Active non-postgraduate status in September 1993. They are recorded according to their place of graduation i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* include physicians who did not have Directory Active non-postgraduate status in January 1992 but held Directory Active non-postgraduate in September 1993, and whose initial registration with the CPSBC was before January 1992. Also included are physicians registered with the CPSBC who reported out-of-province addresses in January 1992, but reported a British Columbia address and held Directory Active non-postgraduate status in British Columbia in September 1993.

*Attrition* describes non-postgraduate physicians who were included in the January 1992 physician stock but who, because of death, retirement, non-renewal of licence, change to post-graduate status, or out-of-province relocation, were not included in the September 1993 physician stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of physicians among different Health Regions. The net migration total is therefore zero.

<sup>10</sup> Includes Cardiology, Clinical Immunology, Gastroenterology, Haematology, Respiratory Medicine, Geriatric Medicine, Rheumatology, and Nephrology.

<sup>11</sup> Includes Paediatric Cardiology.

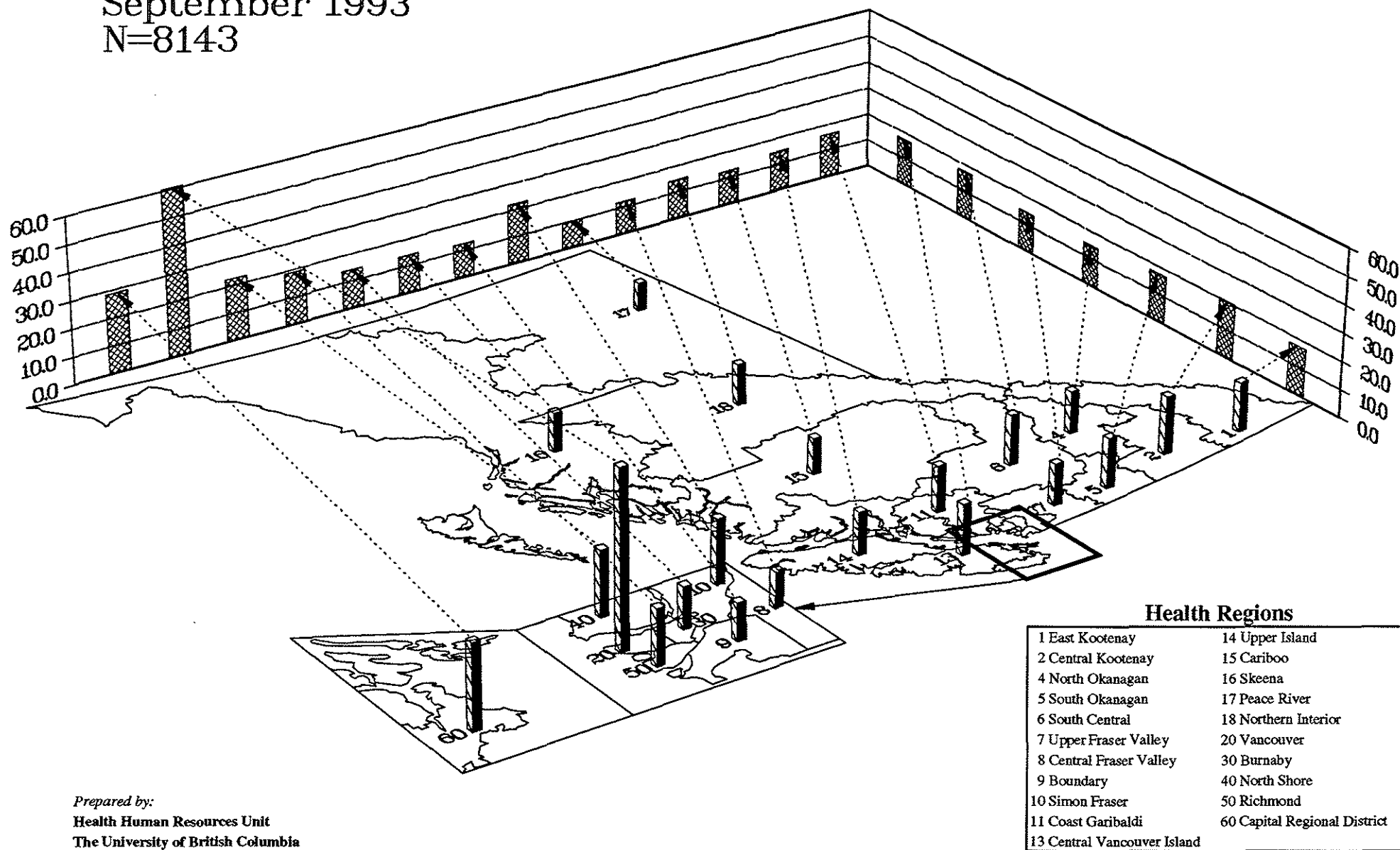
<sup>12</sup> Includes Anatomical Pathology, General Pathology, Haematological Pathology, Medical Biochemistry, and Neuropathology.

<sup>13</sup> Includes Diagnostic Radiology, Therapeutic Radiology, and Radiation Oncology.

<sup>14</sup> Includes Cardiovascular Surgery.

# Directory Active Physicians per 10,000 Population by Health Region September 1993 N=8143

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Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Directory Active Physicians in British Columbia**  
**by Health Region by Registration Status**  
**January 1992 and September 1993**

| Health Region                | Non-Postgraduate |              | Postgraduate |            | Total        |              |
|------------------------------|------------------|--------------|--------------|------------|--------------|--------------|
|                              | 1992             | 1993         | 1992         | 1993       | 1992         | 1993         |
| 1 East Kootenay              | 108              | 121          | 2            | 2          | 110          | 123          |
| 2 Central Kootenay           | 135              | 151          | 0            | 0          | 135          | 151          |
| 4 North Okanagan             | 136              | 154          | 0            | 1          | 136          | 155          |
| 5 South Okanagan             | 322              | 344          | 1            | 1          | 323          | 345          |
| 6 South Central              | 183              | 199          | 1            | 0          | 184          | 199          |
| 7 Upper Fraser Valley        | 224              | 239          | 3            | 6          | 227          | 245          |
| 8 Central Fraser Valley      | 209              | 230          | 1            | 1          | 210          | 231          |
| 9 Boundary                   | 423              | 475          | 2            | 2          | 425          | 477          |
| 10 Simon Fraser              | 385              | 410          | 34           | 30         | 419          | 440          |
| 11 Coast Garibaldi           | 80               | 102          | 1            | 0          | 81           | 102          |
| 13 Central Vancouver Island  | 324              | 360          | 2            | 0          | 326          | 360          |
| 14 Upper Island              | 133              | 151          | 1            | 0          | 134          | 151          |
| 15 Cariboo                   | 81               | 84           | 2            | 0          | 83           | 84           |
| 16 Skeena                    | 110              | 116          | 1            | 2          | 111          | 118          |
| 17 Peace River               | 55               | 57           | 0            | 2          | 55           | 59           |
| 18 Northern Interior         | 151              | 169          | 0            | 0          | 151          | 169          |
| 20 Vancouver                 | 2,272            | 2,402        | 575          | 574        | 2,847        | 2,976        |
| 30 Burnaby                   | 210              | 234          | 0            | 1          | 210          | 235          |
| 40 North Shore               | 341              | 357          | 16           | 14         | 357          | 371          |
| 50 Richmond                  | 228              | 252          | 1            | 1          | 229          | 253          |
| 60 Capital Regional District | 809              | 870          | 34           | 29         | 843          | 899          |
| <b>TOTAL</b>                 | <b>6,919</b>     | <b>7,477</b> | <b>677</b>   | <b>666</b> | <b>7,596</b> | <b>8,143</b> |

**Table 1b**  
**Directory Active Physicians in British Columbia**  
**per 10,000 Population by Health Region by Registration Status**  
**January 1992 and September 1993**

| Health Region                | Non-Postgraduate |              | Postgraduate |             | Total        |              |
|------------------------------|------------------|--------------|--------------|-------------|--------------|--------------|
|                              | 1992             | 1993         | 1992         | 1993        | 1992         | 1993         |
| 1 East Kootenay              | 15.53            | 17.15        | 0.29         | 0.28        | 15.82        | 17.43        |
| 2 Central Kootenay           | 18.77            | 20.26        | 0.00         | 0.00        | 18.77        | 20.26        |
| 4 North Okanagan             | 14.08            | 14.74        | 0.00         | 0.10        | 14.08        | 14.84        |
| 5 South Okanagan             | 18.03            | 17.28        | 0.06         | 0.05        | 18.09        | 17.33        |
| 6 South Central              | 16.81            | 17.47        | 0.09         | 0.00        | 16.91        | 17.47        |
| 7 Upper Fraser Valley        | 14.36            | 14.03        | 0.19         | 0.35        | 14.55        | 14.38        |
| 8 Central Fraser Valley      | 11.85            | 12.11        | 0.06         | 0.05        | 11.91        | 12.16        |
| 9 Boundary                   | 12.04            | 12.60        | 0.06         | 0.05        | 12.10        | 12.65        |
| 10 Simon Fraser              | 20.98            | 20.69        | 1.85         | 1.51        | 22.83        | 22.21        |
| 11 Coast Garibaldi           | 13.41            | 16.14        | 0.17         | 0.00        | 13.58        | 16.14        |
| 13 Central Vancouver Island  | 16.70            | 17.40        | 0.10         | 0.00        | 16.81        | 17.40        |
| 14 Upper Island              | 13.74            | 14.78        | 0.10         | 0.00        | 13.85        | 14.78        |
| 15 Cariboo                   | 12.50            | 12.76        | 0.31         | 0.00        | 12.81        | 12.76        |
| 16 Skeena                    | 13.25            | 13.71        | 0.12         | 0.24        | 13.37        | 13.94        |
| 17 Peace River               | 9.40             | 9.67         | 0.00         | 0.34        | 9.40         | 10.01        |
| 18 Northern Interior         | 13.26            | 14.60        | 0.00         | 0.00        | 13.26        | 14.60        |
| 20 Vancouver                 | 47.56            | 48.79        | 12.04        | 11.66       | 59.59        | 60.45        |
| 30 Burnaby                   | 13.22            | 14.12        | 0.00         | 0.06        | 13.22        | 14.18        |
| 40 North Shore               | 21.53            | 21.68        | 1.01         | 0.85        | 22.54        | 22.53        |
| 50 Richmond                  | 18.01            | 19.04        | 0.08         | 0.08        | 18.09        | 19.12        |
| 60 Capital Regional District | 26.99            | 27.92        | 1.13         | 0.93        | 28.13        | 28.85        |
| <b>TOTAL</b>                 | <b>21.07</b>     | <b>21.60</b> | <b>2.06</b>  | <b>1.92</b> | <b>23.13</b> | <b>23.52</b> |

**Table 1c**  
**Average Annual Rate of Change: Directory Active Physicians in British Columbia**  
**by Health Region by Registration Status**  
**January 1992 to September 1993**

| Health Region                | Non-Postgraduate    |                    | Postgraduate        |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | 7.06                | 6.13               | *                   | *                  | 6.93                | 6.00               |
| 2 Central Kootenay           | 6.95                | 4.71               | *                   | *                  | 6.95                | 4.71               |
| 4 North Okanagan             | 7.74                | 2.79               | *                   | *                  | 8.16                | 3.19               |
| 5 South Okanagan             | 4.05                | -2.52              | *                   | *                  | 4.03                | -2.53              |
| 6 South Central              | 5.16                | 2.33               | *                   | *                  | 4.81                | 2.00               |
| 7 Upper Fraser Valley        | 3.97                | -1.38              | *                   | *                  | 4.68                | -0.70              |
| 8 Central Fraser Valley      | 5.91                | 1.30               | *                   | *                  | 5.89                | 1.27               |
| 9 Boundary                   | 7.20                | 2.74               | *                   | *                  | 7.17                | 2.71               |
| 10 Simon Fraser              | 3.85                | -0.82              | -7.23               | -11.40             | 2.98                | -1.65              |
| 11 Coast Garibaldi           | 15.69               | 11.78              | *                   | *                  | 14.83               | 10.95              |
| 13 Central Vancouver Island  | 6.53                | 2.50               | *                   | *                  | 6.13                | 2.12               |
| 14 Upper Island              | 7.91                | 4.47               | *                   | *                  | 7.43                | 4.00               |
| 15 Cariboo                   | 2.21                | 1.24               | *                   | *                  | 0.72                | -0.23              |
| 16 Skeena                    | 3.24                | 2.07               | *                   | *                  | 3.74                | 2.57               |
| 17 Peace River               | 2.17                | 1.69               | *                   | *                  | 4.30                | 3.81               |
| 18 Northern Interior         | 6.99                | 5.96               | *                   | *                  | 6.99                | 5.96               |
| 20 Vancouver                 | 3.39                | 1.55               | -0.10               | -1.89              | 2.69                | 0.86               |
| 30 Burnaby                   | 6.71                | 4.04               | *                   | *                  | 6.98                | 4.30               |
| 40 North Shore               | 2.79                | 0.41               | -7.70               | -9.83              | 2.33                | -0.03              |
| 50 Richmond                  | 6.19                | 3.41               | *                   | *                  | 6.16                | 3.38               |
| 60 Capital Regional District | 4.46                | 2.06               | -9.10               | -11.19             | 3.93                | 1.55               |
| <b>TOTAL</b>                 | <b>4.76</b>         | <b>1.51</b>        | <b>-0.98</b>        | <b>-4.05</b>       | <b>4.26</b>         | <b>1.02</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Non-Postgraduate Physicians in British Columbia**  
**by Health Region by Age and Sex**  
**September 1993**

| Health Region                | < 25     |          | 25-34      |            | 35-44        |            | 45-54        |            | 55-64        |            | 65 +       |           | Subtotal     |              | Unknown   | Total        |
|------------------------------|----------|----------|------------|------------|--------------|------------|--------------|------------|--------------|------------|------------|-----------|--------------|--------------|-----------|--------------|
|                              | M        | F        | M          | F          | M            | F          | M            | F          | M            | F          | M          | F         | M            | F            |           |              |
| 1 East Kootenay              | 0        | 1        | 19         | 11         | 34           | 4          | 26           | 3          | 15           | 0          | 6          | 1         | 100          | 20           | 1         | 121          |
| 2 Central Kootenay           | 0        | 0        | 17         | 13         | 41           | 14         | 24           | 7          | 22           | 1          | 11         | 1         | 115          | 36           | 0         | 151          |
| 4 North Okanagan             | 0        | 0        | 14         | 9          | 37           | 9          | 41           | 5          | 27           | 0          | 11         | 1         | 130          | 24           | 0         | 154          |
| 5 South Okanagan             | 0        | 0        | 29         | 10         | 101          | 28         | 85           | 6          | 49           | 3          | 29         | 2         | 293          | 49           | 2         | 344          |
| 6 South Central              | 0        | 0        | 20         | 10         | 52           | 14         | 50           | 7          | 31           | 4          | 10         | 1         | 163          | 36           | 0         | 199          |
| 7 Upper Fraser Valley        | 0        | 0        | 29         | 8          | 59           | 11         | 60           | 9          | 39           | 3          | 18         | 2         | 205          | 33           | 1         | 239          |
| 8 Central Fraser Valley      | 0        | 0        | 22         | 14         | 63           | 21         | 67           | 8          | 20           | 0          | 14         | 1         | 186          | 44           | 0         | 230          |
| 9 Boundary                   | 0        | 0        | 60         | 38         | 96           | 59         | 98           | 27         | 60           | 4          | 27         | 6         | 341          | 134          | 0         | 475          |
| 10 Simon Fraser              | 0        | 1        | 39         | 22         | 95           | 35         | 100          | 19         | 57           | 7          | 32         | 2         | 323          | 86           | 1         | 410          |
| 11 Coast Garibaldi           | 0        | 0        | 8          | 9          | 25           | 11         | 21           | 2          | 15           | 3          | 8          | 0         | 77           | 25           | 0         | 102          |
| 13 Central Vancouver Island  | 0        | 0        | 29         | 13         | 111          | 27         | 75           | 13         | 58           | 2          | 30         | 1         | 303          | 56           | 1         | 360          |
| 14 Upper Island              | 0        | 0        | 21         | 8          | 40           | 7          | 40           | 7          | 19           | 1          | 8          | 0         | 128          | 23           | 0         | 151          |
| 15 Cariboo                   | 0        | 0        | 19         | 7          | 28           | 6          | 11           | 1          | 9            | 0          | 3          | 0         | 70           | 14           | 0         | 84           |
| 16 Skeena                    | 0        | 0        | 15         | 8          | 30           | 9          | 29           | 4          | 12           | 3          | 6          | 0         | 92           | 24           | 0         | 116          |
| 17 Peace River               | 0        | 0        | 11         | 6          | 21           | 4          | 6            | 0          | 8            | 0          | 1          | 0         | 47           | 10           | 0         | 57           |
| 18 Northern Interior         | 0        | 0        | 23         | 8          | 53           | 13         | 43           | 2          | 16           | 2          | 6          | 0         | 141          | 25           | 3         | 169          |
| 20 Vancouver                 | 2        | 0        | 258        | 175        | 534          | 273        | 460          | 138        | 300          | 50         | 185        | 21        | 1,739        | 657          | 6         | 2,402        |
| 30 Burnaby                   | 0        | 0        | 28         | 27         | 47           | 28         | 47           | 8          | 29           | 5          | 12         | 2         | 163          | 70           | 1         | 234          |
| 40 North Shore               | 1        | 0        | 27         | 36         | 74           | 29         | 63           | 17         | 62           | 5          | 38         | 5         | 265          | 92           | 0         | 357          |
| 50 Richmond                  | 1        | 0        | 29         | 19         | 56           | 23         | 58           | 10         | 36           | 3          | 16         | 0         | 196          | 55           | 1         | 252          |
| 60 Capital Regional District | 0        | 0        | 61         | 48         | 201          | 74         | 199          | 36         | 133          | 13         | 104        | 0         | 698          | 171          | 1         | 870          |
| <b>TOTAL</b>                 | <b>4</b> | <b>2</b> | <b>778</b> | <b>499</b> | <b>1,798</b> | <b>699</b> | <b>1,603</b> | <b>329</b> | <b>1,017</b> | <b>109</b> | <b>575</b> | <b>46</b> | <b>5,775</b> | <b>1,684</b> | <b>18</b> | <b>7,477</b> |



**Table 3a**  
**Non-Postgraduate Physicians in British Columbia**  
**by Health Region by Specialty Group**  
**January 1992 and September 1993**

| Health Region                | General Practice |              | Clinical Specialties |              | Laboratory<br>Medicine Specialties |            | Surgical Specialties |            | Total        |              |
|------------------------------|------------------|--------------|----------------------|--------------|------------------------------------|------------|----------------------|------------|--------------|--------------|
|                              | 1992             | 1993         | 1992                 | 1993         | 1992                               | 1993       | 1992                 | 1993       | 1992         | 1993         |
| 1 East Kootenay              | 80               | 91           | 17                   | 18           | 0                                  | 0          | 11                   | 12         | 108          | 121          |
| 2 Central Kootenay           | 107              | 119          | 18                   | 20           | 2                                  | 3          | 8                    | 9          | 135          | 151          |
| 4 North Okanagan             | 90               | 101          | 24                   | 30           | 2                                  | 3          | 20                   | 20         | 136          | 154          |
| 5 South Okanagan             | 179              | 196          | 77                   | 82           | 8                                  | 7          | 58                   | 59         | 322          | 344          |
| 6 South Central              | 105              | 119          | 34                   | 36           | 7                                  | 7          | 37                   | 37         | 183          | 199          |
| 7 Upper Fraser Valley        | 144              | 156          | 42                   | 44           | 7                                  | 7          | 31                   | 32         | 224          | 239          |
| 8 Central Fraser Valley      | 147              | 165          | 34                   | 34           | 1                                  | 2          | 27                   | 29         | 209          | 230          |
| 9 Boundary                   | 293              | 331          | 81                   | 92           | 8                                  | 8          | 41                   | 44         | 423          | 475          |
| 10 Simon Fraser              | 188              | 208          | 111                  | 116          | 20                                 | 21         | 66                   | 65         | 385          | 410          |
| 11 Coast Garibaldi           | 68               | 85           | 7                    | 10           | 0                                  | 0          | 5                    | 7          | 80           | 102          |
| 13 Central Vancouver Island  | 206              | 224          | 65                   | 72           | 5                                  | 6          | 48                   | 58         | 324          | 360          |
| 14 Upper Island              | 97               | 104          | 19                   | 26           | 2                                  | 3          | 15                   | 18         | 133          | 151          |
| 15 Cariboo                   | 64               | 68           | 10                   | 10           | 0                                  | 0          | 7                    | 6          | 81           | 84           |
| 16 Skeena                    | 92               | 94           | 9                    | 12           | 1                                  | 1          | 8                    | 9          | 110          | 116          |
| 17 Peace River               | 41               | 44           | 5                    | 5            | 1                                  | 1          | 8                    | 7          | 55           | 57           |
| 18 Northern Interior         | 99               | 111          | 21                   | 26           | 5                                  | 6          | 26                   | 26         | 151          | 169          |
| 20 Vancouver                 | 970              | 1,055        | 885                  | 931          | 89                                 | 94         | 328                  | 322        | 2,272        | 2,402        |
| 30 Burnaby                   | 137              | 155          | 44                   | 46           | 5                                  | 6          | 24                   | 27         | 210          | 234          |
| 40 North Shore               | 186              | 211          | 100                  | 96           | 6                                  | 6          | 49                   | 44         | 341          | 357          |
| 50 Richmond                  | 145              | 160          | 52                   | 62           | 4                                  | 4          | 27                   | 26         | 228          | 252          |
| 60 Capital Regional District | 459              | 509          | 218                  | 232          | 16                                 | 16         | 116                  | 113        | 809          | 870          |
| <b>TOTAL</b>                 | <b>3,897</b>     | <b>4,306</b> | <b>1,873</b>         | <b>2,000</b> | <b>189</b>                         | <b>201</b> | <b>960</b>           | <b>970</b> | <b>6,919</b> | <b>7,477</b> |

**Table 3b**  
**Non-Postgraduate Physicians in British Columbia**  
**per 10,000 Population by Health Region by Specialty Group**  
**January 1992 and September 1993**

| Health Region                | General Practice |              | Clinical Specialties |             | Laboratory<br>Medicine Specialties |             | Surgical Specialties |             | Total        |              |
|------------------------------|------------------|--------------|----------------------|-------------|------------------------------------|-------------|----------------------|-------------|--------------|--------------|
|                              | 1992             | 1993         | 1992                 | 1993        | 1992                               | 1993        | 1992                 | 1993        | 1992         | 1993         |
| 1 East Kootenay              | 11.50            | 12.90        | 2.44                 | 2.55        | 0.00                               | 0.00        | 1.58                 | 1.70        | 15.53        | 17.15        |
| 2 Central Kootenay           | 14.87            | 15.97        | 2.50                 | 2.68        | 0.28                               | 0.40        | 1.11                 | 1.21        | 18.77        | 20.26        |
| 4 North Okanagan             | 9.32             | 9.67         | 2.49                 | 2.87        | 0.21                               | 0.29        | 2.07                 | 1.91        | 14.08        | 14.74        |
| 5 South Okanagan             | 10.03            | 9.85         | 4.31                 | 4.12        | 0.45                               | 0.35        | 3.25                 | 2.96        | 18.03        | 17.28        |
| 6 South Central              | 9.65             | 10.45        | 3.12                 | 3.16        | 0.64                               | 0.61        | 3.40                 | 3.25        | 16.81        | 17.47        |
| 7 Upper Fraser Valley        | 9.23             | 9.16         | 2.69                 | 2.58        | 0.45                               | 0.41        | 1.99                 | 1.88        | 14.36        | 14.03        |
| 8 Central Fraser Valley      | 8.34             | 8.69         | 1.93                 | 1.79        | 0.06                               | 0.11        | 1.53                 | 1.53        | 11.85        | 12.11        |
| 9 Boundary                   | 8.34             | 8.78         | 2.31                 | 2.44        | 0.23                               | 0.21        | 1.17                 | 1.17        | 12.04        | 12.60        |
| 10 Simon Fraser              | 10.24            | 10.50        | 6.05                 | 5.85        | 1.09                               | 1.06        | 3.60                 | 3.28        | 20.98        | 20.69        |
| 11 Coast Garibaldi           | 11.40            | 13.45        | 1.17                 | 1.58        | 0.00                               | 0.00        | 0.84                 | 1.11        | 13.41        | 16.14        |
| 13 Central Vancouver Island  | 10.62            | 10.83        | 3.35                 | 3.48        | 0.26                               | 0.29        | 2.47                 | 2.80        | 16.70        | 17.40        |
| 14 Upper Island              | 10.02            | 10.18        | 1.96                 | 2.55        | 0.21                               | 0.29        | 1.55                 | 1.76        | 13.74        | 14.78        |
| 15 Cariboo                   | 9.88             | 10.33        | 1.54                 | 1.52        | 0.00                               | 0.00        | 1.08                 | 0.91        | 12.50        | 12.76        |
| 16 Skeena                    | 11.08            | 11.11        | 1.08                 | 1.42        | 0.12                               | 0.12        | 0.96                 | 1.06        | 13.25        | 13.71        |
| 17 Peace River               | 7.01             | 7.46         | 0.85                 | 0.85        | 0.17                               | 0.17        | 1.37                 | 1.19        | 9.40         | 9.67         |
| 18 Northern Interior         | 8.69             | 9.59         | 1.84                 | 2.25        | 0.44                               | 0.52        | 2.28                 | 2.25        | 13.26        | 14.60        |
| 20 Vancouver                 | 20.30            | 21.43        | 18.52                | 18.91       | 1.86                               | 1.91        | 6.87                 | 6.54        | 47.56        | 48.79        |
| 30 Burnaby                   | 8.62             | 9.35         | 2.77                 | 2.78        | 0.31                               | 0.36        | 1.51                 | 1.63        | 13.22        | 14.12        |
| 40 North Shore               | 11.75            | 12.81        | 6.31                 | 5.83        | 0.38                               | 0.36        | 3.09                 | 2.67        | 21.53        | 21.68        |
| 50 Richmond                  | 11.45            | 12.09        | 4.11                 | 4.68        | 0.32                               | 0.30        | 2.13                 | 1.96        | 18.01        | 19.04        |
| 60 Capital Regional District | 15.31            | 16.34        | 7.27                 | 7.45        | 0.53                               | 0.51        | 3.87                 | 3.63        | 26.99        | 27.92        |
| <b>TOTAL</b>                 | <b>11.86</b>     | <b>12.44</b> | <b>5.70</b>          | <b>5.78</b> | <b>0.58</b>                        | <b>0.58</b> | <b>2.92</b>          | <b>2.80</b> | <b>21.07</b> | <b>21.60</b> |

**Table 3c**  
**Average Annual Rate of Change: Non-Postgraduate Physicians in British Columbia**  
**by Health Region by Specialty Group**  
**January 1992 to September 1993**

| Health Region                | General Practice    |                    | Clinical Specialties |                    | Laboratory<br>Medicine Specialties |                    | Surgical Specialties |                    | Total               |                    |
|------------------------------|---------------------|--------------------|----------------------|--------------------|------------------------------------|--------------------|----------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup>  | Ratio <sup>2</sup> | Number <sup>1</sup>                | Ratio <sup>2</sup> | Number <sup>1</sup>  | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | 8.04                | 7.10               | 3.49                 | 2.59               | *                                  | *                  | 5.36                 | 4.44               | 7.06                | 6.13               |
| 2 Central Kootenay           | 6.59                | 4.35               | 6.53                 | 4.29               | *                                  | *                  | *                    | *                  | 6.95                | 4.71               |
| 4 North Okanagan             | 7.16                | 2.23               | 14.33                | 9.07               | *                                  | *                  | 0.00                 | -4.60              | 7.74                | 2.79               |
| 5 South Okanagan             | 5.59                | -1.07              | 3.85                 | -2.71              | *                                  | *                  | 1.03                 | -5.34              | 4.05                | -2.52              |
| 6 South Central              | 7.80                | 4.90               | 3.49                 | 0.71               | *                                  | *                  | 0.00                 | -2.69              | 5.16                | 2.33               |
| 7 Upper Fraser Valley        | 4.92                | -0.47              | 2.83                 | -2.46              | *                                  | *                  | 1.92                 | -3.32              | 3.97                | -1.38              |
| 8 Central Fraser Valley      | 7.18                | 2.50               | 0.00                 | -4.36              | *                                  | *                  | 4.38                 | -0.17              | 5.91                | 1.30               |
| 9 Boundary                   | 7.59                | 3.11               | 7.94                 | 3.45               | *                                  | *                  | 4.33                 | -0.02              | 7.20                | 2.74               |
| 10 Simon Fraser              | 6.25                | 1.48               | 2.68                 | -1.93              | 2.97                               | -1.65              | -0.91                | -5.36              | 3.85                | -0.82              |
| 11 Coast Garibaldi           | 14.33               | 10.46              | *                    | *                  | *                                  | *                  | *                    | *                  | 15.69               | 11.78              |
| 13 Central Vancouver Island  | 5.15                | 1.18               | 6.33                 | 2.31               | *                                  | *                  | 12.02                | 7.79               | 6.53                | 2.50               |
| 14 Upper Island              | 4.27                | 0.94               | 20.71                | 16.85              | *                                  | *                  | 11.56                | 8.00               | 7.91                | 4.47               |
| 15 Cariboo                   | 3.70                | 2.73               | 0.00                 | -0.94              | *                                  | *                  | *                    | *                  | 2.21                | 1.24               |
| 16 Skeena                    | 1.30                | 0.16               | *                    | *                  | *                                  | *                  | *                    | *                  | 3.24                | 2.07               |
| 17 Peace River               | 4.33                | 3.84               | *                    | *                  | *                                  | *                  | *                    | *                  | 2.17                | 1.69               |
| 18 Northern Interior         | 7.11                | 6.07               | 13.67                | 12.57              | *                                  | *                  | 0.00                 | -0.97              | 6.99                | 5.96               |
| 20 Vancouver                 | 5.17                | 3.29               | 3.09                 | 1.25               | 3.33                               | 1.49               | -1.10                | -2.87              | 3.39                | 1.55               |
| 30 Burnaby                   | 7.69                | 4.99               | 2.70                 | 0.13               | *                                  | *                  | 7.32                 | 4.64               | 6.71                | 4.04               |
| 40 North Shore               | 7.86                | 5.37               | -2.42                | -4.68              | *                                  | *                  | -6.25                | -8.42              | 2.79                | 0.41               |
| 50 Richmond                  | 6.08                | 3.31               | 11.13                | 8.22               | *                                  | *                  | -2.24                | -4.80              | 6.19                | 3.41               |
| 60 Capital Regional District | 6.40                | 3.96               | 3.81                 | 1.42               | 0.00                               | -2.30              | -1.56                | -3.82              | 4.46                | 2.06               |
| <b>TOTAL</b>                 | <b>6.17</b>         | <b>2.87</b>        | <b>4.01</b>          | <b>0.78</b>        | <b>3.76</b>                        | <b>0.54</b>        | <b>0.62</b>          | <b>-2.50</b>       | <b>4.76</b>         | <b>1.51</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 4**  
**Non-Postgraduate Physicians in British Columbia**  
**by Health Region by Specialty Group by Sex**  
**September 1993**

| Health Region                | General Practice |              | Clinical Specialties |            | Laboratory<br>Medicine Specialties |           | Surgical Specialties |           | Total        |
|------------------------------|------------------|--------------|----------------------|------------|------------------------------------|-----------|----------------------|-----------|--------------|
|                              | M                | F            | M                    | F          | M                                  | F         | M                    | F         |              |
| 1 East Kootenay              | 72               | 19           | 17                   | 1          | 0                                  | 0         | 12                   | 0         | 121          |
| 2 Central Kootenay           | 83               | 36           | 20                   | 0          | 3                                  | 0         | 9                    | 0         | 151          |
| 4 North Okanagan             | 81               | 20           | 26                   | 4          | 3                                  | 0         | 20                   | 0         | 154          |
| 5 South Okanagan             | 154              | 42           | 75                   | 7          | 7                                  | 0         | 58                   | 1         | 344          |
| 6 South Central              | 91               | 28           | 31                   | 5          | 7                                  | 0         | 34                   | 3         | 199          |
| 7 Upper Fraser Valley        | 131              | 25           | 37                   | 7          | 6                                  | 1         | 32                   | 0         | 239          |
| 8 Central Fraser Valley      | 136              | 29           | 24                   | 10         | 2                                  | 0         | 24                   | 5         | 230          |
| 9 Boundary                   | 225              | 106          | 67                   | 25         | 8                                  | 0         | 41                   | 3         | 475          |
| 10 Simon Fraser              | 145              | 63           | 101                  | 15         | 16                                 | 5         | 62                   | 3         | 410          |
| 11 Coast Garibaldi           | 61               | 24           | 9                    | 1          | 0                                  | 0         | 7                    | 0         | 102          |
| 13 Central Vancouver Island  | 183              | 41           | 60                   | 12         | 6                                  | 0         | 55                   | 3         | 360          |
| 14 Upper Island              | 85               | 19           | 23                   | 3          | 2                                  | 1         | 18                   | 0         | 151          |
| 15 Cariboo                   | 57               | 11           | 7                    | 3          | 0                                  | 0         | 6                    | 0         | 84           |
| 16 Skeena                    | 72               | 22           | 10                   | 2          | 1                                  | 0         | 9                    | 0         | 116          |
| 17 Peace River               | 34               | 10           | 5                    | 0          | 1                                  | 0         | 7                    | 0         | 57           |
| 18 Northern Interior         | 94               | 17           | 21                   | 5          | 4                                  | 2         | 25                   | 1         | 169          |
| 20 Vancouver                 | 687              | 368          | 711                  | 220        | 66                                 | 28        | 281                  | 41        | 2,402        |
| 30 Burnaby                   | 101              | 54           | 32                   | 14         | 4                                  | 2         | 27                   | 0         | 234          |
| 40 North Shore               | 137              | 74           | 82                   | 14         | 4                                  | 2         | 42                   | 2         | 357          |
| 50 Richmond                  | 122              | 38           | 48                   | 14         | 2                                  | 2         | 25                   | 1         | 252          |
| 60 Capital Regional District | 368              | 141          | 208                  | 24         | 15                                 | 1         | 108                  | 5         | 870          |
| <b>TOTAL</b>                 | <b>3,119</b>     | <b>1,187</b> | <b>1,614</b>         | <b>386</b> | <b>157</b>                         | <b>44</b> | <b>902</b>           | <b>68</b> | <b>7,477</b> |

**Table 5a**  
**Non-Postgraduate Physicians in British Columbia**  
**by Health Region by MSC Specialty**  
**September 1993**

| Health Region                | General Practice | Family Practice | General Practice Subtotal | Anaesthesia | Community Medicine | Dermatology | Emergency Medicine | General Surgery | Internal Medicine | Medical Microbiology | Neurology | Neuropsychiatry | Neurosurgery | Nuclear Medicine | Obstetrics & Gynaecology |
|------------------------------|------------------|-----------------|---------------------------|-------------|--------------------|-------------|--------------------|-----------------|-------------------|----------------------|-----------|-----------------|--------------|------------------|--------------------------|
| 1 East Kootenay              | 69               | 22              | 91                        | 1           | 1                  | 0           | 0                  | 5               | 3                 | 0                    | 0         | 0               | 0            | 0                | 2                        |
| 2 Central Kootenay           | 91               | 28              | 119                       | 1           | 0                  | 0           | 0                  | 5               | 8                 | 0                    | 1         | 0               | 0            | 0                | 1                        |
| 4 North Okanagan             | 71               | 30              | 101                       | 8           | 1                  | 1           | 0                  | 6               | 6                 | 1                    | 0         | 0               | 0            | 0                | 2                        |
| 5 South Okanagan             | 145              | 51              | 196                       | 13          | 2                  | 1           | 0                  | 12              | 24                | 0                    | 4         | 0               | 2            | 1                | 11                       |
| 6 South Central              | 101              | 18              | 119                       | 8           | 0                  | 1           | 0                  | 10              | 9                 | 1                    | 0         | 1               | 3            | 1                | 7                        |
| 7 Upper Fraser Valley        | 117              | 39              | 156                       | 9           | 0                  | 1           | 0                  | 6               | 8                 | 0                    | 2         | 0               | 0            | 0                | 4                        |
| 8 Central Fraser Valley      | 130              | 35              | 165                       | 6           | 2                  | 2           | 1                  | 6               | 8                 | 0                    | 0         | 0               | 0            | 0                | 4                        |
| 9 Boundary                   | 254              | 77              | 331                       | 17          | 2                  | 5           | 3                  | 9               | 19                | 0                    | 1         | 0               | 1            | 0                | 9                        |
| 10 Simon Fraser              | 175              | 33              | 208                       | 17          | 2                  | 3           | 8                  | 14              | 29                | 2                    | 7         | 0               | 3            | 0                | 8                        |
| 11 Coast Garibaldi           | 63               | 22              | 85                        | 0           | 3                  | 0           | 0                  | 6               | 2                 | 0                    | 0         | 0               | 0            | 0                | 1                        |
| 13 Central Vancouver Island  | 165              | 59              | 224                       | 16          | 2                  | 1           | 1                  | 14              | 17                | 0                    | 2         | 0               | 0            | 1                | 12                       |
| 14 Upper Island              | 83               | 21              | 104                       | 7           | 0                  | 1           | 0                  | 4               | 4                 | 0                    | 0         | 0               | 0            | 0                | 3                        |
| 15 Cariboo                   | 59               | 9               | 68                        | 2           | 1                  | 0           | 0                  | 4               | 3                 | 0                    | 0         | 0               | 0            | 0                | 1                        |
| 16 Skeena                    | 73               | 21              | 94                        | 3           | 1                  | 0           | 0                  | 6               | 3                 | 0                    | 0         | 0               | 0            | 0                | 2                        |
| 17 Peace River               | 39               | 5               | 44                        | 0           | 0                  | 0           | 0                  | 4               | 2                 | 0                    | 0         | 0               | 0            | 0                | 1                        |
| 18 Northern Interior         | 84               | 27              | 111                       | 7           | 0                  | 1           | 0                  | 6               | 6                 | 0                    | 1         | 0               | 1            | 0                | 5                        |
| 20 Vancouver                 | 791              | 264             | 1,055                     | 113         | 13                 | 26          | 23                 | 53              | 257               | 12                   | 33        | 1               | 15           | 4                | 62                       |
| 30 Burnaby                   | 132              | 23              | 155                       | 8           | 0                  | 2           | 4                  | 3               | 11                | 0                    | 2         | 0               | 0            | 0                | 4                        |
| 40 North Shore               | 166              | 45              | 211                       | 17          | 0                  | 4           | 1                  | 5               | 20                | 1                    | 3         | 0               | 3            | 1                | 7                        |
| 50 Richmond                  | 135              | 25              | 160                       | 14          | 3                  | 3           | 3                  | 4               | 16                | 0                    | 2         | 0               | 0            | 1                | 4                        |
| 60 Capital Regional District | 402              | 107             | 509                       | 46          | 3                  | 5           | 9                  | 23              | 62                | 1                    | 7         | 0               | 4            | 2                | 15                       |
| <b>TOTAL</b>                 | <b>3,345</b>     | <b>961</b>      | <b>4,306</b>              | <b>313</b>  | <b>36</b>          | <b>57</b>   | <b>53</b>          | <b>205</b>      | <b>517</b>        | <b>18</b>            | <b>65</b> | <b>2</b>        | <b>32</b>    | <b>11</b>        | <b>165</b>               |

... continued

**Table 5a (continued)**  
**Non-Postgraduate Physicians in British Columbia**  
**by Health Region by MSC Specialty**  
**September 1993**

| Health Region                | Ophthal-<br>mology | Ortho-<br>paedic<br>Surgery | Otolaryn-<br>gology | Paedi-<br>atrics | Pathology  | Physical<br>Medicine | Plastic<br>Surgery | Psychiatry | Radiology  | Thoracic<br>Surgery | Urology   | Vascular<br>Surgery | Specialty<br>Subtotal | Total        |
|------------------------------|--------------------|-----------------------------|---------------------|------------------|------------|----------------------|--------------------|------------|------------|---------------------|-----------|---------------------|-----------------------|--------------|
| 1 East Kootenay              | 1                  | 2                           | 1                   | 2                | 0          | 0                    | 0                  | 2          | 9          | 0                   | 1         | 0                   | 30                    | 121          |
| 2 Central Kootenay           | 0                  | 1                           | 0                   | 3                | 3          | 0                    | 1                  | 2          | 5          | 0                   | 1         | 0                   | 32                    | 151          |
| 4 North Okanagan             | 5                  | 4                           | 1                   | 4                | 2          | 0                    | 0                  | 5          | 5          | 0                   | 2         | 0                   | 53                    | 154          |
| 5 South Okanagan             | 10                 | 9                           | 3                   | 10               | 7          | 3                    | 3                  | 12         | 12         | 1                   | 5         | 3                   | 148                   | 344          |
| 6 South Central              | 3                  | 6                           | 2                   | 4                | 6          | 2                    | 2                  | 4          | 6          | 0                   | 2         | 2                   | 80                    | 199          |
| 7 Upper Fraser Valley        | 6                  | 7                           | 3                   | 5                | 7          | 0                    | 2                  | 10         | 9          | 0                   | 3         | 1                   | 83                    | 239          |
| 8 Central Fraser Valley      | 6                  | 9                           | 2                   | 4                | 2          | 0                    | 1                  | 6          | 5          | 0                   | 1         | 0                   | 65                    | 230          |
| 9 Boundary                   | 6                  | 9                           | 4                   | 14               | 8          | 0                    | 3                  | 21         | 10         | 0                   | 2         | 1                   | 144                   | 475          |
| 10 Simon Fraser              | 12                 | 11                          | 5                   | 7                | 19         | 3                    | 5                  | 26         | 14         | 2                   | 5         | 0                   | 202                   | 410          |
| 11 Coast Garibaldi           | 0                  | 0                           | 0                   | 2                | 0          | 0                    | 0                  | 3          | 0          | 0                   | 0         | 0                   | 17                    | 102          |
| 13 Central Vancouver Island  | 14                 | 9                           | 4                   | 6                | 6          | 1                    | 2                  | 12         | 13         | 0                   | 3         | 0                   | 136                   | 360          |
| 14 Upper Island              | 2                  | 5                           | 2                   | 1                | 3          | 0                    | 0                  | 8          | 5          | 0                   | 2         | 0                   | 47                    | 151          |
| 15 Cariboo                   | 0                  | 0                           | 0                   | 1                | 0          | 0                    | 0                  | 1          | 2          | 0                   | 1         | 0                   | 16                    | 84           |
| 16 Skeena                    | 0                  | 0                           | 0                   | 2                | 1          | 0                    | 0                  | 1          | 2          | 0                   | 1         | 0                   | 22                    | 116          |
| 17 Peace River               | 0                  | 1                           | 1                   | 0                | 1          | 0                    | 0                  | 1          | 2          | 0                   | 0         | 0                   | 13                    | 57           |
| 18 Northern Interior         | 4                  | 5                           | 1                   | 4                | 6          | 0                    | 2                  | 2          | 5          | 0                   | 2         | 0                   | 58                    | 169          |
| 20 Vancouver                 | 59                 | 39                          | 30                  | 118              | 82         | 18                   | 16                 | 215        | 110        | 20                  | 18        | 10                  | 1,347                 | 2,402        |
| 30 Burnaby                   | 8                  | 5                           | 2                   | 6                | 6          | 0                    | 2                  | 8          | 5          | 0                   | 2         | 1                   | 79                    | 234          |
| 40 North Shore               | 7                  | 6                           | 5                   | 8                | 5          | 2                    | 4                  | 26         | 14         | 1                   | 4         | 2                   | 146                   | 357          |
| 50 Richmond                  | 2                  | 7                           | 2                   | 9                | 4          | 0                    | 2                  | 9          | 2          | 0                   | 3         | 2                   | 92                    | 252          |
| 60 Capital Regional District | 25                 | 16                          | 8                   | 11               | 15         | 5                    | 6                  | 49         | 33         | 4                   | 10        | 2                   | 361                   | 870          |
| <b>TOTAL</b>                 | <b>170</b>         | <b>151</b>                  | <b>76</b>           | <b>221</b>       | <b>183</b> | <b>34</b>            | <b>51</b>          | <b>423</b> | <b>268</b> | <b>28</b>           | <b>68</b> | <b>24</b>           | <b>3,171</b>          | <b>7,477</b> |

**Table 5b**  
**Non-Postgraduate Physicians in British Columbia**  
**per 10,000 Population by Health Region by MSC Specialty**  
**September 1993**

| Health Region                | General Practice | Family Practice | General Practice Subtotal | Anaesthesia | Community Medicine | Dermatology | Emergency Medicine | General Surgery | Internal Medicine | Medical Microbiology | Neurology   | Neuro-psychiatry | Neuro-surgery | Nuclear Medicine | Obstetrics & Gynaecology |
|------------------------------|------------------|-----------------|---------------------------|-------------|--------------------|-------------|--------------------|-----------------|-------------------|----------------------|-------------|------------------|---------------|------------------|--------------------------|
| 1 East Kootenay              | 9.78             | 3.12            | 12.90                     | 0.14        | 0.14               | 0.00        | 0.00               | 0.71            | 0.43              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.28                     |
| 2 Central Kootenay           | 12.21            | 3.76            | 15.97                     | 0.13        | 0.00               | 0.00        | 0.00               | 0.67            | 1.07              | 0.00                 | 0.13        | 0.00             | 0.00          | 0.00             | 0.13                     |
| 4 North Okanagan             | 6.80             | 2.87            | 9.67                      | 0.77        | 0.10               | 0.10        | 0.00               | 0.57            | 0.57              | 0.10                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.19                     |
| 5 South Okanagan             | 7.29             | 2.56            | 9.85                      | 0.65        | 0.10               | 0.05        | 0.00               | 0.60            | 1.21              | 0.00                 | 0.20        | 0.00             | 0.10          | 0.05             | 0.55                     |
| 6 South Central              | 8.87             | 1.58            | 10.45                     | 0.70        | 0.00               | 0.09        | 0.00               | 0.88            | 0.79              | 0.09                 | 0.00        | 0.09             | 0.26          | 0.09             | 0.61                     |
| 7 Upper Fraser Valley        | 6.87             | 2.29            | 9.16                      | 0.53        | 0.00               | 0.06        | 0.00               | 0.35            | 0.47              | 0.00                 | 0.12        | 0.00             | 0.00          | 0.00             | 0.23                     |
| 8 Central Fraser Valley      | 6.85             | 1.84            | 8.69                      | 0.32        | 0.11               | 0.11        | 0.05               | 0.32            | 0.42              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.21                     |
| 9 Boundary                   | 6.74             | 2.04            | 8.78                      | 0.45        | 0.05               | 0.13        | 0.08               | 0.24            | 0.50              | 0.00                 | 0.03        | 0.00             | 0.03          | 0.00             | 0.24                     |
| 10 Simon Fraser              | 8.83             | 1.67            | 10.50                     | 0.86        | 0.10               | 0.15        | 0.40               | 0.71            | 1.46              | 0.10                 | 0.35        | 0.00             | 0.15          | 0.00             | 0.40                     |
| 11 Coast Garibaldi           | 9.97             | 3.48            | 13.45                     | 0.00        | 0.47               | 0.00        | 0.00               | 0.95            | 0.32              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.16                     |
| 13 Central Vancouver Island  | 7.98             | 2.85            | 10.83                     | 0.77        | 0.10               | 0.05        | 0.05               | 0.68            | 0.82              | 0.00                 | 0.10        | 0.00             | 0.00          | 0.05             | 0.58                     |
| 14 Upper Island              | 8.12             | 2.06            | 10.18                     | 0.69        | 0.00               | 0.10        | 0.00               | 0.39            | 0.39              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.29                     |
| 15 Cariboo                   | 8.96             | 1.37            | 10.33                     | 0.30        | 0.15               | 0.00        | 0.00               | 0.61            | 0.46              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.15                     |
| 16 Skeena                    | 8.63             | 2.48            | 11.11                     | 0.35        | 0.12               | 0.00        | 0.00               | 0.71            | 0.35              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.24                     |
| 17 Peace River               | 6.62             | 0.85            | 7.46                      | 0.00        | 0.00               | 0.00        | 0.00               | 0.68            | 0.34              | 0.00                 | 0.00        | 0.00             | 0.00          | 0.00             | 0.17                     |
| 18 Northern Interior         | 7.26             | 2.33            | 9.59                      | 0.60        | 0.00               | 0.09        | 0.00               | 0.52            | 0.52              | 0.00                 | 0.09        | 0.00             | 0.09          | 0.00             | 0.43                     |
| 20 Vancouver                 | 16.07            | 5.36            | 21.43                     | 2.30        | 0.26               | 0.53        | 0.47               | 1.08            | 5.22              | 0.24                 | 0.67        | 0.02             | 0.30          | 0.08             | 1.26                     |
| 30 Burnaby                   | 7.97             | 1.39            | 9.35                      | 0.48        | 0.00               | 0.12        | 0.24               | 0.18            | 0.66              | 0.00                 | 0.12        | 0.00             | 0.00          | 0.00             | 0.24                     |
| 40 North Shore               | 10.08            | 2.73            | 12.81                     | 1.03        | 0.00               | 0.24        | 0.06               | 0.30            | 1.21              | 0.06                 | 0.18        | 0.00             | 0.18          | 0.06             | 0.43                     |
| 50 Richmond                  | 10.20            | 1.89            | 12.09                     | 1.06        | 0.23               | 0.23        | 0.23               | 0.30            | 1.21              | 0.00                 | 0.15        | 0.00             | 0.00          | 0.08             | 0.30                     |
| 60 Capital Regional District | 12.90            | 3.43            | 16.34                     | 1.48        | 0.10               | 0.16        | 0.29               | 0.74            | 1.99              | 0.03                 | 0.22        | 0.00             | 0.13          | 0.06             | 0.48                     |
| <b>TOTAL</b>                 | <b>9.66</b>      | <b>2.78</b>     | <b>12.44</b>              | <b>0.90</b> | <b>0.10</b>        | <b>0.16</b> | <b>0.15</b>        | <b>0.59</b>     | <b>1.49</b>       | <b>0.05</b>          | <b>0.19</b> | <b>0.01</b>      | <b>0.09</b>   | <b>0.03</b>      | <b>0.48</b>              |

... continued

**Table 5b (continued)**  
**Non-Postgraduate Physicians in British Columbia**  
**per 10,000 Population by Health Region by MSC Specialty**  
**September 1993**

| Health Region                | Ophthalmology | Orthopaedic Surgery | Otolaryngology | Paediatrics | Pathology   | Physical Medicine | Plastic Surgery | Psychiatry  | Radiology   | Thoracic Surgery | Urology     | Vascular Surgery | Specialty Subtotal | Total        |
|------------------------------|---------------|---------------------|----------------|-------------|-------------|-------------------|-----------------|-------------|-------------|------------------|-------------|------------------|--------------------|--------------|
| 1 East Kootenay              | 0.14          | 0.28                | 0.14           | 0.28        | 0.00        | 0.00              | 0.00            | 0.28        | 1.28        | 0.00             | 0.14        | 0.00             | 4.25               | 17.15        |
| 2 Central Kootenay           | 0.00          | 0.13                | 0.00           | 0.40        | 0.40        | 0.00              | 0.13            | 0.27        | 0.67        | 0.00             | 0.13        | 0.00             | 4.29               | 20.26        |
| 4 North Okanagan             | 0.48          | 0.38                | 0.10           | 0.38        | 0.19        | 0.00              | 0.00            | 0.48        | 0.48        | 0.00             | 0.19        | 0.00             | 5.07               | 14.74        |
| 5 South Okanagan             | 0.50          | 0.45                | 0.15           | 0.50        | 0.35        | 0.15              | 0.15            | 0.60        | 0.60        | 0.05             | 0.25        | 0.15             | 7.44               | 17.28        |
| 6 South Central              | 0.26          | 0.53                | 0.18           | 0.35        | 0.53        | 0.18              | 0.18            | 0.35        | 0.53        | 0.00             | 0.18        | 0.18             | 7.02               | 17.47        |
| 7 Upper Fraser Valley        | 0.35          | 0.41                | 0.18           | 0.29        | 0.41        | 0.00              | 0.12            | 0.59        | 0.53        | 0.00             | 0.18        | 0.06             | 4.87               | 14.03        |
| 8 Central Fraser Valley      | 0.32          | 0.47                | 0.11           | 0.21        | 0.11        | 0.00              | 0.05            | 0.32        | 0.26        | 0.00             | 0.05        | 0.00             | 3.42               | 12.11        |
| 9 Boundary                   | 0.16          | 0.24                | 0.11           | 0.37        | 0.21        | 0.00              | 0.08            | 0.56        | 0.27        | 0.00             | 0.05        | 0.03             | 3.82               | 12.60        |
| 10 Simon Fraser              | 0.61          | 0.56                | 0.25           | 0.35        | 0.96        | 0.15              | 0.25            | 1.31        | 0.71        | 0.10             | 0.25        | 0.00             | 10.20              | 20.69        |
| 11 Coast Garibaldi           | 0.00          | 0.00                | 0.00           | 0.32        | 0.00        | 0.00              | 0.00            | 0.47        | 0.00        | 0.00             | 0.00        | 0.00             | 2.69               | 16.14        |
| 13 Central Vancouver Island  | 0.68          | 0.44                | 0.19           | 0.29        | 0.29        | 0.05              | 0.10            | 0.58        | 0.63        | 0.00             | 0.15        | 0.00             | 6.58               | 17.40        |
| 14 Upper Island              | 0.20          | 0.49                | 0.20           | 0.10        | 0.29        | 0.00              | 0.00            | 0.78        | 0.49        | 0.00             | 0.20        | 0.00             | 4.60               | 14.78        |
| 15 Cariboo                   | 0.00          | 0.00                | 0.00           | 0.15        | 0.00        | 0.00              | 0.00            | 0.15        | 0.30        | 0.00             | 0.15        | 0.00             | 2.43               | 12.76        |
| 16 Skeena                    | 0.00          | 0.00                | 0.00           | 0.24        | 0.12        | 0.00              | 0.00            | 0.12        | 0.24        | 0.00             | 0.12        | 0.00             | 2.60               | 13.71        |
| 17 Peace River               | 0.00          | 0.17                | 0.17           | 0.00        | 0.17        | 0.00              | 0.00            | 0.17        | 0.34        | 0.00             | 0.00        | 0.00             | 2.21               | 9.67         |
| 18 Northern Interior         | 0.35          | 0.43                | 0.09           | 0.35        | 0.52        | 0.00              | 0.17            | 0.17        | 0.43        | 0.00             | 0.17        | 0.00             | 5.01               | 14.60        |
| 20 Vancouver                 | 1.20          | 0.79                | 0.61           | 2.40        | 1.67        | 0.37              | 0.33            | 4.37        | 2.23        | 0.41             | 0.37        | 0.20             | 27.36              | 48.79        |
| 30 Burnaby                   | 0.48          | 0.30                | 0.12           | 0.36        | 0.36        | 0.00              | 0.12            | 0.48        | 0.30        | 0.00             | 0.12        | 0.06             | 4.77               | 14.12        |
| 40 North Shore               | 0.43          | 0.36                | 0.30           | 0.49        | 0.30        | 0.12              | 0.24            | 1.58        | 0.85        | 0.06             | 0.24        | 0.12             | 8.87               | 21.68        |
| 50 Richmond                  | 0.15          | 0.53                | 0.15           | 0.68        | 0.30        | 0.00              | 0.15            | 0.68        | 0.15        | 0.00             | 0.23        | 0.15             | 6.95               | 19.04        |
| 60 Capital Regional District | 0.80          | 0.51                | 0.26           | 0.35        | 0.48        | 0.16              | 0.19            | 1.57        | 1.06        | 0.13             | 0.32        | 0.06             | 11.59              | 27.92        |
| <b>TOTAL</b>                 | <b>0.49</b>   | <b>0.44</b>         | <b>0.22</b>    | <b>0.64</b> | <b>0.53</b> | <b>0.10</b>       | <b>0.15</b>     | <b>1.22</b> | <b>0.77</b> | <b>0.08</b>      | <b>0.20</b> | <b>0.07</b>      | <b>9.16</b>        | <b>21.60</b> |



**Table 6**  
**Analysis of Change in the Number of Non-Postgraduate Physicians**  
**in British Columbia by Health Region**  
**January 1992 to September 1993**

| Health Region                | January 1992 | New Registrants <sup>1</sup> by Place of Graduation |              |               |          |            | Reactivation <sup>2</sup> | Attrition <sup>3</sup> | Net Intra-provincial Migration | September 1993 |
|------------------------------|--------------|---|--------------|---------------|----------|------------|---------------------------|------------------------|--------------------------------|----------------|
|                              |              | B.C.  | Other Canada | Other Country | Unknown  | Subtotal   |                           |                        |                                |                |
| 1 East Kootenay              | 108          | 0   | 7            | 5             | 0        | 12         | 14                        | 8                      | -5                             | 121            |
| 2 Central Kootenay           | 135          | 1   | 7            | 8             | 0        | 16         | 3                         | 5                      | 2                              | 151            |
| 4 North Okanagan             | 136          | 2   | 5            | 4             | 0        | 11         | 7                         | 4                      | 4                              | 154            |
| 5 South Okanagan             | 322          | 3   | 14           | 7             | 0        | 24         | 10                        | 25                     | 13                             | 344            |
| 6 South Central              | 183          | 4   | 3            | 10            | 0        | 17         | 5                         | 9                      | 3                              | 199            |
| 7 Upper Fraser Valley        | 224          | 2   | 7            | 11            | 0        | 20         | 11                        | 16                     | 0                              | 239            |
| 8 Central Fraser Valley      | 209          | 3   | 3            | 8             | 0        | 14         | 6                         | 10                     | 11                             | 230            |
| 9 Boundary                   | 423          | 10  | 18           | 12            | 0        | 40         | 17                        | 21                     | 16                             | 475            |
| 10 Simon Fraser              | 385          | 4   | 17           | 8             | 0        | 29         | 13                        | 20                     | 3                              | 410            |
| 11 Coast Garibaldi           | 80           | 0   | 8            | 2             | 0        | 10         | 7                         | 5                      | 10                             | 102            |
| 13 Central Vancouver Island  | 324          | 5   | 9            | 10            | 0        | 24         | 20                        | 26                     | 18                             | 360            |
| 14 Upper Island              | 133          | 2   | 6            | 6             | 0        | 14         | 10                        | 12                     | 6                              | 151            |
| 15 Cariboo                   | 81           | 4   | 3            | 7             | 0        | 14         | 4                         | 11                     | -4                             | 84             |
| 16 Skeena                    | 110          | 0   | 1            | 8             | 0        | 9          | 7                         | 8                      | -2                             | 116            |
| 17 Peace River               | 55           | 0   | 1            | 13            | 0        | 14         | 1                         | 4                      | -9                             | 57             |
| 18 Northern Interior         | 151          | 3   | 7            | 11            | 0        | 21         | 10                        | 9                      | -4                             | 169            |
| 20 Vancouver                 | 2,272        | 42  | 102          | 42            | 0        | 186        | 176                       | 165                    | -67                            | 2,402          |
| 30 Burnaby                   | 210          | 5   | 9            | 8             | 0        | 22         | 12                        | 9                      | -1                             | 234            |
| 40 North Shore               | 341          | 9   | 16           | 5             | 0        | 30         | 19                        | 29                     | -4                             | 357            |
| 50 Richmond                  | 228          | 7   | 8            | 10            | 0        | 25         | 14                        | 17                     | 2                              | 252            |
| 60 Capital Regional District | 809          | 14  | 51           | 12            | 1        | 78         | 41                        | 66                     | 8                              | 870            |
| <b>TOTAL</b>                 | <b>6,919</b> | <b>120</b>  | <b>302</b>   | <b>207</b>    | <b>1</b> | <b>630</b> | <b>407</b>                | <b>479</b>             | <b>0</b>                       | <b>7,477</b>   |

<sup>1</sup> Physicians who reported B.C. addresses and were non-postgraduate registrants in September 1993 and whose date of initial registration was after January 1992.

<sup>2</sup> Physicians who reported B.C. addresses and were non-postgraduate registrants in September 1993 but not in January 1992 and who were registered for the first time before January 1992.

<sup>3</sup> Physicians who reported B.C. addresses and were non-postgraduate registrants in January 1992 but not in September 1993.



## PODIATRISTS

**Definition:** A podiatrist

...diagnoses diseases, deformities, and injuries of the human foot and treats patients using braces, casts, shields, splints, physical therapy, medications, or surgery.<sup>1</sup>

**Governing Statute:** Podiatrists Act, Revised Statutes of British Columbia, 1979, Chapter 330; Health Professions Amendment Act, 1989, Chapter 29, Sections 17-18; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 55-58; administered by the Ministry of Health.

**Governing Body:** British Columbia Association of Podiatrists. In order to practise podiatry in British Columbia, it is necessary to hold a certificate of registration issued by the British Columbia Association of Podiatrists.

**Date of Record:** December 1991 and January 1994.

**Source of Data:** British Columbia Association of Podiatrists.

### Preparation and Updating:

The tables, derived from the register supplied by the British Columbia Association of Podiatrists, include registered podiatrists who reported a British Columbia address at the date of record. Data presented in the tables are based on employment address for the majority of podiatrists. Precise percentages of home vs. employment or other address are not known.

### Definition of Terms:

#### 1. Registered Podiatrists

Table 1 shows number, number per 10,000 population, and average annual rates of change in these figures for podiatrists in British Columbia registered with the B.C. Association of Podiatrists at the date of record.

#### 2. Age and Sex

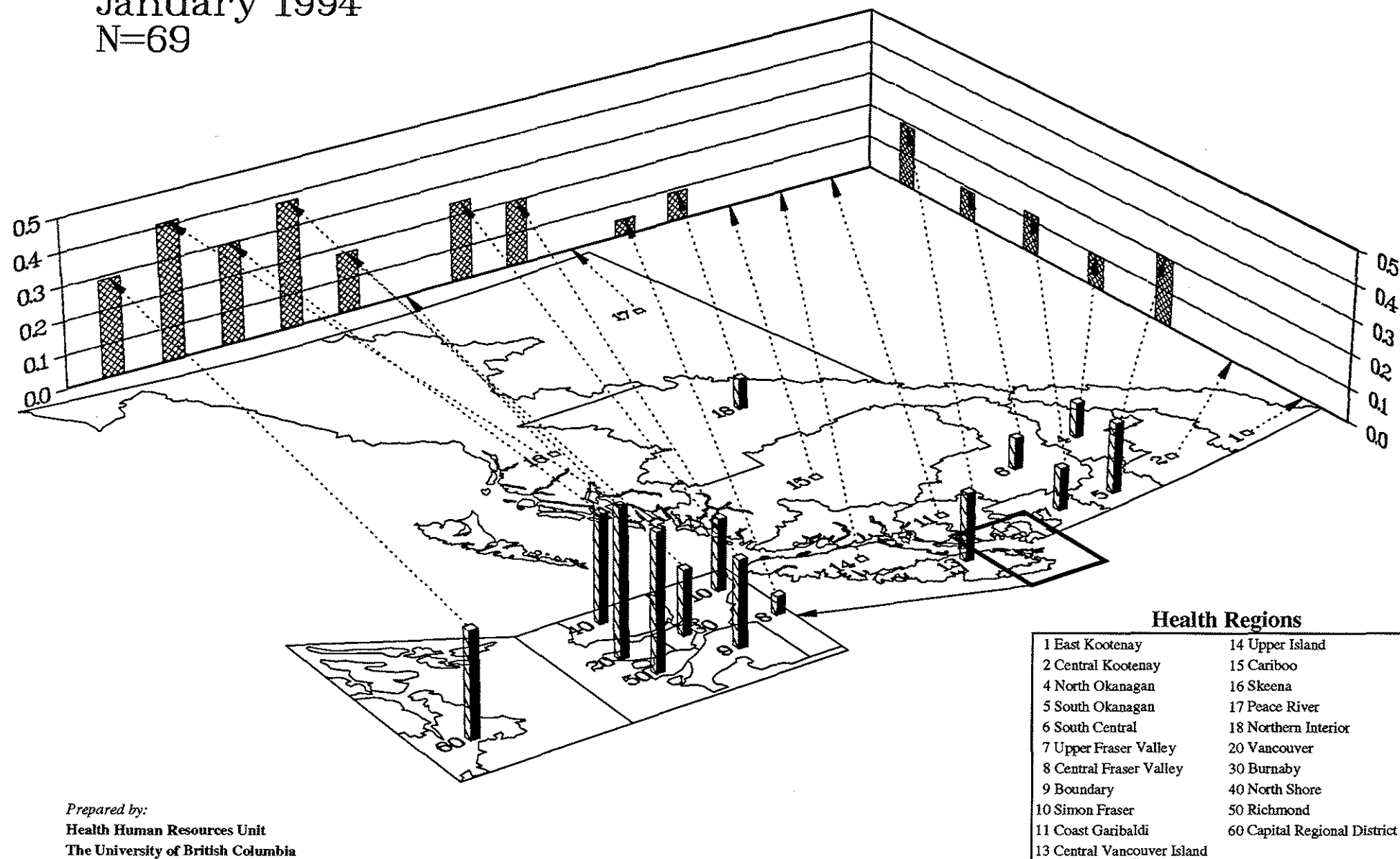
Age and sex information on registered podiatrists in British Columbia is shown in Table 2. Age information in the table is grouped according to standard age categories developed and used by Statistics Canada. In 1993, no registered podiatrists were reported in the category for under 25 years of age.

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3123, Ottawa: Employment and Immigration Canada.

# Registered Podiatrists per 10,000 Population by Health Region January 1994 N=69

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Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Registered Podiatrists in British Columbia**  
**by Health Region**  
**December 1991 and January 1994**

| Health Region                | Number    |           | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|-----------|-----------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991      | 1994      | 1991                            | 1994        | Number <sup>1</sup>              | Ratio <sup>2</sup> |
| 1 East Kootenay              | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 2 Central Kootenay           | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 4 North Okanagan             | 1         | 1         | 0.10                            | 0.10        | *                                | *                  |
| 5 South Okanagan             | 3         | 4         | 0.17                            | 0.20        | *                                | *                  |
| 6 South Central              | 2         | 1         | 0.18                            | 0.09        | *                                | *                  |
| 7 Upper Fraser Valley        | 2         | 2         | 0.13                            | 0.12        | *                                | *                  |
| 8 Central Fraser Valley      | 1         | 1         | 0.06                            | 0.05        | *                                | *                  |
| 9 Boundary                   | 6         | 9         | 0.17                            | 0.24        | *                                | *                  |
| 10 Simon Fraser              | 3         | 4         | 0.16                            | 0.20        | *                                | *                  |
| 11 Coast Garibaldi           | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 13 Central Vancouver Island  | 2         | 4         | 0.10                            | 0.19        | *                                | *                  |
| 14 Upper Island              | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 15 Cariboo                   | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 16 Skeena                    | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 17 Peace River               | 0         | 0         | 0.00                            | 0.00        | *                                | *                  |
| 18 Northern Interior         | 1         | 1         | 0.09                            | 0.09        | *                                | *                  |
| 20 Vancouver                 | 23        | 20        | 0.48                            | 0.41        | -6.75                            | -8.14              |
| 30 Burnaby                   | 3         | 3         | 0.19                            | 0.18        | *                                | *                  |
| 40 North Shore               | 6         | 5         | 0.38                            | 0.30        | *                                | *                  |
| 50 Richmond                  | 6         | 5         | 0.47                            | 0.38        | *                                | *                  |
| 60 Capital Regional District | 10        | 9         | 0.33                            | 0.29        | -5.13                            | -6.95              |
| <b>TOTAL</b>                 | <b>69</b> | <b>69</b> | <b>0.21</b>                     | <b>0.20</b> | <b>0.00</b>                      | <b>-2.60</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Registered Podiatrists in British Columbia**  
**by Health Region by Age and Sex**  
**January 1994**

| Health Region                | 25-34     |          | 35-44     |          | 45-54     |          | 55-64    |          | 65 +     |          | Subtotal  |          | Unknown   | Total     |
|------------------------------|-----------|----------|-----------|----------|-----------|----------|----------|----------|----------|----------|-----------|----------|-----------|-----------|
|                              | M         | F        | M         | F        | M         | F        | M        | F        | M        | F        | M         | F        |           |           |
| 1 East Kootenay              | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 2 Central Kootenay           | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 4 North Okanagan             | 0         | 0        | 1         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 1         | 0        | 0         | 1         |
| 5 South Okanagan             | 2         | 0        | 1         | 0        | 0         | 0        | 0        | 0        | 1        | 0        | 4         | 0        | 0         | 4         |
| 6 South Central              | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 1         | 1         |
| 7 Upper Fraser Valley        | 0         | 0        | 1         | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 2         | 0        | 0         | 2         |
| 8 Central Fraser Valley      | 0         | 0        | 0         | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 1         | 0        | 0         | 1         |
| 9 Boundary                   | 2         | 0        | 3         | 0        | 2         | 0        | 0        | 0        | 1        | 0        | 8         | 0        | 1         | 9         |
| 10 Simon Fraser              | 0         | 1        | 0         | 0        | 1         | 0        | 1        | 0        | 0        | 0        | 2         | 1        | 1         | 4         |
| 11 Coast Garibaldi           | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 13 Central Vancouver Island  | 1         | 0        | 1         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 2         | 0        | 2         | 4         |
| 14 Upper Island              | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 15 Cariboo                   | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 16 Skeena                    | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 17 Peace River               | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 0         | 0         |
| 18 Northern Interior         | 0         | 0        | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0         | 0        | 1         | 1         |
| 20 Vancouver                 | 3         | 1        | 3         | 0        | 5         | 0        | 0        | 0        | 1        | 0        | 12        | 1        | 7         | 20        |
| 30 Burnaby                   | 0         | 0        | 2         | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 2         | 0        | 1         | 3         |
| 40 North Shore               | 0         | 0        | 0         | 1        | 2         | 0        | 0        | 0        | 1        | 0        | 3         | 1        | 1         | 5         |
| 50 Richmond                  | 1         | 0        | 0         | 0        | 3         | 0        | 0        | 0        | 0        | 0        | 4         | 0        | 1         | 5         |
| 60 Capital Regional District | 2         | 0        | 4         | 0        | 2         | 0        | 0        | 0        | 1        | 0        | 9         | 0        | 0         | 9         |
| <b>TOTAL</b>                 | <b>11</b> | <b>2</b> | <b>16</b> | <b>1</b> | <b>17</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>5</b> | <b>0</b> | <b>50</b> | <b>3</b> | <b>16</b> | <b>69</b> |

## **VI. NURSING SERVICES**





## LICENSED PRACTICAL NURSES

**Definition:** A licensed practical nurse

...may be employed in a wide variety of health care settings and may carry out such nursing duties related to the care of patients as is consistent with [their] training and ability. All such duties are to be carried out under the direction of a duly qualified physician who is attending the patient, or under the supervision of a graduate nurse who is rendering service to the patient, except in an emergency when the services of a Licensed Practical Nurse may be urgently required. Provided that the attending physician gives directions and assumes responsibility with respect to the ability of Licensed Practical Nurses (LPNs) to carry out such services in a satisfactory manner, LPNs may also undertake nursing service for patients in private homes.<sup>1</sup>

**Governing Statute:** Nurses (Licensed Practical) Act, Revised Statutes of British Columbia, 1979, Chapter 300; Nursing Statutes Amendment Act, 1988, Chapter 51, Sections 1-3; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 33-36; administered by the Ministry of Health.

**Governing Body:** British Columbia Council of Licensed Practical Nurses (BCCLPN). Only persons licensed by the BCCLPN may use the titles: *Licensed Practical Nurse* or *LPN*.

**Date of Record:** September 1991 and September 1993.

**Source of Data:** British Columbia Council of Licensed Practical Nurses (BCCLPN).

### **Preparation and Updating:**

The tables, derived from the register of the BCCLPN, include Licensed Practical Nurses who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when LPNs report employment in nursing and employment address is available. In 1991 and 1993, employment address was available for 82% and 86% of LPNs employed in nursing, respectively. Home address is used for the remainder, as well as for LPNs who are not employed in nursing.

### **Definition of Terms:**

#### **1. Licensed Practical Nurses**

Table 1 reports the number and number per 10,000 population of LPNs in British Columbia, as well as the average annual rates of change in these figures.

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<sup>1</sup> Adapted from information provided by the British Columbia Council of Licensed Practical Nurses. See also *National Occupational Classification 1992*, Major Group 32, No. 3233, Ottawa: Employment and Immigration Canada.

## **2. Age and Sex**

Age and sex information for LPNs in British Columbia, derived from the BCCLPN registration database, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

## **3. Employment Status**

Tables 3a and 3b report the number of LPNs and the number of LPNs per 10,000 population based on their employment status as noted on the BCCLPN annual licence renewal form. The categories used are:

- (a) Employed in Nursing;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) Seasonal/Casual
- (b) Employed in Other Field;
- (c) Not Employed.

## **4. Place of Employment**

Place of employment was reported by the registrant on the annual licence renewal form. Tables 4a and 4b report the number and number per 10,000 population of LPNs employed in nursing by the type of institution in which they are employed. The categories used are:

- (a) Acute Care General Hospital;
- (b) Activation/Rehabilitation Hospital;
- (c) Extended Care Hospital;
- (d) Other Long Term Care Facility/Nursing Home;
- (e) Psychiatric Hospital;
- (f) Visiting Care Agency/Home Care;
- (g) Community Health Agency;
- (h) Physician's Office/Family Practice Unit;
- (i) Educational Institution;
- (j) Business/Industry;
- (k) Other.

## **5. Field of Practice**

Field of practice was reported by the registrant on the annual licence renewal form. Tables 5a and 5b report the number and number per 10,000 population of LPNs employed in nursing by their field of practice. The categories used are:

- (a) Medical/Surgical General;
- (b) Medical/Surgical Specialties (e.g., ICU, OR, Emergency, Dialysis);
- (c) Maternal/Newborn;
- (d) Psychiatric;
- (e) Paediatric;
- (f) Geriatric;

- (g) Generalised Practice (e.g., Float Pool, Small General Hospital);
- (h) Teaching;
- (i) Administration;
- (j) Rehabilitation.

## 6. Job Title

Job title was reported by the registrant on the annual licence renewal form. Tables 6a and 6b report the number and number per 10,000 population of LPNs employed in nursing according to their job title. The categories used are:

- (a) Licensed Practical Nurse (LPN);
- (b) Long Term Care Aide/Nurses Aide (e.g., Patient Care Aide, Activity Aide);
- (c) Orderly;
- (d) Other.

## 7. Analysis of Change

Table 7 shows sources of change that affected the stock of LPNs from 1991 to 1993.

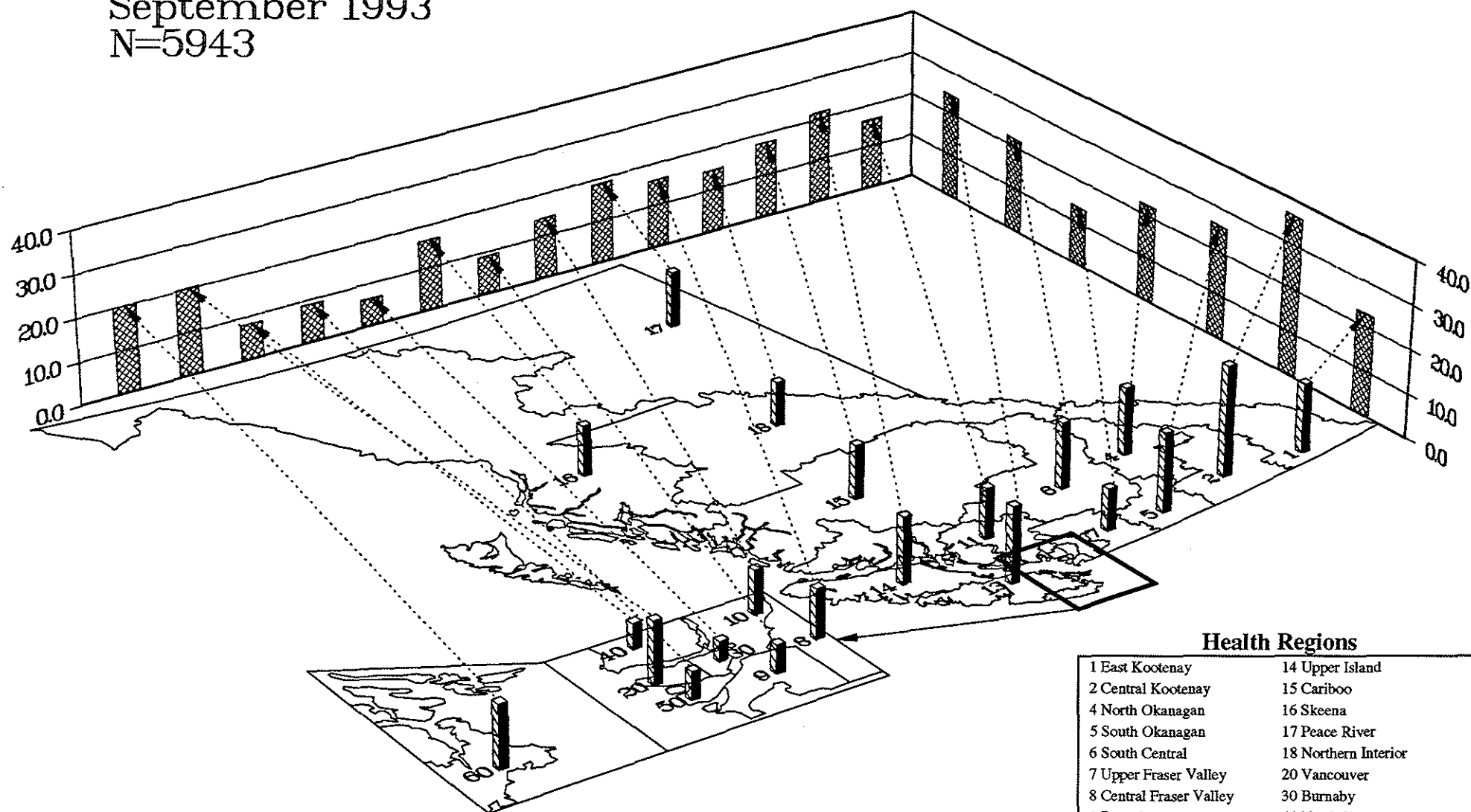
*New registrants* include LPNs who were licensed in September 1993 and who registered with the BCCLPN for the first time subsequent to September 1991. New registrants are recorded according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent LPNs who were not licensed in British Columbia in September 1991 but were licensed in the province in September 1993, and whose date of initial registration was before September 1991. Also included are LPNs who reported out-of-province addresses in September 1991, but who reported British Columbia addresses in September 1993.

*Attrition* describes LPNs who were included in the 1991 Licensed Practical Nurse stock, but who, because of death, retirement, out-of-province relocation or non-renewal of licence, were not included in the 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of LPNs among different Health Regions. The net migration total is therefore zero.

Licensed Practical Nurses  
per 10,000 Population  
by Health Region  
September 1993  
N=5943



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Licensed Practical Nurses in British Columbia**  
**by Health Region**  
**September 1991 and September 1993**

| Health Region                | Number            |              | Number per<br>10,000 Population |              | Average Annual<br>Rate of Change |                    |
|------------------------------|-------------------|--------------|---------------------------------|--------------|----------------------------------|--------------------|
|                              | 1991 <sup>1</sup> | 1993         | 1991                            | 1993         | Number <sup>2</sup>              | Ratio <sup>3</sup> |
| 1 East Kootenay              | 173               | 163          | 24.88                           | 23.10        | -2.93                            | -3.64              |
| 2 Central Kootenay           | 297               | 272          | 41.28                           | 36.50        | -4.30                            | -5.98              |
| 4 North Okanagan             | 238               | 234          | 24.65                           | 22.40        | -0.84                            | -4.66              |
| 5 South Okanagan             | 479               | 518          | 26.83                           | 26.03        | 3.99                             | -1.51              |
| 6 South Central              | 256               | 251          | 23.52                           | 22.04        | -0.98                            | -3.20              |
| 7 Upper Fraser Valley        | 244               | 234          | 15.64                           | 13.73        | -2.07                            | -6.28              |
| 8 Central Fraser Valley      | 311               | 305          | 17.64                           | 16.06        | -0.97                            | -4.58              |
| 9 Boundary                   | 375               | 341          | 10.67                           | 9.04         | -4.64                            | -7.96              |
| 10 Simon Fraser              | 294               | 284          | 16.02                           | 14.33        | -1.72                            | -5.41              |
| 11 Coast Garibaldi           | 108               | 104          | 18.10                           | 16.46        | -1.87                            | -4.64              |
| 13 Central Vancouver Island  | 522               | 508          | 26.91                           | 24.56        | -1.35                            | -4.47              |
| 14 Upper Island              | 220               | 220          | 22.73                           | 21.54        | 0.00                             | -2.67              |
| 15 Cariboo                   | 129               | 117          | 19.91                           | 17.78        | -4.76                            | -5.51              |
| 16 Skeena                    | 149               | 142          | 17.94                           | 16.78        | -2.38                            | -3.30              |
| 17 Peace River               | 117               | 114          | 20.01                           | 19.34        | -1.29                            | -1.68              |
| 18 Northern Interior         | 199               | 175          | 17.47                           | 15.12        | -6.22                            | -6.98              |
| 20 Vancouver                 | 989               | 995          | 20.70                           | 20.21        | 0.30                             | -1.19              |
| 30 Burnaby                   | 117               | 109          | 7.36                            | 6.58         | -3.48                            | -5.50              |
| 40 North Shore               | 146               | 136          | 9.22                            | 8.26         | -3.49                            | -5.35              |
| 50 Richmond                  | 132               | 121          | 10.42                           | 9.14         | -4.26                            | -6.35              |
| 60 Capital Regional District | 683               | 627          | 22.79                           | 20.12        | -4.19                            | -6.02              |
| <b>TOTAL</b>                 | <b>6,178</b>      | <b>5,970</b> | <b>18.81</b>                    | <b>17.24</b> | <b>-1.70</b>                     | <b>-4.25</b>       |

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net increase of 9 LPNs.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

**Table 2**  
**Licensed Practical Nurses in British Columbia**  
**by Health Region by Age and Sex**  
**September 1993**

| Health Region                | < 25     |            | 25-34     |            | 35-44      |              | 45-54      |              | 55-64     |            | 65 +     |           | Subtotal   |              | Unknown    | Total        |
|------------------------------|----------|------------|-----------|------------|------------|--------------|------------|--------------|-----------|------------|----------|-----------|------------|--------------|------------|--------------|
|                              | M        | F          | M         | F          | M          | F            | M          | F            | M         | F          | M        | F         | M          | F            |            |              |
| 1 East Kootenay              | 0        | 3          | 0         | 17         | 0          | 71           | 0          | 57           | 0         | 11         | 0        | 0         | 0          | 159          | 4          | 163          |
| 2 Central Kootenay           | 0        | 6          | 5         | 40         | 4          | 117          | 1          | 75           | 0         | 13         | 0        | 2         | 10         | 253          | 9          | 272          |
| 4 North Okanagan             | 0        | 2          | 0         | 26         | 6          | 91           | 4          | 69           | 1         | 28         | 0        | 2         | 11         | 218          | 5          | 234          |
| 5 South Okanagan             | 1        | 12         | 11        | 73         | 11         | 190          | 8          | 160          | 5         | 33         | 0        | 5         | 36         | 473          | 9          | 518          |
| 6 South Central              | 0        | 1          | 1         | 33         | 4          | 99           | 6          | 83           | 1         | 19         | 0        | 0         | 12         | 235          | 4          | 251          |
| 7 Upper Fraser Valley        | 0        | 8          | 0         | 53         | 5          | 77           | 2          | 61           | 4         | 19         | 0        | 1         | 11         | 219          | 4          | 234          |
| 8 Central Fraser Valley      | 0        | 5          | 1         | 43         | 4          | 134          | 6          | 79           | 2         | 21         | 0        | 4         | 13         | 286          | 6          | 305          |
| 9 Boundary                   | 1        | 13         | 3         | 41         | 4          | 119          | 2          | 121          | 2         | 27         | 1        | 4         | 13         | 325          | 3          | 341          |
| 10 Simon Fraser              | 0        | 8          | 6         | 47         | 7          | 86           | 8          | 93           | 1         | 18         | 0        | 2         | 22         | 254          | 8          | 284          |
| 11 Coast Garibaldi           | 0        | 2          | 2         | 25         | 0          | 43           | 0          | 23           | 0         | 9          | 0        | 0         | 2          | 102          | 0          | 104          |
| 13 Central Vancouver Island  | 0        | 10         | 0         | 78         | 5          | 225          | 4          | 135          | 1         | 36         | 0        | 7         | 10         | 491          | 7          | 508          |
| 14 Upper Island              | 0        | 4          | 2         | 49         | 0          | 76           | 2          | 55           | 0         | 27         | 0        | 0         | 4          | 211          | 5          | 220          |
| 15 Cariboo                   | 0        | 1          | 0         | 8          | 0          | 51           | 0          | 35           | 0         | 18         | 0        | 1         | 0          | 114          | 3          | 117          |
| 16 Skeena                    | 0        | 2          | 2         | 17         | 2          | 55           | 1          | 39           | 0         | 19         | 1        | 1         | 6          | 133          | 3          | 142          |
| 17 Peace River               | 0        | 0          | 0         | 16         | 1          | 49           | 0          | 34           | 0         | 13         | 0        | 1         | 1          | 113          | 0          | 114          |
| 18 Northern Interior         | 0        | 1          | 0         | 22         | 0          | 80           | 1          | 55           | 0         | 15         | 0        | 0         | 1          | 173          | 1          | 175          |
| 20 Vancouver                 | 1        | 44         | 37        | 184        | 49         | 252          | 54         | 228          | 19        | 89         | 1        | 9         | 161        | 806          | 28         | 995          |
| 30 Burnaby                   | 0        | 7          | 2         | 22         | 3          | 36           | 2          | 24           | 0         | 10         | 0        | 2         | 7          | 101          | 1          | 109          |
| 40 North Shore               | 0        | 2          | 0         | 29         | 2          | 48           | 2          | 33           | 0         | 17         | 0        | 0         | 4          | 129          | 3          | 136          |
| 50 Richmond                  | 0        | 3          | 5         | 18         | 6          | 37           | 2          | 36           | 0         | 10         | 1        | 2         | 14         | 106          | 1          | 121          |
| 60 Capital Regional District | 0        | 15         | 12        | 81         | 25         | 227          | 20         | 159          | 6         | 66         | 1        | 4         | 64         | 552          | 11         | 627          |
| <b>TOTAL</b>                 | <b>3</b> | <b>149</b> | <b>89</b> | <b>922</b> | <b>138</b> | <b>2,163</b> | <b>125</b> | <b>1,654</b> | <b>42</b> | <b>518</b> | <b>5</b> | <b>47</b> | <b>402</b> | <b>5,453</b> | <b>115</b> | <b>5,970</b> |

**Table 3a**  
**Licensed Practical Nurses in British Columbia**  
**by Health Region by Employment Status**  
**September 1993**

| Health Region                | Employed in Nursing |              |                     |              | Employed in<br>Other Field | Not<br>Employed | Unknown   | Total        |
|------------------------------|---------------------|--------------|---------------------|--------------|----------------------------|-----------------|-----------|--------------|
|                              | Full-Time           | Part-Time    | Seasonal/<br>Casual | Subtotal     |                            |                 |           |              |
| 1 East Kootenay              | 65                  | 31           | 36                  | 132          | 15                         | 15              | 1         | 163          |
| 2 Central Kootenay           | 100                 | 59           | 68                  | 227          | 11                         | 30              | 4         | 272          |
| 4 North Okanagan             | 95                  | 42           | 49                  | 186          | 20                         | 25              | 3         | 234          |
| 5 South Okanagan             | 222                 | 76           | 132                 | 430          | 26                         | 57              | 5         | 518          |
| 6 South Central              | 122                 | 21           | 55                  | 198          | 23                         | 29              | 1         | 251          |
| 7 Upper Fraser Valley        | 83                  | 47           | 55                  | 185          | 21                         | 26              | 2         | 234          |
| 8 Central Fraser Valley      | 102                 | 65           | 62                  | 229          | 26                         | 48              | 2         | 305          |
| 9 Boundary                   | 109                 | 69           | 72                  | 250          | 44                         | 43              | 4         | 341          |
| 10 Simon Fraser              | 99                  | 56           | 60                  | 215          | 26                         | 41              | 2         | 284          |
| 11 Coast Garibaldi           | 31                  | 25           | 23                  | 79           | 7                          | 18              | 0         | 104          |
| 13 Central Vancouver Island  | 172                 | 95           | 110                 | 377          | 56                         | 72              | 3         | 508          |
| 14 Upper Island              | 72                  | 49           | 43                  | 164          | 27                         | 29              | 0         | 220          |
| 15 Cariboo                   | 48                  | 16           | 28                  | 92           | 10                         | 15              | 0         | 117          |
| 16 Skeena                    | 59                  | 20           | 32                  | 111          | 12                         | 18              | 1         | 142          |
| 17 Peace River               | 41                  | 23           | 23                  | 87           | 11                         | 16              | 0         | 114          |
| 18 Northern Interior         | 57                  | 23           | 55                  | 135          | 19                         | 20              | 1         | 175          |
| 20 Vancouver                 | 485                 | 189          | 219                 | 893          | 50                         | 46              | 6         | 995          |
| 30 Burnaby                   | 52                  | 20           | 15                  | 87           | 10                         | 11              | 1         | 109          |
| 40 North Shore               | 63                  | 28           | 22                  | 113          | 13                         | 10              | 0         | 136          |
| 50 Richmond                  | 50                  | 15           | 26                  | 91           | 17                         | 13              | 0         | 121          |
| 60 Capital Regional District | 283                 | 105          | 108                 | 496          | 54                         | 72              | 5         | 627          |
| <b>TOTAL</b>                 | <b>2,410</b>        | <b>1,074</b> | <b>1,293</b>        | <b>4,777</b> | <b>498</b>                 | <b>654</b>      | <b>41</b> | <b>5,970</b> |

**Table 3b**  
**Licensed Practical Nurses in British Columbia**  
**per 10,000 Population by Health Region by Employment Status**  
**September 1993**

| Health Region                | Employed in Nursing |             |                     |              | Employed in<br>Other Field | Not<br>Employed | Unknown     | Total        |
|------------------------------|---------------------|-------------|---------------------|--------------|----------------------------|-----------------|-------------|--------------|
|                              | Full-Time           | Part-Time   | Seasonal/<br>Casual | Subtotal     |                            |                 |             |              |
| 1 East Kootenay              | 9.21                | 4.39        | 5.10                | 18.71        | 2.13                       | 2.13            | 0.14        | 23.10        |
| 2 Central Kootenay           | 13.42               | 7.92        | 9.12                | 30.46        | 1.48                       | 4.03            | 0.54        | 36.50        |
| 4 North Okanagan             | 9.10                | 4.02        | 4.69                | 17.81        | 1.91                       | 2.39            | 0.29        | 22.40        |
| 5 South Okanagan             | 11.15               | 3.82        | 6.63                | 21.60        | 1.31                       | 2.86            | 0.25        | 26.03        |
| 6 South Central              | 10.71               | 1.84        | 4.83                | 17.38        | 2.02                       | 2.55            | 0.09        | 22.04        |
| 7 Upper Fraser Valley        | 4.87                | 2.76        | 3.23                | 10.86        | 1.23                       | 1.53            | 0.12        | 13.73        |
| 8 Central Fraser Valley      | 5.37                | 3.42        | 3.26                | 12.06        | 1.37                       | 2.53            | 0.11        | 16.06        |
| 9 Boundary                   | 2.89                | 1.83        | 1.91                | 6.63         | 1.17                       | 1.14            | 0.11        | 9.04         |
| 10 Simon Fraser              | 5.00                | 2.83        | 3.03                | 10.85        | 1.31                       | 2.07            | 0.10        | 14.33        |
| 11 Coast Garibaldi           | 4.91                | 3.96        | 3.64                | 12.50        | 1.11                       | 2.85            | 0.00        | 16.46        |
| 13 Central Vancouver Island  | 8.32                | 4.59        | 5.32                | 18.23        | 2.71                       | 3.48            | 0.15        | 24.56        |
| 14 Upper Island              | 7.05                | 4.80        | 4.21                | 16.05        | 2.64                       | 2.84            | 0.00        | 21.54        |
| 15 Cariboo                   | 7.29                | 2.43        | 4.25                | 13.98        | 1.52                       | 2.28            | 0.00        | 17.78        |
| 16 Skeena                    | 6.97                | 2.36        | 3.78                | 13.12        | 1.42                       | 2.13            | 0.12        | 16.78        |
| 17 Peace River               | 6.96                | 3.90        | 3.90                | 14.76        | 1.87                       | 2.71            | 0.00        | 19.34        |
| 18 Northern Interior         | 4.92                | 1.99        | 4.75                | 11.66        | 1.64                       | 1.73            | 0.09        | 15.12        |
| 20 Vancouver                 | 9.85                | 3.84        | 4.45                | 18.14        | 1.02                       | 0.93            | 0.12        | 20.21        |
| 30 Burnaby                   | 3.14                | 1.21        | 0.91                | 5.25         | 0.60                       | 0.66            | 0.06        | 6.58         |
| 40 North Shore               | 3.83                | 1.70        | 1.34                | 6.86         | 0.79                       | 0.61            | 0.00        | 8.26         |
| 50 Richmond                  | 3.78                | 1.13        | 1.96                | 6.88         | 1.28                       | 0.98            | 0.00        | 9.14         |
| 60 Capital Regional District | 9.08                | 3.37        | 3.47                | 15.92        | 1.73                       | 2.31            | 0.16        | 20.12        |
| <b>TOTAL</b>                 | <b>6.96</b>         | <b>3.10</b> | <b>3.73</b>         | <b>13.80</b> | <b>1.44</b>                | <b>1.89</b>     | <b>0.12</b> | <b>17.24</b> |



**Table 4a**  
**Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Place of Employment**  
**September 1993**

| Health Region                | Institutional Care                   |                                   |                              |   |                         |              | Visiting<br>Care<br>Agency/<br>Home Care | Community<br>Health<br>Agency | Physician's                           |                            |                       |            |            |              |
|------------------------------|--------------------------------------|-----------------------------------|------------------------------|---|-------------------------|--------------|--|-------------------------------|---------------------------------------|----------------------------|-----------------------|------------|------------|--------------|
|                              | Acute<br>Care<br>General<br>Hospital | Activation/<br>Rehab.<br>Hospital | Extended<br>Care<br>Hospital | Other LTC<br>Facility/<br>Nursing<br>Home | Psychiatric<br>Hospital | Subtotal     |  |                               | Office/<br>Family<br>Practice<br>Unit | Educational<br>Institution | Business/<br>Industry | Other      | Unknown    | Total        |
| 1 East Kootenay              | 93                                   | 0                                 | 15                           | 10  | 0                       | 118          | 3  | 1                             | 5                                     | 0                          | 0                     | 2          | 3          | 132          |
| 2 Central Kootenay           | 132                                  | 1                                 | 48                           | 22  | 0                       | 203          | 4  | 0                             | 12                                    | 0                          | 0                     | 4          | 4          | 227          |
| 4 North Okanagan             | 98                                   | 0                                 | 58                           | 18  | 0                       | 174          | 6  | 1                             | 1                                     | 0                          | 0                     | 2          | 2          | 186          |
| 5 South Okanagan             | 235                                  | 3                                 | 114                          | 33  | 1                       | 386          | 22                                       | 1                             | 6                                     | 1                          | 0                     | 8          | 6          | 430          |
| 6 South Central              | 148                                  | 1                                 | 16                           | 12  | 0                       | 177          | 6  | 2                             | 7                                     | 0                          | 0                     | 3          | 3          | 198          |
| 7 Upper Fraser Valley        | 135                                  | 2                                 | 11                           | 25  | 1                       | 174          | 4  | 0                             | 2                                     | 0                          | 1                     | 2          | 2          | 185          |
| 8 Central Fraser Valley      | 159                                  | 3                                 | 19                           | 26  | 2                       | 209          | 8  | 2                             | 4                                     | 1                          | 1                     | 2          | 2          | 229          |
| 9 Boundary                   | 149                                  | 5                                 | 5                            | 49  | 0                       | 208          | 9  | 1                             | 15                                    | 4                          | 0                     | 5          | 8          | 250          |
| 10 Simon Fraser              | 158                                  | 5                                 | 7                            | 10  | 9                       | 189          | 6  | 3                             | 6                                     | 1                          | 0                     | 7          | 3          | 215          |
| 11 Coast Garibaldi           | 42                                   | 0                                 | 15                           | 15  | 0                       | 72           | 1  | 1                             | 3                                     | 0                          | 0                     | 1          | 1          | 79           |
| 13 Central Vancouver Island  | 187                                  | 2                                 | 88                           | 56  | 1                       | 334          | 21                                       | 3                             | 6                                     | 0                          | 0                     | 10         | 3          | 377          |
| 14 Upper Island              | 103                                  | 0                                 | 17                           | 17  | 0                       | 137          | 9  | 3                             | 4                                     | 4                          | 0                     | 4          | 3          | 164          |
| 15 Cariboo                   | 61                                   | 0                                 | 18                           | 2   | 0                       | 81           | 0  | 0                             | 4                                     | 0                          | 0                     | 4          | 3          | 92           |
| 16 Skeena                    | 86                                   | 0                                 | 5                            | 9   | 0                       | 100          | 1  | 1                             | 3                                     | 0                          | 0                     | 2          | 4          | 111          |
| 17 Peace River               | 57                                   | 1                                 | 6                            | 9   | 0                       | 73           | 0  | 2                             | 8                                     | 0                          | 0                     | 2          | 2          | 87           |
| 18 Northern Interior         | 96                                   | 0                                 | 2                            | 18  | 0                       | 116          | 1  | 0                             | 11                                    | 0                          | 0                     | 2          | 5          | 135          |
| 20 Vancouver                 | 431                                  | 70                                | 100                          | 124                                       | 3                       | 728          | 57                                       | 28                            | 8                                     | 11                         | 5                     | 27         | 29         | 893          |
| 30 Burnaby                   | 18                                   | 0                                 | 5                            | 33  | 1                       | 57           | 5  | 6                             | 5                                     | 3                          | 0                     | 6          | 5          | 87           |
| 40 North Shore               | 77                                   | 3                                 | 7                            | 12  | 0                       | 99           | 1  | 3                             | 2                                     | 3                          | 0                     | 1          | 4          | 113          |
| 50 Richmond                  | 64                                   | 2                                 | 0                            | 12  | 1                       | 79           | 3  | 2                             | 2                                     | 1                          | 0                     | 1          | 3          | 91           |
| 60 Capital Regional District | 160                                  | 78                                | 124                          | 58  | 2                       | 422          | 27                                       | 5                             | 9                                     | 2                          | 3                     | 19         | 9          | 496          |
| <b>TOTAL</b>                 | <b>2,689</b>                         | <b>176</b>                        | <b>680</b>                   | <b>570</b>                                | <b>21</b>               | <b>4,136</b> | <b>194</b>                               | <b>65</b>                     | <b>123</b>                            | <b>31</b>                  | <b>10</b>             | <b>114</b> | <b>104</b> | <b>4,777</b> |

<sup>1</sup> Excludes 498 LPNs who are employed in other fields, 654 who are not employed and 41 who did not indicate their employment status.

**Table 4b**  
**Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Place of Employment**  
**September 1993**

| Health Region                | Institutional Care                   |                                   |                              |   |                         |              | Physician's                              |                               |                                       |                            |                       |             |             | Total        |
|------------------------------|--------------------------------------|-----------------------------------|------------------------------|---|-------------------------|--------------|--|-------------------------------|---------------------------------------|----------------------------|-----------------------|-------------|-------------|--------------|
|                              | Acute<br>Care<br>General<br>Hospital | Activation/<br>Rehab.<br>Hospital | Extended<br>Care<br>Hospital | Other LTC<br>Facility/<br>Nursing<br>Home | Psychiatric<br>Hospital | Subtotal     | Visiting<br>Care<br>Agency/<br>Home Care | Community<br>Health<br>Agency | Office/<br>Family<br>Practice<br>Unit | Educational<br>Institution | Business/<br>Industry | Other       | Unknown     |              |
| 1 East Kootenay              | 13.18                                | 0.00                              | 2.13                         | 1.42                                      | 0.00                    | 16.72        | 0.43                                     | 0.14                          | 0.71                                  | 0.00                       | 0.00                  | 0.28        | 0.43        | 18.71        |
| 2 Central Kootenay           | 17.71                                | 0.13                              | 6.44                         | 2.95                                      | 0.00                    | 27.24        | 0.54                                     | 0.00                          | 1.61                                  | 0.00                       | 0.00                  | 0.54        | 0.54        | 30.46        |
| 4 North Okanagan             | 9.38                                 | 0.00                              | 5.55                         | 1.72                                      | 0.00                    | 16.66        | 0.57                                     | 0.10                          | 0.10                                  | 0.00                       | 0.00                  | 0.19        | 0.19        | 17.81        |
| 5 South Okanagan             | 11.81                                | 0.15                              | 5.73                         | 1.66                                      | 0.05                    | 19.39        | 1.11                                     | 0.05                          | 0.30                                  | 0.05                       | 0.00                  | 0.40        | 0.30        | 21.60        |
| 6 South Central              | 12.99                                | 0.09                              | 1.40                         | 1.05                                      | 0.00                    | 15.54        | 0.53                                     | 0.18                          | 0.61                                  | 0.00                       | 0.00                  | 0.26        | 0.26        | 17.38        |
| 7 Upper Fraser Valley        | 7.92                                 | 0.12                              | 0.65                         | 1.47                                      | 0.06                    | 10.21        | 0.23                                     | 0.00                          | 0.12                                  | 0.00                       | 0.06                  | 0.12        | 0.12        | 10.86        |
| 8 Central Fraser Valley      | 8.37                                 | 0.16                              | 1.00                         | 1.37                                      | 0.11                    | 11.01        | 0.42                                     | 0.11                          | 0.21                                  | 0.05                       | 0.05                  | 0.11        | 0.11        | 12.06        |
| 9 Boundary                   | 3.95                                 | 0.13                              | 0.13                         | 1.30                                      | 0.00                    | 5.52         | 0.24                                     | 0.03                          | 0.40                                  | 0.11                       | 0.00                  | 0.13        | 0.21        | 6.63         |
| 10 Simon Fraser              | 7.97                                 | 0.25                              | 0.35                         | 0.50                                      | 0.45                    | 9.54         | 0.30                                     | 0.15                          | 0.30                                  | 0.05                       | 0.00                  | 0.35        | 0.15        | 10.85        |
| 11 Coast Garibaldi           | 6.65                                 | 0.00                              | 2.37                         | 2.37                                      | 0.00                    | 11.39        | 0.16                                     | 0.16                          | 0.47                                  | 0.00                       | 0.00                  | 0.16        | 0.16        | 12.50        |
| 13 Central Vancouver Island  | 9.04                                 | 0.10                              | 4.25                         | 2.71                                      | 0.05                    | 16.15        | 1.02                                     | 0.15                          | 0.29                                  | 0.00                       | 0.00                  | 0.48        | 0.15        | 18.23        |
| 14 Upper Island              | 10.08                                | 0.00                              | 1.66                         | 1.66                                      | 0.00                    | 13.41        | 0.88                                     | 0.29                          | 0.39                                  | 0.39                       | 0.00                  | 0.39        | 0.29        | 16.05        |
| 15 Cariboo                   | 9.27                                 | 0.00                              | 2.73                         | 0.30                                      | 0.00                    | 12.31        | 0.00                                     | 0.00                          | 0.61                                  | 0.00                       | 0.00                  | 0.61        | 0.46        | 13.98        |
| 16 Skeena                    | 10.16                                | 0.00                              | 0.59                         | 1.06                                      | 0.00                    | 11.82        | 0.12                                     | 0.12                          | 0.35                                  | 0.00                       | 0.00                  | 0.24        | 0.47        | 13.12        |
| 17 Peace River               | 9.67                                 | 0.17                              | 1.02                         | 1.53                                      | 0.00                    | 12.38        | 0.00                                     | 0.34                          | 1.36                                  | 0.00                       | 0.00                  | 0.34        | 0.34        | 14.76        |
| 18 Northern Interior         | 8.29                                 | 0.00                              | 0.17                         | 1.56                                      | 0.00                    | 10.02        | 0.09                                     | 0.00                          | 0.95                                  | 0.00                       | 0.00                  | 0.17        | 0.43        | 11.66        |
| 20 Vancouver                 | 8.75                                 | 1.42                              | 2.03                         | 2.52                                      | 0.06                    | 14.79        | 1.16                                     | 0.57                          | 0.16                                  | 0.22                       | 0.10                  | 0.55        | 0.59        | 18.14        |
| 30 Burnaby                   | 1.09                                 | 0.00                              | 0.30                         | 1.99                                      | 0.06                    | 3.44         | 0.30                                     | 0.36                          | 0.30                                  | 0.18                       | 0.00                  | 0.36        | 0.30        | 5.25         |
| 40 North Shore               | 4.68                                 | 0.18                              | 0.43                         | 0.73                                      | 0.00                    | 6.01         | 0.06                                     | 0.18                          | 0.12                                  | 0.18                       | 0.00                  | 0.06        | 0.24        | 6.86         |
| 50 Richmond                  | 4.84                                 | 0.15                              | 0.00                         | 0.91                                      | 0.08                    | 5.97         | 0.23                                     | 0.15                          | 0.15                                  | 0.08                       | 0.00                  | 0.08        | 0.23        | 6.88         |
| 60 Capital Regional District | 5.14                                 | 2.50                              | 3.98                         | 1.86                                      | 0.06                    | 13.54        | 0.87                                     | 0.16                          | 0.29                                  | 0.06                       | 0.10                  | 0.61        | 0.29        | 15.92        |
| <b>TOTAL</b>                 | <b>7.77</b>                          | <b>0.51</b>                       | <b>1.96</b>                  | <b>1.65</b>                               | <b>0.06</b>             | <b>11.95</b> | <b>0.56</b>                              | <b>0.19</b>                   | <b>0.36</b>                           | <b>0.09</b>                | <b>0.03</b>           | <b>0.33</b> | <b>0.30</b> | <b>13.80</b> |

<sup>1</sup> Excludes 498 LPNs who are employed in other fields, 654 who are not employed and 41 who did not indicate their employment status.

**Table 5a**  
**Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Field of Practice**  
**September 1993**

| Health Region                | Medical/<br>Surgical<br>General | Medical/<br>Surgical<br>Specialties | Maternal/<br>Newborn | Psychiatric | Paediatric | Geriatric    | Generalized<br>Practice | Teaching  | Admin-<br>istration | Rehab-<br>ilitation | Other      | Unknown    | Total        |
|------------------------------|---------------------------------|-------------------------------------|----------------------|-------------|------------|--------------|-------------------------|-----------|---------------------|---------------------|------------|------------|--------------|
| 1 East Kootenay              | 52                              | 4                                   | 0                    | 0           | 0          | 28           | 27                      | 1         | 1                   | 3                   | 7          | 9          | 132          |
| 2 Central Kootenay           | 70                              | 5                                   | 1                    | 2           | 5          | 76           | 33                      | 0         | 0                   | 3                   | 9          | 23         | 227          |
| 4 North Okanagan             | 53                              | 2                                   | 0                    | 1           | 8          | 77           | 19                      | 0         | 2                   | 0                   | 7          | 17         | 186          |
| 5 South Okanagan             | 155                             | 12                                  | 3                    | 7           | 6          | 146          | 33                      | 0         | 0                   | 14                  | 25         | 29         | 430          |
| 6 South Central              | 84                              | 11                                  | 4                    | 1           | 9          | 30           | 21                      | 1         | 0                   | 7                   | 15         | 15         | 198          |
| 7 Upper Fraser Valley        | 90                              | 2                                   | 2                    | 5           | 1          | 33           | 21                      | 0         | 0                   | 11                  | 9          | 11         | 185          |
| 8 Central Fraser Valley      | 112                             | 7                                   | 4                    | 4           | 1          | 55           | 12                      | 2         | 3                   | 4                   | 10         | 15         | 229          |
| 9 Boundary                   | 96                              | 16                                  | 3                    | 3           | 10         | 65           | 16                      | 2         | 3                   | 5                   | 13         | 18         | 250          |
| 10 Simon Fraser              | 83                              | 14                                  | 16                   | 7           | 2          | 36           | 11                      | 0         | 0                   | 9                   | 27         | 10         | 215          |
| 11 Coast Garibaldi           | 28                              | 1                                   | 0                    | 0           | 1          | 26           | 12                      | 0         | 1                   | 1                   | 4          | 5          | 79           |
| 13 Central Vancouver Island  | 120                             | 6                                   | 2                    | 5           | 7          | 160          | 30                      | 1         | 2                   | 5                   | 18         | 21         | 377          |
| 14 Upper Island              | 66                              | 5                                   | 0                    | 0           | 0          | 53           | 17                      | 2         | 0                   | 0                   | 9          | 12         | 164          |
| 15 Cariboo                   | 34                              | 8                                   | 3                    | 0           | 0          | 18           | 13                      | 0         | 0                   | 1                   | 5          | 10         | 92           |
| 16 Skeena                    | 56                              | 5                                   | 4                    | 1           | 4          | 15           | 9                       | 0         | 1                   | 1                   | 6          | 9          | 111          |
| 17 Peace River               | 39                              | 0                                   | 1                    | 1           | 1          | 14           | 14                      | 0         | 0                   | 1                   | 7          | 9          | 87           |
| 18 Northern Interior         | 47                              | 3                                   | 7                    | 3           | 5          | 18           | 29                      | 1         | 3                   | 2                   | 7          | 10         | 135          |
| 20 Vancouver                 | 236                             | 57                                  | 25                   | 11          | 37         | 253          | 41                      | 4         | 13                  | 61                  | 71         | 84         | 893          |
| 30 Burnaby                   | 10                              | 1                                   | 0                    | 5           | 2          | 42           | 3                       | 1         | 0                   | 0                   | 15         | 8          | 87           |
| 40 North Shore               | 49                              | 9                                   | 5                    | 2           | 2          | 17           | 13                      | 1         | 0                   | 5                   | 5          | 5          | 113          |
| 50 Richmond                  | 52                              | 2                                   | 0                    | 1           | 1          | 10           | 7                       | 0         | 0                   | 4                   | 9          | 5          | 91           |
| 60 Capital Regional District | 102                             | 28                                  | 1                    | 9           | 2          | 197          | 17                      | 3         | 8                   | 55                  | 40         | 34         | 496          |
| <b>TOTAL</b>                 | <b>1,634</b>                    | <b>198</b>                          | <b>81</b>            | <b>68</b>   | <b>104</b> | <b>1,369</b> | <b>398</b>              | <b>19</b> | <b>37</b>           | <b>192</b>          | <b>318</b> | <b>359</b> | <b>4,777</b> |

<sup>1</sup> Excludes 498 LPNs who are employed in other fields, 654 who are not employed and 41 who did not indicate their employment status.

**Table 5b**  
**Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Field of Practice**  
**September 1993**

| Health Region                | Medical/<br>Surgical<br>General | Medical/<br>Surgical<br>Specialties | Maternal/<br>Newborn | Psychiatric | Paediatric  | Geriatric   | Generalized<br>Practice | Teaching    | Admin-<br>istration | Rehab-<br>ilitation | Other       | Unknown     | Total        |
|------------------------------|---------------------------------|-------------------------------------|----------------------|-------------|-------------|-------------|-------------------------|-------------|---------------------|---------------------|-------------|-------------|--------------|
| 1 East Kootenay              | 7.37                            | 0.57                                | 0.00                 | 0.00        | 0.00        | 3.97        | 3.83                    | 0.14        | 0.14                | 0.43                | 0.99        | 1.28        | 18.71        |
| 2 Central Kootenay           | 9.39                            | 0.67                                | 0.13                 | 0.27        | 0.67        | 10.20       | 4.43                    | 0.00        | 0.00                | 0.40                | 1.21        | 3.09        | 30.46        |
| 4 North Okanagan             | 5.07                            | 0.19                                | 0.00                 | 0.10        | 0.77        | 7.37        | 1.82                    | 0.00        | 0.19                | 0.00                | 0.67        | 1.63        | 17.81        |
| 5 South Okanagan             | 7.79                            | 0.60                                | 0.15                 | 0.35        | 0.30        | 7.34        | 1.66                    | 0.00        | 0.00                | 0.70                | 1.26        | 1.46        | 21.60        |
| 6 South Central              | 7.38                            | 0.97                                | 0.35                 | 0.09        | 0.79        | 2.63        | 1.84                    | 0.09        | 0.00                | 0.61                | 1.32        | 1.32        | 17.38        |
| 7 Upper Fraser Valley        | 5.28                            | 0.12                                | 0.12                 | 0.29        | 0.06        | 1.94        | 1.23                    | 0.00        | 0.00                | 0.65                | 0.53        | 0.65        | 10.86        |
| 8 Central Fraser Valley      | 5.90                            | 0.37                                | 0.21                 | 0.21        | 0.05        | 2.90        | 0.63                    | 0.11        | 0.16                | 0.21                | 0.53        | 0.79        | 12.06        |
| 9 Boundary                   | 2.55                            | 0.42                                | 0.08                 | 0.08        | 0.27        | 1.72        | 0.42                    | 0.05        | 0.08                | 0.13                | 0.34        | 0.48        | 6.63         |
| 10 Simon Fraser              | 4.19                            | 0.71                                | 0.81                 | 0.35        | 0.10        | 1.82        | 0.56                    | 0.00        | 0.00                | 0.45                | 1.36        | 0.50        | 10.85        |
| 11 Coast Garibaldi           | 4.43                            | 0.16                                | 0.00                 | 0.00        | 0.16        | 4.11        | 1.90                    | 0.00        | 0.16                | 0.16                | 0.63        | 0.79        | 12.50        |
| 13 Central Vancouver Island  | 5.80                            | 0.29                                | 0.10                 | 0.24        | 0.34        | 7.74        | 1.45                    | 0.05        | 0.10                | 0.24                | 0.87        | 1.02        | 18.23        |
| 14 Upper Island              | 6.46                            | 0.49                                | 0.00                 | 0.00        | 0.00        | 5.19        | 1.66                    | 0.20        | 0.00                | 0.00                | 0.88        | 1.17        | 16.05        |
| 15 Cariboo                   | 5.17                            | 1.22                                | 0.46                 | 0.00        | 0.00        | 2.73        | 1.98                    | 0.00        | 0.00                | 0.15                | 0.76        | 1.52        | 13.98        |
| 16 Skeena                    | 6.62                            | 0.59                                | 0.47                 | 0.12        | 0.47        | 1.77        | 1.06                    | 0.00        | 0.12                | 0.12                | 0.71        | 1.06        | 13.12        |
| 17 Peace River               | 6.62                            | 0.00                                | 0.17                 | 0.17        | 0.17        | 2.38        | 2.38                    | 0.00        | 0.00                | 0.17                | 1.19        | 1.53        | 14.76        |
| 18 Northern Interior         | 4.06                            | 0.26                                | 0.60                 | 0.26        | 0.43        | 1.56        | 2.51                    | 0.09        | 0.26                | 0.17                | 0.60        | 0.86        | 11.66        |
| 20 Vancouver                 | 4.79                            | 1.16                                | 0.51                 | 0.22        | 0.75        | 5.14        | 0.83                    | 0.08        | 0.26                | 1.24                | 1.44        | 1.71        | 18.14        |
| 30 Burnaby                   | 0.60                            | 0.06                                | 0.00                 | 0.30        | 0.12        | 2.53        | 0.18                    | 0.06        | 0.00                | 0.00                | 0.91        | 0.48        | 5.25         |
| 40 North Shore               | 2.98                            | 0.55                                | 0.30                 | 0.12        | 0.12        | 1.03        | 0.79                    | 0.06        | 0.00                | 0.30                | 0.30        | 0.30        | 6.86         |
| 50 Richmond                  | 3.93                            | 0.15                                | 0.00                 | 0.08        | 0.08        | 0.76        | 0.53                    | 0.00        | 0.00                | 0.30                | 0.68        | 0.38        | 6.88         |
| 60 Capital Regional District | 3.27                            | 0.90                                | 0.03                 | 0.29        | 0.06        | 6.32        | 0.55                    | 0.10        | 0.26                | 1.77                | 1.28        | 1.09        | 15.92        |
| <b>TOTAL</b>                 | <b>4.72</b>                     | <b>0.57</b>                         | <b>0.23</b>          | <b>0.20</b> | <b>0.30</b> | <b>3.95</b> | <b>1.15</b>             | <b>0.05</b> | <b>0.11</b>         | <b>0.55</b>         | <b>0.92</b> | <b>1.04</b> | <b>13.80</b> |

<sup>1</sup> Excludes 498 LPNs who are employed in other fields, 654 who are not employed and 41 who did not indicate their employment status.

**Table 6a**  
**Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Job Title**  
**September 1993**

| Health Region                | LPN          | LTC Aide/<br>Nurses<br>Aide | Orderly   | Other      | Unknown    | Total        |
|------------------------------|--------------|-----------------------------|-----------|------------|------------|--------------|
| 1 East Kootenay              | 96           | 18                          | 0         | 11         | 7          | 132          |
| 2 Central Kootenay           | 156          | 43                          | 0         | 15         | 13         | 227          |
| 4 North Okanagan             | 143          | 18                          | 5         | 13         | 7          | 186          |
| 5 South Okanagan             | 346          | 31                          | 16        | 23         | 14         | 430          |
| 6 South Central              | 137          | 24                          | 4         | 24         | 9          | 198          |
| 7 Upper Fraser Valley        | 134          | 22                          | 1         | 22         | 6          | 185          |
| 8 Central Fraser Valley      | 165          | 26                          | 2         | 25         | 11         | 229          |
| 9 Boundary                   | 190          | 24                          | 0         | 29         | 7          | 250          |
| 10 Simon Fraser              | 163          | 11                          | 4         | 31         | 6          | 215          |
| 11 Coast Garibaldi           | 66           | 4                           | 0         | 5          | 4          | 79           |
| 13 Central Vancouver Island  | 278          | 58                          | 0         | 30         | 11         | 377          |
| 14 Upper Island              | 111          | 32                          | 0         | 17         | 4          | 164          |
| 15 Cariboo                   | 74           | 5                           | 0         | 8          | 5          | 92           |
| 16 Skeena                    | 94           | 7                           | 0         | 7          | 3          | 111          |
| 17 Peace River               | 69           | 7                           | 0         | 6          | 5          | 87           |
| 18 Northern Interior         | 94           | 16                          | 1         | 17         | 7          | 135          |
| 20 Vancouver                 | 679          | 50                          | 18        | 95         | 51         | 893          |
| 30 Burnaby                   | 51           | 13                          | 0         | 20         | 3          | 87           |
| 40 North Shore               | 85           | 11                          | 0         | 10         | 7          | 113          |
| 50 Richmond                  | 74           | 4                           | 0         | 8          | 5          | 91           |
| 60 Capital Regional District | 347          | 54                          | 9         | 61         | 25         | 496          |
| <b>TOTAL</b>                 | <b>3,552</b> | <b>478</b>                  | <b>60</b> | <b>477</b> | <b>210</b> | <b>4,777</b> |

<sup>1</sup> Excludes 498 LPNs who are employed in other fields, 654 who are not employed and 41 who did not indicate their employment status.

**Table 6b**  
**Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Job Title**  
**September 1993**

| Health Region                | LPN          | LTC Aide/<br>Nurses<br>Aide | Orderly     | Other       | Unknown     | Total        |
|------------------------------|--------------|-----------------------------|-------------|-------------|-------------|--------------|
| 1 East Kootenay              | 13.60        | 2.55                        | 0.00        | 1.56        | 0.99        | 18.71        |
| 2 Central Kootenay           | 20.93        | 5.77                        | 0.00        | 2.01        | 1.74        | 30.46        |
| 4 North Okanagan             | 13.69        | 1.72                        | 0.48        | 1.24        | 0.67        | 17.81        |
| 5 South Okanagan             | 17.38        | 1.56                        | 0.80        | 1.16        | 0.70        | 21.60        |
| 6 South Central              | 12.03        | 2.11                        | 0.35        | 2.11        | 0.79        | 17.38        |
| 7 Upper Fraser Valley        | 7.86         | 1.29                        | 0.06        | 1.29        | 0.35        | 10.86        |
| 8 Central Fraser Valley      | 8.69         | 1.37                        | 0.11        | 1.32        | 0.58        | 12.06        |
| 9 Boundary                   | 5.04         | 0.64                        | 0.00        | 0.77        | 0.19        | 6.63         |
| 10 Simon Fraser              | 8.23         | 0.56                        | 0.20        | 1.56        | 0.30        | 10.85        |
| 11 Coast Garibaldi           | 10.45        | 0.63                        | 0.00        | 0.79        | 0.63        | 12.50        |
| 13 Central Vancouver Island  | 13.44        | 2.80                        | 0.00        | 1.45        | 0.53        | 18.23        |
| 14 Upper Island              | 10.87        | 3.13                        | 0.00        | 1.66        | 0.39        | 16.05        |
| 15 Cariboo                   | 11.24        | 0.76                        | 0.00        | 1.22        | 0.76        | 13.98        |
| 16 Skeena                    | 11.11        | 0.83                        | 0.00        | 0.83        | 0.35        | 13.12        |
| 17 Peace River               | 11.71        | 1.19                        | 0.00        | 1.02        | 0.85        | 14.76        |
| 18 Northern Interior         | 8.12         | 1.38                        | 0.09        | 1.47        | 0.60        | 11.66        |
| 20 Vancouver                 | 13.79        | 1.02                        | 0.37        | 1.93        | 1.04        | 18.14        |
| 30 Burnaby                   | 3.08         | 0.78                        | 0.00        | 1.21        | 0.18        | 5.25         |
| 40 North Shore               | 5.16         | 0.67                        | 0.00        | 0.61        | 0.43        | 6.86         |
| 50 Richmond                  | 5.59         | 0.30                        | 0.00        | 0.60        | 0.38        | 6.88         |
| 60 Capital Regional District | 11.14        | 1.73                        | 0.29        | 1.96        | 0.80        | 15.92        |
| <b>TOTAL</b>                 | <b>10.26</b> | <b>1.38</b>                 | <b>0.17</b> | <b>1.38</b> | <b>0.61</b> | <b>13.80</b> |

<sup>1</sup> Excludes 498 LPNs who are employed in other fields, 654 who are not employed and 41 who did not indicate their employment status.

**Table 7**  
**Analysis of Change in the Number of Licensed Practical Nurses in British Columbia**  
**by Health Region**  
**September 1991 to September 1993**

| Health Region                | September 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |          |            | Reactivation <sup>3</sup> | Attrition <sup>*</sup> | Net Intra-provincial Migration | September 1993 |
|------------------------------|-----------------------------|---|--------------|---------------|----------|------------|---------------------------|------------------------|--------------------------------|----------------|
|                              |                             | B.C.  | Other Canada | Other Country | Unknown  | Subtotal   |                           |                        |                                |                |
| 1 East Kootenay              | 173                         | 4   | 4            | 0             | 0        | 8          | 7                         | 25                     | 0                              | 163            |
| 2 Central Kootenay           | 297                         | 10  | 2            | 0             | 0        | 12         | 10                        | 45                     | -2                             | 272            |
| 4 North Okanagan             | 238                         | 3   | 7            | 0             | 0        | 10         | 13                        | 34                     | 7                              | 234            |
| 5 South Okanagan             | 479                         | 43  | 19           | 0             | 0        | 62         | 25                        | 62                     | 14                             | 518            |
| 6 South Central              | 256                         | 4   | 10           | 1             | 0        | 15         | 9                         | 35                     | 6                              | 251            |
| 7 Upper Fraser Valley        | 244                         | 10  | 15           | 2             | 0        | 27         | 6                         | 48                     | 5                              | 234            |
| 8 Central Fraser Valley      | 311                         | 20  | 5            | 3             | 1        | 29         | 20                        | 56                     | 1                              | 305            |
| 9 Boundary                   | 375                         | 21  | 15           | 3             | 0        | 39         | 18                        | 62                     | -29                            | 341            |
| 10 Simon Fraser              | 294                         | 15  | 12           | 5             | 0        | 32         | 14                        | 43                     | -13                            | 284            |
| 11 Coast Garibaldi           | 108                         | 5   | 3            | 1             | 0        | 9          | 6                         | 14                     | -5                             | 104            |
| 13 Central Vancouver Island  | 522                         | 26  | 10           | 0             | 0        | 36         | 30                        | 91                     | 11                             | 508            |
| 14 Upper Island              | 220                         | 11  | 8            | 2             | 0        | 21         | 8                         | 41                     | 12                             | 220            |
| 15 Cariboo                   | 129                         | 5   | 0            | 0             | 1        | 6          | 1                         | 22                     | 3                              | 117            |
| 16 Skeena                    | 149                         | 7   | 5            | 0             | 0        | 12         | 5                         | 20                     | -4                             | 142            |
| 17 Peace River               | 117                         | 1   | 6            | 0             | 0        | 7          | 10                        | 19                     | -1                             | 114            |
| 18 Northern Interior         | 199                         | 4   | 5            | 0             | 0        | 9          | 15                        | 45                     | -3                             | 175            |
| 20 Vancouver                 | 989                         | 76  | 27           | 13            | 2        | 118        | 53                        | 190                    | 25                             | 995            |
| 30 Burnaby                   | 117                         | 11  | 6            | 2             | 0        | 19         | 4                         | 28                     | -3                             | 109            |
| 40 North Shore               | 146                         | 7   | 1            | 2             | 0        | 10         | 7                         | 23                     | -4                             | 136            |
| 50 Richmond                  | 132                         | 8   | 4            | 4             | 0        | 16         | 8                         | 24                     | -11                            | 121            |
| 60 Capital Regional District | 683                         | 30  | 22           | 0             | 0        | 52         | 23                        | 122                    | -9                             | 627            |
| <b>TOTAL</b>                 | <b>6,178</b>                | <b>321</b>  | <b>186</b>   | <b>38</b>     | <b>4</b> | <b>549</b> | <b>292</b>                | <b>1,049</b>           | <b>0</b>                       | <b>5,970</b>   |

<sup>1</sup> Licensed Practical Nurses who reported B.C. addresses and were licensed in September 1993 and whose date of initial registration was after September 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net increase of 9 LPNs.

<sup>3</sup> Licensed Practical Nurses who reported B.C. addresses and were licensed in September 1993 but not in September 1991 and who were registered for the first time before September 1991.

<sup>\*</sup> Licensed Practical Nurses who reported B.C. addresses and were licensed in September 1991 but not in September 1993.





## REGISTERED NURSES

**Definition:** A registered nurse

...functions as a practitioner, educator, administrator or researcher. The choice of role will be determined by academic preparation, experience, established policies of the employing agency, and the nurse's employment agreement. A few nurses are self-employed.<sup>1</sup>

General duty registered nurses perform some or all of the following duties:

- (a) consult with other members of the health care team to assess, plan, implement and evaluate patient care;
- (b) administer medications and treatments as prescribed by a physician;
- (c) monitor, record and report symptoms and changes in patients' conditions;
- (d) operate or monitor medical apparatus or equipment;
- (e) assist in surgery and other medical procedures;
- (f) supervise registered nursing assistants and other nursing staff.<sup>2</sup>

**Governing Statute:** Nurses (Registered) Act, Revised Statutes of British Columbia, 1979, Chapter 302; Nursing Statutes Amendment Act, 1988, Chapter 51 Sections 4-38; Health Statutes Amendment Act, 1990, Chapter 51, Sections 30-32; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 37-42; administered by the Ministry of Health.

**Governing Body:** Registered Nurses Association of British Columbia (RNABC). In order to practise as a Registered Nurse in British Columbia, it is necessary to be registered by the RNABC. Members of the RNABC who are registered nurses have exclusive use of the titles: *Registered Nurse*, or *RN*.

**Date of Record:** June 1991 and June 1993.

**Source of Data:** Registered Nurses Association of British Columbia (RNABC).

### Preparation and Updating:

The tables that follow are derived from the register of the RNABC and include registered nurses who reported a British Columbia address at the date of record.. The data in the tables are presented based on employment address when the membership status is "practising", when employment in nursing is reported, and when employment address is available. In 1991 and 1993, employment address was available for 90% and 89% of practising RNs employed in nursing, respectively. Home address is used for the remainder, as well as for practising RNs who are not employed in nursing, and for RNs with non-practising membership status.

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<sup>1</sup> Adapted from information provided by the Registered Nurses Association of British Columbia.

<sup>2</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3152, Ottawa; Employment and Immigration Canada.

In 1993, 261 practising and 123 non-practising Registered Psychiatric Nurses held dual registration with the RNABC. The numbers for 1991 were 298 practising and 116 non-practising. Dual registrants are included in both the RN and RPN tables.

### **Definition of Terms:**

#### **1. Membership Status**

Tables 1a, 1b, and 1c report RNs by their RNABC registration status. An RN may hold a practising or non-practising membership in the RNABC. A practising RN may or may not be employed in nursing. A non-practising RN who commences employment in nursing in British Columbia must convert to practising membership.

#### **2. Age and Sex**

Age and sex information for practising and non-practising RNs, derived from the RNABC registration database, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

#### **3. Employment Status**

Tables 3a and 3b report practising RNs according to their employment status as indicated on their RNABC registration form. The categories used in the table are:

- (a) Employed in nursing;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) Seasonal/Casual
- (b) Employed in other field;
- (c) Not employed.

The reader is cautioned that changes made by the RNABC to the categories for reporting Type of Employer, Area of Responsibility, and Employment Position on the registration renewal form may limit the degree to which the figures presented can be compared from year to year. The changes in the form between 1991 and 1993 were responsible for large increases in the number of Registered Nurses subsumed in the *Other* category in the corresponding tables.

#### **4. Type of Employer**

Type of employer is reported initially upon registration, and updated annually from the RNABC registration renewal form. Tables 4a and 4b show this information for practising RNs employed in nursing. The RNABC made significant changes to this category on its registration renewal form in 1992. The categories that were altered are listed here as they appeared in 1991 and 1992:

**1991**

Acute Care Hospital  
 Activation/Rehab. Hospital  
 Extended Care Hospital  
 Psychiatric Hospital  
 Long Term Care Facility/Nursing Home  
 Home Care/ Visiting Care Agency  
 Business/Industry

**1992**

General Hospital  
 Rehabilitation  
 Extended Care  
 Psychiatric Hospital/Mental Health Centre  
 Long Term Care/ Nursing Home  
 Home Care  
 Business-Industry/Occupational Health

In addition, the categories "Private Nursing Agency/Private Duty", "Association/Government", and "Nursing Stations (Outpost/Nurse Clinics)" were added to the 1992 form. The categories on the 1993 form were not changed from 1992, and are as follows:

- (a) General Hospital;
- (b) Rehabilitation;
- (c) Extended Care;
- (d) Psychiatric Hospital/Mental Health Centre;
- (e) Long Term Care/Nursing Home;
- (f) Home Care;
- (g) Community Health Agency;
- (h) Business-Industry/Occupational Health;
- (i) Physician's Office/Family Practice Unit;
- (j) Educational Institution;
- (k) Self-employed;
- (l) Private Nursing Agency/Private Duty;
- (m) Association/Government;
- (n) Nursing Stations (Outpost/Nurse Clinics);
- (o) Other.

## **5. Primary Area of Responsibility**

Primary area of responsibility is reported initially upon registration, and updated annually from the RNABC registration renewal form. Tables 5a and 5b show this information for practising RNs employed in nursing. Changes on the registration renewal form in 1992 included dropping the categories "Post-Anesthetic Recovery Room" and "Neurosciences" and adding "Emergency Care", "Ambulatory Care", "Community Health", and "Home Care". There were no changes to the form from 1992 to 1993. The categories used by the RNABC in 1993 were:

- (a) Direct Patient Care;
  - (i) Medical/Surgical
  - (ii) Critical Care (e.g., ICU, CCU, PAR)
  - (iii) Operating Room
  - (iv) Ambulatory Care
  - (v) Emergency Care
  - (vi) Maternal/Newborn
  - (vii) Psychiatric/Mental Health
  - (viii) Paediatrics
  - (ix) Geriatrics/Gerontology
  - (x) Occupational Health

- (xi) Several Clinical Areas
- (xii) Community Health
- (xiii) Home Care
- (xiv) Other Patient Care
- (b) Administration;
  - (i) Nursing Education Administration
  - (ii) Nursing Services Administration
  - (iii) Other Administration
- (c) Education;
  - (i) Teaching - Students
  - (ii) Teaching - Employees
  - (iii) Teaching - Patients/Clients
  - (iv) Teaching - Other Education
- (d) Research;
  - (i) Nursing research only
  - (ii) Other research.

## 6. Employment Position

Employment position is reported initially upon registration, and updated annually from the RNABC registration renewal form. Tables 6a and 6b show this information for practising RNs employed in nursing. The RNABC made significant changes to this category on its registration renewal form in 1992. The categories that were altered are listed below as they appeared on the 1991 and 1992 forms.

### 1991

Director  
 Supervisor/Assistant Supervisor  
 Clinical Specialist/Clinician  
 Staff/General Duty Nurse  
  
 Community/Occupational Health/Home Care  
 Nurse

### 1992

Chief Nursing Officer/Director  
 Supervisor/Co-ordinator  
 Clinical Nurse Specialist/Clinician  
 Staff Nurse/Home Care/Community Health  
 Nurse  
 Office/Occupational/Industrial Nurse

In addition, the category "Researcher" was added to the 1992 form. There were no changes on the form from 1992 to 1993. The full list of categories used in 1993 was:

- (a) Chief Nursing Officer/Director;
- (b) Assistant/Associate Director;
- (c) Supervisor/Co-ordinator;
- (d) Clinical Nurse Specialist/Clinician;
- (e) Head Nurse/Assistant Head Nurse;
- (f) Staff Nurse/Home Care/Community Health Nurse;
- (g) Office/Occupational/Industrial Nurse;
- (h) Instructor/Professor;
- (i) Consultant/Counsellor;
- (j) Researcher;
- (k) Other.

## 7. Analysis of Change

Table 7 illustrates the sources of change which affected the stock of practising RNs from 1991 to 1993.

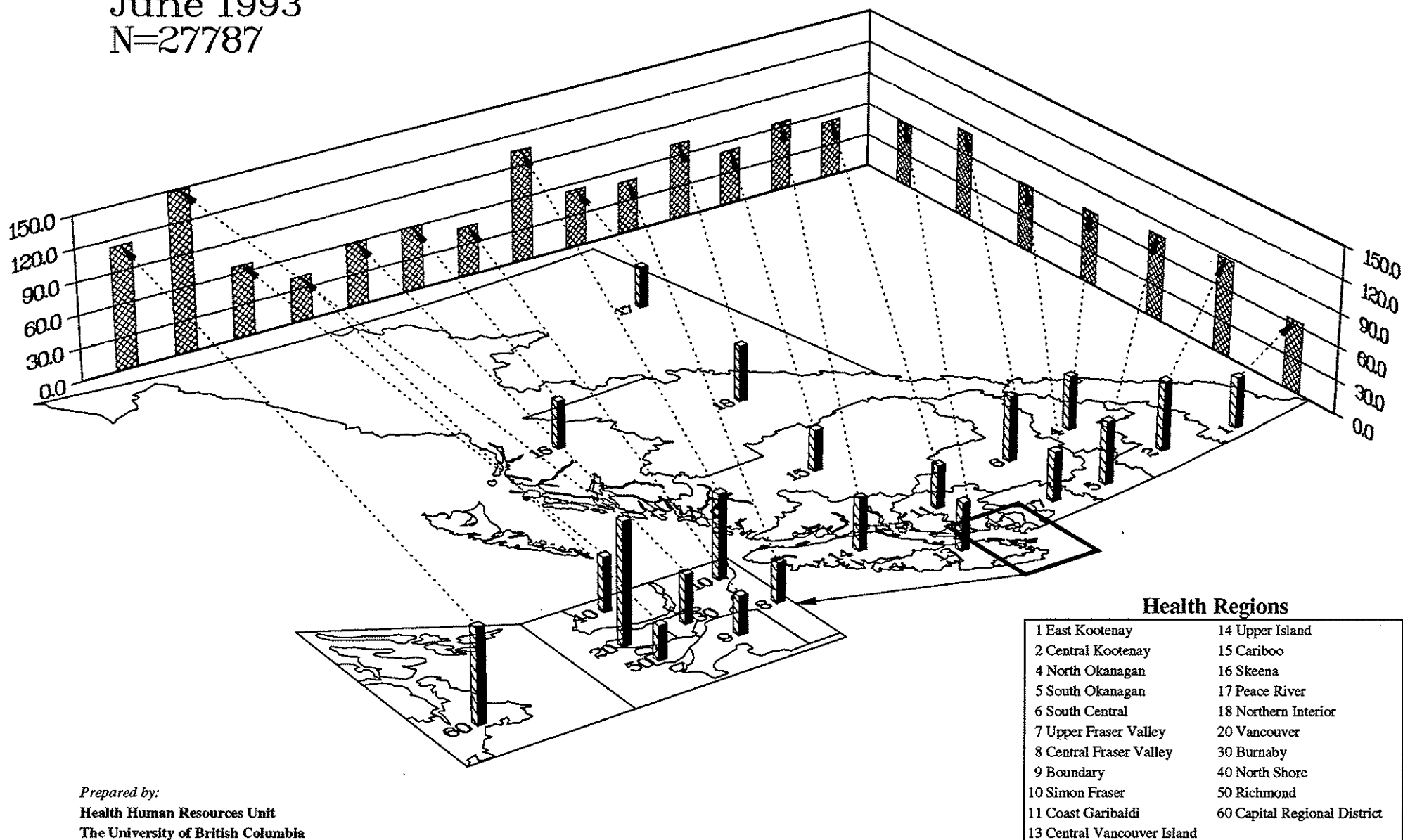
*New registrants* include RNs who were practising members as of June 1993 and who registered with the RNABC *for the first time* subsequent to June 1991. New registrants are recorded according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses and new registrants who register as non-practising.

*Reactivations* represent RNs who were not practising members in June 1991 but were practising members in British Columbia in June 1993, and whose date of initial registration was before June 1991. Also included as reactivations are practising RNs who reported out-of-province addresses in June 1991, but who reported British Columbia addresses in June 1993.

*Attrition* describes practising RNs who were included in the 1991 Registered Nurse stock, but who, because of death, retirement, out-of-province relocation, or non-renewal of practising registration, were not included in the 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of RNs among different Health Regions. The net migration total is therefore zero.

Practising Registered Nurses  
per 10,000 Population  
by Health Region  
June 1993  
N=27787



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Registered Nurses in British Columbia**  
**by Health Region by Registration Status**  
**June 1991<sup>1</sup> and June 1993**

| Health Region                | Practising    |               | Non-Practising |              | Total         |               |
|------------------------------|---------------|---------------|----------------|--------------|---------------|---------------|
|                              | 1991          | 1993          | 1991           | 1993         | 1991          | 1993          |
| 1 East Kootenay              | 442           | 451           | 42             | 46           | 484           | 497           |
| 2 Central Kootenay           | 629           | 651           | 68             | 71           | 697           | 722           |
| 4 North Okanagan             | 678           | 707           | 68             | 79           | 746           | 786           |
| 5 South Okanagan             | 1,446         | 1,555         | 139            | 138          | 1,585         | 1,693         |
| 6 South Central              | 909           | 931           | 68             | 87           | 977           | 1,018         |
| 7 Upper Fraser Valley        | 940           | 1,051         | 97             | 115          | 1,037         | 1,166         |
| 8 Central Fraser Valley      | 874           | 928           | 112            | 107          | 986           | 1,035         |
| 9 Boundary                   | 1,633         | 1,776         | 239            | 268          | 1,872         | 2,044         |
| 10 Simon Fraser              | 1,978         | 2,086         | 138            | 134          | 2,116         | 2,220         |
| 11 Coast Garibaldi           | 338           | 341           | 59             | 62           | 397           | 403           |
| 13 Central Vancouver Island  | 1,150         | 1,231         | 178            | 179          | 1,328         | 1,410         |
| 14 Upper Island              | 605           | 665           | 82             | 83           | 687           | 748           |
| 15 Cariboo                   | 325           | 338           | 26             | 35           | 351           | 373           |
| 16 Skeena                    | 501           | 514           | 45             | 50           | 546           | 564           |
| 17 Peace River               | 291           | 321           | 23             | 26           | 314           | 347           |
| 18 Northern Interior         | 799           | 825           | 38             | 60           | 837           | 885           |
| 20 Vancouver                 | 7,210         | 7,323         | 326            | 327          | 7,536         | 7,650         |
| 30 Burnaby                   | 932           | 986           | 107            | 118          | 1,039         | 1,104         |
| 40 North Shore               | 1,128         | 1,101         | 170            | 161          | 1,298         | 1,262         |
| 50 Richmond                  | 545           | 556           | 98             | 97           | 643           | 653           |
| 60 Capital Regional District | 3,455         | 3,542         | 343            | 364          | 3,798         | 3,906         |
| <b>TOTAL</b>                 | <b>26,808</b> | <b>27,879</b> | <b>2,466</b>   | <b>2,607</b> | <b>29,274</b> | <b>30,486</b> |

<sup>1</sup> The figures for 1991 differ slightly from the corresponding figures for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net increase of 8 RNs.

**Table 1b**  
**Registered Nurses in British Columbia**  
**per 10,000 Population by Health Region by Registration Status**  
**June 1991 and June 1993**

| Health Region                | Practising   |              | Non-Practising |             | Total        |              |
|------------------------------|--------------|--------------|----------------|-------------|--------------|--------------|
|                              | 1991         | 1993         | 1991           | 1993        | 1991         | 1993         |
| 1 East Kootenay              | 63.56        | 63.91        | 6.04           | 6.52        | 69.60        | 70.43        |
| 2 Central Kootenay           | 87.43        | 87.35        | 9.45           | 9.53        | 96.89        | 96.88        |
| 4 North Okanagan             | 70.21        | 67.69        | 7.04           | 7.56        | 77.25        | 75.25        |
| 5 South Okanagan             | 80.99        | 78.13        | 7.79           | 6.93        | 88.77        | 85.06        |
| 6 South Central              | 83.51        | 81.74        | 6.25           | 7.64        | 89.76        | 89.38        |
| 7 Upper Fraser Valley        | 60.24        | 61.68        | 6.22           | 6.75        | 66.46        | 68.43        |
| 8 Central Fraser Valley      | 49.57        | 48.87        | 6.35           | 5.63        | 55.93        | 54.50        |
| 9 Boundary                   | 46.48        | 47.10        | 6.80           | 7.11        | 53.29        | 54.20        |
| 10 Simon Fraser              | 107.78       | 105.29       | 7.52           | 6.76        | 115.30       | 112.05       |
| 11 Coast Garibaldi           | 56.65        | 53.97        | 9.89           | 9.81        | 66.54        | 63.78        |
| 13 Central Vancouver Island  | 59.29        | 59.51        | 9.18           | 8.65        | 68.46        | 68.17        |
| 14 Upper Island              | 62.51        | 65.10        | 8.47           | 8.12        | 70.99        | 73.22        |
| 15 Cariboo                   | 50.16        | 51.35        | 4.01           | 5.32        | 54.18        | 56.67        |
| 16 Skeena                    | 60.34        | 60.74        | 5.42           | 5.91        | 65.76        | 66.65        |
| 17 Peace River               | 49.76        | 54.46        | 3.93           | 4.41        | 53.69        | 58.87        |
| 18 Northern Interior         | 70.15        | 71.27        | 3.34           | 5.18        | 73.49        | 76.46        |
| 20 Vancouver                 | 150.92       | 148.75       | 6.82           | 6.64        | 157.74       | 155.39       |
| 30 Burnaby                   | 58.67        | 59.50        | 6.74           | 7.12        | 65.40        | 66.62        |
| 40 North Shore               | 71.23        | 66.87        | 10.74          | 9.78        | 81.97        | 76.64        |
| 50 Richmond                  | 43.04        | 42.01        | 7.74           | 7.33        | 50.78        | 49.34        |
| 60 Capital Regional District | 115.27       | 113.69       | 11.44          | 11.68       | 126.71       | 125.37       |
| <b>TOTAL</b>                 | <b>81.62</b> | <b>80.53</b> | <b>7.51</b>    | <b>7.53</b> | <b>89.13</b> | <b>88.06</b> |



**Table 1c**  
**Average Annual Rate of Change: Registered Nurses in British Columbia**  
**by Health Region by Registration Status**  
**June 1991 to June 1993**

| Health Region                | Practising          |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | 1.01                | 0.28               | 4.65                | 3.90               | 1.33                | 0.60               |
| 2 Central Kootenay           | 1.73                | -0.05              | 2.18                | 0.39               | 1.78                | 0.00               |
| 4 North Okanagan             | 2.12                | -1.81              | 7.79                | 3.64               | 2.65                | -1.30              |
| 5 South Okanagan             | 3.70                | -1.78              | -0.36               | -5.63              | 3.35                | -2.11              |
| 6 South Central              | 1.20                | -1.07              | 13.11               | 10.57              | 2.08                | -0.21              |
| 7 Upper Fraser Valley        | 5.74                | 1.19               | 8.88                | 4.20               | 6.04                | 1.48               |
| 8 Central Fraser Valley      | 3.04                | -0.71              | -2.26               | -5.82              | 2.45                | -1.28              |
| 9 Boundary                   | 4.29                | 0.66               | 5.89                | 2.21               | 4.49                | 0.85               |
| 10 Simon Fraser              | 2.69                | -1.17              | -1.46               | -5.16              | 2.43                | -1.42              |
| 11 Coast Garibaldi           | 0.44                | -2.40              | 2.51                | -0.39              | 0.75                | -2.10              |
| 13 Central Vancouver Island  | 3.46                | 0.19               | 0.28                | -2.89              | 3.04                | -0.22              |
| 14 Upper Island              | 4.84                | 2.04               | 0.61                | -2.08              | 4.35                | 1.56               |
| 15 Cariboo                   | 1.98                | 1.18               | 16.02               | 15.11              | 3.09                | 2.28               |
| 16 Skeena                    | 1.29                | 0.34               | 5.41                | 4.42               | 1.63                | 0.68               |
| 17 Peace River               | 5.03                | 4.62               | 6.32                | 5.91               | 5.12                | 4.71               |
| 18 Northern Interior         | 1.61                | 0.80               | 25.66               | 24.64              | 2.83                | 2.00               |
| 20 Vancouver                 | 0.78                | -0.72              | 0.15                | -1.34              | 0.75                | -0.75              |
| 30 Burnaby                   | 2.86                | 0.71               | 5.01                | 2.82               | 3.08                | 0.93               |
| 40 North Shore               | -1.20               | -3.11              | -2.68               | -4.56              | -1.40               | -3.30              |
| 50 Richmond                  | 1.00                | -1.20              | -0.51               | -2.69              | 0.77                | -1.43              |
| 60 Capital Regional District | 1.25                | -0.69              | 3.02                | 1.04               | 1.41                | -0.53              |
| <b>TOTAL</b>                 | <b>1.98</b>         | <b>-0.67</b>       | <b>2.82</b>         | <b>0.15</b>        | <b>2.05</b>         | <b>-0.60</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

**Table 2**  
**Registered Nurses in British Columbia**  
**by Health Region by Age and Sex**  
**June 1993**

| Health Region                | < 25      |            | 25-34      |              | 35-44      |               | 45-54      |              | 55-64     |              | 65 +     |            | Subtotal   |               | Unknown   | Total         |
|------------------------------|-----------|------------|------------|--------------|------------|---------------|------------|--------------|-----------|--------------|----------|------------|------------|---------------|-----------|---------------|
|                              | M         | F          | M          | F            | M          | F             | M          | F            | M         | F            | M        | F          | M          | F             |           |               |
| 1 East Kootenay              | 0         | 10         | 2          | 82           | 6          | 169           | 1          | 167          | 0         | 50           | 0        | 9          | 9          | 487           | 1         | 497           |
| 2 Central Kootenay           | 1         | 13         | 6          | 109          | 11         | 296           | 3          | 195          | 0         | 77           | 0        | 9          | 21         | 699           | 2         | 722           |
| 4 North Okanagan             | 0         | 10         | 3          | 115          | 6          | 305           | 2          | 239          | 1         | 96           | 0        | 7          | 12         | 772           | 2         | 786           |
| 5 South Okanagan             | 1         | 31         | 11         | 323          | 19         | 610           | 7          | 459          | 0         | 204          | 0        | 27         | 38         | 1,654         | 1         | 1,693         |
| 6 South Central              | 1         | 22         | 4          | 240          | 9          | 362           | 5          | 261          | 1         | 104          | 0        | 8          | 20         | 997           | 1         | 1,018         |
| 7 Upper Fraser Valley        | 0         | 36         | 11         | 257          | 10         | 373           | 13         | 309          | 5         | 132          | 1        | 18         | 40         | 1,125         | 1         | 1,166         |
| 8 Central Fraser Valley      | 1         | 17         | 5          | 175          | 9          | 352           | 10         | 328          | 5         | 124          | 0        | 8          | 30         | 1,004         | 1         | 1,035         |
| 9 Boundary                   | 1         | 34         | 11         | 314          | 15         | 737           | 12         | 632          | 1         | 255          | 0        | 28         | 40         | 2,000         | 4         | 2,044         |
| 10 Simon Fraser              | 1         | 50         | 17         | 476          | 28         | 799           | 50         | 574          | 9         | 197          | 1        | 16         | 106        | 2,112         | 2         | 2,220         |
| 11 Coast Garibaldi           | 0         | 6          | 1          | 81           | 2          | 160           | 1          | 90           | 0         | 56           | 0        | 6          | 4          | 399           | 0         | 403           |
| 13 Central Vancouver Island  | 0         | 12         | 6          | 202          | 15         | 509           | 3          | 444          | 3         | 192          | 0        | 24         | 27         | 1,383         | 0         | 1,410         |
| 14 Upper Island              | 0         | 7          | 5          | 141          | 4          | 277           | 2          | 204          | 0         | 98           | 0        | 10         | 11         | 737           | 0         | 748           |
| 15 Cariboo                   | 1         | 7          | 3          | 61           | 1          | 148           | 1          | 103          | 1         | 44           | 0        | 3          | 7          | 366           | 0         | 373           |
| 16 Skeena                    | 0         | 15         | 6          | 161          | 12         | 191           | 1          | 122          | 2         | 46           | 0        | 8          | 21         | 543           | 0         | 564           |
| 17 Peace River               | 0         | 16         | 2          | 106          | 3          | 111           | 1          | 79           | 0         | 26           | 0        | 3          | 6          | 341           | 0         | 347           |
| 18 Northern Interior         | 0         | 48         | 7          | 213          | 9          | 339           | 2          | 198          | 0         | 65           | 0        | 3          | 18         | 866           | 1         | 885           |
| 20 Vancouver                 | 11        | 243        | 102        | 2,355        | 97         | 2,321         | 62         | 1,668        | 15        | 687          | 0        | 83         | 287        | 7,357         | 6         | 7,650         |
| 30 Burnaby                   | 0         | 47         | 9          | 253          | 15         | 322           | 13         | 288          | 0         | 143          | 0        | 13         | 37         | 1,066         | 1         | 1,104         |
| 40 North Shore               | 0         | 19         | 7          | 248          | 4          | 349           | 5          | 387          | 0         | 221          | 0        | 21         | 16         | 1,245         | 1         | 1,262         |
| 50 Richmond                  | 0         | 15         | 5          | 104          | 4          | 222           | 0          | 224          | 0         | 71           | 0        | 6          | 9          | 642           | 2         | 653           |
| 60 Capital Regional District | 0         | 72         | 33         | 694          | 70         | 1,338         | 33         | 1,132        | 5         | 467          | 0        | 57         | 141        | 3,760         | 5         | 3,906         |
| <b>TOTAL</b>                 | <b>18</b> | <b>730</b> | <b>256</b> | <b>6,710</b> | <b>349</b> | <b>10,290</b> | <b>227</b> | <b>8,103</b> | <b>48</b> | <b>3,355</b> | <b>2</b> | <b>367</b> | <b>900</b> | <b>29,555</b> | <b>31</b> | <b>30,486</b> |

**Table 3a**  
**Practising Registered Nurses in British Columbia**  
**by Health Region by Employment Status**  
**June 1993**

| Health Region                | Employed in Nursing |              |                     |            |               | Employed in<br>Other Field | Not<br>Employed | Unknown    | Total         |
|------------------------------|---------------------|--------------|---------------------|------------|---------------|----------------------------|-----------------|------------|---------------|
|                              | Full-Time           | Part-Time    | Seasonal/<br>Casual | Unknown    | Subtotal      |                            |                 |            |               |
| 1 East Kootenay              | 186                 | 115          | 128                 | 12         | 441           | 4                          | 6               | 0          | 451           |
| 2 Central Kootenay           | 278                 | 151          | 180                 | 18         | 627           | 1                          | 18              | 5          | 651           |
| 4 North Okanagan             | 293                 | 173          | 201                 | 10         | 677           | 9                          | 15              | 6          | 707           |
| 5 South Okanagan             | 704                 | 307          | 426                 | 57         | 1,494         | 8                          | 40              | 13         | 1,555         |
| 6 South Central              | 458                 | 198          | 233                 | 13         | 902           | 5                          | 21              | 3          | 931           |
| 7 Upper Fraser Valley        | 517                 | 241          | 246                 | 22         | 1,026         | 4                          | 16              | 5          | 1,051         |
| 8 Central Fraser Valley      | 404                 | 247          | 227                 | 23         | 901           | 4                          | 21              | 2          | 928           |
| 9 Boundary                   | 771                 | 452          | 418                 | 44         | 1,685         | 17                         | 52              | 22         | 1,776         |
| 10 Simon Fraser              | 1,098               | 518          | 395                 | 39         | 2,050         | 10                         | 19              | 7          | 2,086         |
| 11 Coast Garibaldi           | 133                 | 74           | 101                 | 13         | 321           | 1                          | 14              | 5          | 341           |
| 13 Central Vancouver Island  | 557                 | 281          | 293                 | 36         | 1,167         | 10                         | 45              | 9          | 1,231         |
| 14 Upper Island              | 281                 | 144          | 191                 | 18         | 634           | 10                         | 17              | 4          | 665           |
| 15 Cariboo                   | 157                 | 87           | 82                  | 4          | 330           | 0                          | 5               | 3          | 338           |
| 16 Skeena                    | 258                 | 100          | 121                 | 16         | 495           | 2                          | 9               | 8          | 514           |
| 17 Peace River               | 147                 | 79           | 78                  | 6          | 310           | 0                          | 6               | 5          | 321           |
| 18 Northern Interior         | 399                 | 121          | 260                 | 19         | 799           | 8                          | 10              | 8          | 825           |
| 20 Vancouver                 | 4,436               | 1,188        | 1,436               | 128        | 7,188         | 26                         | 73              | 36         | 7,323         |
| 30 Burnaby                   | 546                 | 156          | 226                 | 24         | 952           | 4                          | 21              | 9          | 986           |
| 40 North Shore               | 535                 | 258          | 239                 | 25         | 1,057         | 8                          | 31              | 5          | 1,101         |
| 50 Richmond                  | 255                 | 131          | 132                 | 13         | 531           | 8                          | 10              | 7          | 556           |
| 60 Capital Regional District | 1,658               | 739          | 912                 | 97         | 3,406         | 25                         | 80              | 31         | 3,542         |
| <b>TOTAL</b>                 | <b>14,071</b>       | <b>5,760</b> | <b>6,525</b>        | <b>637</b> | <b>26,993</b> | <b>164</b>                 | <b>529</b>      | <b>193</b> | <b>27,879</b> |

**Table 3b**  
**Practising Registered Nurses in British Columbia**  
**per 10,000 Population by Health Region by Employment Status**  
**June 1993**

| Health Region                | Employed in Nursing |              |                     |             |              | Employed in<br>Other Field | Not<br>Employed | Unknown     | Total        |
|------------------------------|---------------------|--------------|---------------------|-------------|--------------|----------------------------|-----------------|-------------|--------------|
|                              | Full-Time           | Part-Time    | Seasonal/<br>Casual | Unknown     | Subtotal     |                            |                 |             |              |
| 1 East Kootenay              | 26.36               | 16.30        | 18.14               | 1.70        | 62.50        | 0.57                       | 0.85            | 0.00        | 63.91        |
| 2 Central Kootenay           | 37.30               | 20.26        | 24.15               | 2.42        | 84.13        | 0.13                       | 2.42            | 0.67        | 87.35        |
| 4 North Okanagan             | 28.05               | 16.56        | 19.24               | 0.96        | 64.82        | 0.86                       | 1.44            | 0.57        | 67.69        |
| 5 South Okanagan             | 35.37               | 15.42        | 21.40               | 2.86        | 75.06        | 0.40                       | 2.01            | 0.65        | 78.13        |
| 6 South Central              | 40.21               | 17.38        | 20.46               | 1.14        | 79.19        | 0.44                       | 1.84            | 0.26        | 81.74        |
| 7 Upper Fraser Valley        | 30.34               | 14.14        | 14.44               | 1.29        | 60.22        | 0.23                       | 0.94            | 0.29        | 61.68        |
| 8 Central Fraser Valley      | 21.27               | 13.01        | 11.95               | 1.21        | 47.45        | 0.21                       | 1.11            | 0.11        | 48.87        |
| 9 Boundary                   | 20.45               | 11.99        | 11.08               | 1.17        | 44.68        | 0.45                       | 1.38            | 0.58        | 47.10        |
| 10 Simon Fraser              | 55.42               | 26.15        | 19.94               | 1.97        | 103.47       | 0.50                       | 0.96            | 0.35        | 105.29       |
| 11 Coast Garibaldi           | 21.05               | 11.71        | 15.98               | 2.06        | 50.80        | 0.16                       | 2.22            | 0.79        | 53.97        |
| 13 Central Vancouver Island  | 26.93               | 13.59        | 14.17               | 1.74        | 56.42        | 0.48                       | 2.18            | 0.44        | 59.51        |
| 14 Upper Island              | 27.51               | 14.10        | 18.70               | 1.76        | 62.06        | 0.98                       | 1.66            | 0.39        | 65.10        |
| 15 Cariboo                   | 23.85               | 13.22        | 12.46               | 0.61        | 50.14        | 0.00                       | 0.76            | 0.46        | 51.35        |
| 16 Skeena                    | 30.49               | 11.82        | 14.30               | 1.89        | 58.50        | 0.24                       | 1.06            | 0.95        | 60.74        |
| 17 Peace River               | 24.94               | 13.40        | 13.23               | 1.02        | 52.59        | 0.00                       | 1.02            | 0.85        | 54.46        |
| 18 Northern Interior         | 34.47               | 10.45        | 22.46               | 1.64        | 69.03        | 0.69                       | 0.86            | 0.69        | 71.27        |
| 20 Vancouver                 | 90.11               | 24.13        | 29.17               | 2.60        | 146.01       | 0.53                       | 1.48            | 0.73        | 148.75       |
| 30 Burnaby                   | 32.95               | 9.41         | 13.64               | 1.45        | 57.45        | 0.24                       | 1.27            | 0.54        | 59.50        |
| 40 North Shore               | 32.49               | 15.67        | 14.51               | 1.52        | 64.19        | 0.49                       | 1.88            | 0.30        | 66.87        |
| 50 Richmond                  | 19.27               | 9.90         | 9.97                | 0.98        | 40.12        | 0.60                       | 0.76            | 0.53        | 42.01        |
| 60 Capital Regional District | 53.22               | 23.72        | 29.27               | 3.11        | 109.32       | 0.80                       | 2.57            | 0.99        | 113.69       |
| <b>TOTAL</b>                 | <b>40.65</b>        | <b>16.64</b> | <b>18.85</b>        | <b>1.84</b> | <b>77.97</b> | <b>0.47</b>                | <b>1.53</b>     | <b>0.56</b> | <b>80.53</b> |

**Table 4a**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Type of Employer**  
**June 1993**

| Health Region                | General<br>Hospital | Rehabilitation | Extended Care | Psychiatric<br>Hospital/<br>Mental<br>Health Centre | Long<br>Term Care/<br>Nursing Home | Home Care  | Community<br>Health Agency | Business-<br>Industry/<br>Occupational<br>Health | Physician's<br>Office/<br>Family<br>Practice Unit |
|------------------------------|---------------------|----------------|---------------|---|------------------------------------|------------|----------------------------|--|---|
| 1 East Kootenay              | 284                 | 0              | 12            | 1   | 44                                 | 20         | 34                         | 0  | 13  |
| 2 Central Kootenay           | 393                 | 0              | 43            | 2   | 61                                 | 26         | 32                         | 2  | 14  |
| 4 North Okanagan             | 446                 | 0              | 38            | 5   | 59                                 | 28         | 40                         | 1  | 18  |
| 5 South Okanagan             | 940                 | 2              | 99            | 11  | 157                                | 52         | 61                         | 5  | 59  |
| 6 South Central              | 607                 | 2              | 49            | 5   | 35                                 | 35         | 51                         | 6  | 7   |
| 7 Upper Fraser Valley        | 623                 | 2              | 76            | 25  | 113                                | 21         | 41                         | 0  | 20  |
| 8 Central Fraser Valley      | 561                 | 0              | 67            | 14  | 80                                 | 21         | 54                         | 2  | 21  |
| 9 Boundary                   | 977                 | 2              | 103           | 9   | 150                                | 61         | 112                        | 20   | 55  |
| 10 Simon Fraser              | 1,350               | 5              | 85            | 163   | 58                                 | 33         | 64                         | 11   | 26  |
| 11 Coast Garibaldi           | 191                 | 1              | 14            | 2   | 22                                 | 14         | 32                         | 0  | 9   |
| 13 Central Vancouver Island  | 692                 | 1              | 62            | 8   | 111                                | 45         | 87                         | 3  | 45  |
| 14 Upper Island              | 398                 | 0              | 18            | 3   | 42                                 | 19         | 49                         | 0  | 24  |
| 15 Cariboo                   | 218                 | 0              | 13            | 4   | 21                                 | 16         | 24                         | 0  | 7   |
| 16 Skeena                    | 313                 | 0              | 5             | 3   | 19                                 | 14         | 52                         | 3  | 19  |
| 17 Peace River               | 176                 | 0              | 15            | 1   | 33                                 | 14         | 30                         | 2  | 6   |
| 18 Northern Interior         | 542                 | 5              | 15            | 1   | 41                                 | 17         | 48                         | 1  | 15  |
| 20 Vancouver                 | 4,575               | 143            | 261           | 47  | 300                                | 133        | 376                        | 51   | 50  |
| 30 Burnaby                   | 508                 | 3              | 59            | 10  | 88                                 | 39         | 70                         | 11   | 15  |
| 40 North Shore               | 630                 | 3              | 56            | 3   | 94                                 | 40         | 70                         | 21   | 41  |
| 50 Richmond                  | 325                 | 2              | 6             | 0   | 50                                 | 27         | 53                         | 9  | 20  |
| 60 Capital Regional District | 1,888               | 47             | 248           | 81  | 312                                | 125        | 231                        | 15   | 73  |
| <b>TOTAL</b>                 | <b>16,637</b>       | <b>218</b>     | <b>1,344</b>  | <b>398</b>  | <b>1,890</b>                       | <b>800</b> | <b>1,611</b>               | <b>163</b>                                       | <b>557</b>  |

... continued

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 4a (continued)**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Type of Employer**  
**June 1993**

| Health Region                | Education<br>Institution | Self-<br>Employed | Private<br>Nursing<br>Agency/<br>Private Duty | Association/<br>Government | Nursing<br>Stations<br>(Outpost/<br>Nurse Clinics) | Other        | Unknown    | Total         |
|------------------------------|--------------------------|-------------------|---|----------------------------|--|--------------|------------|---------------|
| 1 East Kootenay              | 6                        | 1                 | 0   | 6                          | 0  | 16           | 4          | 441           |
| 2 Central Kootenay           | 14                       | 2                 | 2   | 7                          | 1  | 25           | 3          | 627           |
| 4 North Okanagan             | 2                        | 3                 | 1   | 9                          | 0  | 25           | 2          | 677           |
| 5 South Okanagan             | 34                       | 7                 | 5   | 12                         | 3  | 39           | 8          | 1,494         |
| 6 South Central              | 41                       | 4                 | 0   | 11                         | 3  | 43           | 3          | 902           |
| 7 Upper Fraser Valley        | 18                       | 10                | 2   | 21                         | 1  | 41           | 12         | 1,026         |
| 8 Central Fraser Valley      | 3                        | 6                 | 1   | 12                         | 0  | 52           | 7          | 901           |
| 9 Boundary                   | 41                       | 22                | 9   | 21                         | 1  | 87           | 15         | 1,685         |
| 10 Simon Fraser              | 92                       | 18                | 5   | 14                         | 0  | 111          | 15         | 2,050         |
| 11 Coast Garibaldi           | 0                        | 3                 | 0   | 8                          | 0  | 20           | 5          | 321           |
| 13 Central Vancouver Island  | 33                       | 10                | 6   | 14                         | 0  | 41           | 9          | 1,167         |
| 14 Upper Island              | 16                       | 14                | 0   | 7                          | 2  | 38           | 4          | 634           |
| 15 Cariboo                   | 0                        | 1                 | 1   | 8                          | 3  | 12           | 2          | 330           |
| 16 Skeena                    | 8                        | 1                 | 0   | 15                         | 13   | 27           | 3          | 495           |
| 17 Peace River               | 6                        | 2                 | 0   | 11                         | 0  | 13           | 1          | 310           |
| 18 Northern Interior         | 36                       | 7                 | 0   | 9                          | 4  | 52           | 6          | 799           |
| 20 Vancouver                 | 220                      | 57                | 46  | 64                         | 16   | 784          | 65         | 7,188         |
| 30 Burnaby                   | 67                       | 10                | 23  | 7                          | 1  | 34           | 7          | 952           |
| 40 North Shore               | 9                        | 18                | 7   | 8                          | 0  | 47           | 10         | 1,057         |
| 50 Richmond                  | 8                        | 9                 | 0   | 1                          | 0  | 16           | 5          | 531           |
| 60 Capital Regional District | 80                       | 41                | 11  | 57                         | 4  | 178          | 15         | 3,406         |
| <b>TOTAL</b>                 | <b>734</b>               | <b>246</b>        | <b>119</b>                                    | <b>322</b>                 | <b>52</b>  | <b>1,701</b> | <b>201</b> | <b>26,993</b> |

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 4b**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Type of Employer**  
**June 1993**

| Health Region                | General<br>Hospital | Rehabilitation | Extended Care | Psychiatric<br>Hospital/<br>Mental<br>Health Centre | Long<br>Term Care/<br>Nursing Home | Home Care   | Community<br>Health Agency | Business-<br>Industry/<br>Occupational<br>Health | Physician's<br>Office/<br>Family<br>Practice Unit |
|------------------------------|---------------------|----------------|---------------|---|------------------------------------|-------------|----------------------------|--|---|
| 1 East Kootenay              | 40.25               | 0.00           | 1.70          | 0.14  | 6.24                               | 2.83        | 4.82                       | 0.00   | 1.84  |
| 2 Central Kootenay           | 52.73               | 0.00           | 5.77          | 0.27  | 8.19                               | 3.49        | 4.29                       | 0.27   | 1.88  |
| 4 North Okanagan             | 42.70               | 0.00           | 3.64          | 0.48  | 5.65                               | 2.68        | 3.83                       | 0.10   | 1.72  |
| 5 South Okanagan             | 47.23               | 0.10           | 4.97          | 0.55  | 7.89                               | 2.61        | 3.06                       | 0.25   | 2.96  |
| 6 South Central              | 53.29               | 0.18           | 4.30          | 0.44  | 3.07                               | 3.07        | 4.48                       | 0.53   | 0.61  |
| 7 Upper Fraser Valley        | 36.56               | 0.12           | 4.46          | 1.47  | 6.63                               | 1.23        | 2.41                       | 0.00   | 1.17  |
| 8 Central Fraser Valley      | 29.54               | 0.00           | 3.53          | 0.74  | 4.21                               | 1.11        | 2.84                       | 0.11   | 1.11  |
| 9 Boundary                   | 25.91               | 0.05           | 2.73          | 0.24  | 3.98                               | 1.62        | 2.97                       | 0.53   | 1.46  |
| 10 Simon Fraser              | 68.14               | 0.25           | 4.29          | 8.23  | 2.93                               | 1.67        | 3.23                       | 0.56   | 1.31  |
| 11 Coast Garibaldi           | 30.23               | 0.16           | 2.22          | 0.32  | 3.48                               | 2.22        | 5.06                       | 0.00   | 1.42  |
| 13 Central Vancouver Island  | 33.46               | 0.05           | 3.00          | 0.39  | 5.37                               | 2.18        | 4.21                       | 0.15   | 2.18  |
| 14 Upper Island              | 38.96               | 0.00           | 1.76          | 0.29  | 4.11                               | 1.86        | 4.80                       | 0.00   | 2.35  |
| 15 Cariboo                   | 33.12               | 0.00           | 1.98          | 0.61  | 3.19                               | 2.43        | 3.65                       | 0.00   | 1.06  |
| 16 Skeena                    | 36.99               | 0.00           | 0.59          | 0.35  | 2.25                               | 1.65        | 6.15                       | 0.35   | 2.25  |
| 17 Peace River               | 29.86               | 0.00           | 2.54          | 0.17  | 5.60                               | 2.38        | 5.09                       | 0.34   | 1.02  |
| 18 Northern Interior         | 46.82               | 0.43           | 1.30          | 0.09  | 3.54                               | 1.47        | 4.15                       | 0.09   | 1.30  |
| 20 Vancouver                 | 92.93               | 2.90           | 5.30          | 0.95  | 6.09                               | 2.70        | 7.64                       | 1.04   | 1.02  |
| 30 Burnaby                   | 30.65               | 0.18           | 3.56          | 0.60  | 5.31                               | 2.35        | 4.22                       | 0.66   | 0.91  |
| 40 North Shore               | 38.26               | 0.18           | 3.40          | 0.18  | 5.71                               | 2.43        | 4.25                       | 1.28   | 2.49  |
| 50 Richmond                  | 24.56               | 0.15           | 0.45          | 0.00  | 3.78                               | 2.04        | 4.00                       | 0.68   | 1.51  |
| 60 Capital Regional District | 60.60               | 1.51           | 7.96          | 2.60  | 10.01                              | 4.01        | 7.41                       | 0.48   | 2.34  |
| <b>TOTAL</b>                 | <b>48.06</b>        | <b>0.63</b>    | <b>3.88</b>   | <b>1.15</b>   | <b>5.46</b>                        | <b>2.31</b> | <b>4.65</b>                | <b>0.47</b>                                      | <b>1.61</b>                                       |

*... continued*

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 4b (continued)**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Type of Employer**  
**June 1993**

| Health Region                | Education<br>Institution | Self-<br>Employed | Private<br>Nursing<br>Agency/<br>Private Duty | Association/<br>Government | Nursing<br>Stations<br>(Outpost/<br>Nurse Clinics) | Other       | Unknown     | Total        |
|------------------------------|--------------------------|-------------------|---|----------------------------|--|-------------|-------------|--------------|
| 1 East Kootenay              | 0.85                     | 0.14              | 0.00  | 0.85                       | 0.00   | 2.27        | 0.57        | 62.50        |
| 2 Central Kootenay           | 1.88                     | 0.27              | 0.27  | 0.94                       | 0.13   | 3.35        | 0.40        | 84.13        |
| 4 North Okanagan             | 0.19                     | 0.29              | 0.10  | 0.86                       | 0.00   | 2.39        | 0.19        | 64.82        |
| 5 South Okanagan             | 1.71                     | 0.35              | 0.25  | 0.60                       | 0.15   | 1.96        | 0.40        | 75.06        |
| 6 South Central              | 3.60                     | 0.35              | 0.00  | 0.97                       | 0.26   | 3.78        | 0.26        | 79.19        |
| 7 Upper Fraser Valley        | 1.06                     | 0.59              | 0.12  | 1.23                       | 0.06   | 2.41        | 0.70        | 60.22        |
| 8 Central Fraser Valley      | 0.16                     | 0.32              | 0.05  | 0.63                       | 0.00   | 2.74        | 0.37        | 47.45        |
| 9 Boundary                   | 1.09                     | 0.58              | 0.24  | 0.56                       | 0.03   | 2.31        | 0.40        | 44.68        |
| 10 Simon Fraser              | 4.64                     | 0.91              | 0.25  | 0.71                       | 0.00   | 5.60        | 0.76        | 103.47       |
| 11 Coast Garibaldi           | 0.00                     | 0.47              | 0.00  | 1.27                       | 0.00   | 3.17        | 0.79        | 50.80        |
| 13 Central Vancouver Island  | 1.60                     | 0.48              | 0.29  | 0.68                       | 0.00   | 1.98        | 0.44        | 56.42        |
| 14 Upper Island              | 1.57                     | 1.37              | 0.00  | 0.69                       | 0.20   | 3.72        | 0.39        | 62.06        |
| 15 Cariboo                   | 0.00                     | 0.15              | 0.15  | 1.22                       | 0.46   | 1.82        | 0.30        | 50.14        |
| 16 Skeena                    | 0.95                     | 0.12              | 0.00  | 1.77                       | 1.54   | 3.19        | 0.35        | 58.50        |
| 17 Peace River               | 1.02                     | 0.34              | 0.00  | 1.87                       | 0.00   | 2.21        | 0.17        | 52.59        |
| 18 Northern Interior         | 3.11                     | 0.60              | 0.00  | 0.78                       | 0.35   | 4.49        | 0.52        | 69.03        |
| 20 Vancouver                 | 4.47                     | 1.16              | 0.93  | 1.30                       | 0.33   | 15.93       | 1.32        | 146.01       |
| 30 Burnaby                   | 4.04                     | 0.60              | 1.39  | 0.42                       | 0.06   | 2.05        | 0.42        | 57.45        |
| 40 North Shore               | 0.55                     | 1.09              | 0.43  | 0.49                       | 0.00   | 2.85        | 0.61        | 64.19        |
| 50 Richmond                  | 0.60                     | 0.68              | 0.00  | 0.08                       | 0.00   | 1.21        | 0.38        | 40.12        |
| 60 Capital Regional District | 2.57                     | 1.32              | 0.35  | 1.83                       | 0.13   | 5.71        | 0.48        | 109.32       |
| <b>TOTAL</b>                 | <b>2.12</b>              | <b>0.71</b>       | <b>0.34</b>                                   | <b>0.93</b>                | <b>0.15</b>  | <b>4.91</b> | <b>0.58</b> | <b>77.97</b> |

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.



**Table 5a**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Primary Area of Responsibility**  
**June 1993**

| Health Region                | Direct Patient Care  |                  |                   |                         |                        |                      |                                  |             |                                 |                             |                              |                     |              |                          | Subtotal      |
|------------------------------|----------------------|------------------|-------------------|-------------------------|------------------------|----------------------|----------------------------------|-------------|---------------------------------|-----------------------------|------------------------------|---------------------|--------------|--------------------------|---------------|
|                              | Medical/<br>Surgical | Critical<br>Care | Operating<br>Room | Ambul-<br>atory<br>Care | Emerg-<br>ency<br>Care | Maternal/<br>Newborn | Psychiatric/<br>Mental<br>Health | Paediatrics | Geriatrics/<br>Geront-<br>ology | Occupa-<br>tional<br>Health | Several<br>Clinical<br>Areas | Community<br>Health | Home<br>Care | Other<br>Patient<br>Care |               |
| 1 East Kootenay              | 94                   | 14               | 17                | 1                       | 14                     | 18                   | 18                               | 0           | 67                              | 1                           | 104                          | 25                  | 15           | 10                       | 398           |
| 2 Central Kootenay           | 139                  | 53               | 27                | 6                       | 23                     | 39                   | 27                               | 8           | 104                             | 3                           | 71                           | 22                  | 22           | 21                       | 565           |
| 4 North Okanagan             | 158                  | 60               | 36                | 8                       | 37                     | 38                   | 32                               | 18          | 101                             | 2                           | 65                           | 28                  | 22           | 22                       | 627           |
| 5 South Okanagan             | 366                  | 134              | 62                | 17                      | 51                     | 98                   | 69                               | 42          | 246                             | 8                           | 86                           | 63                  | 46           | 71                       | 1,359         |
| 6 South Central              | 201                  | 100              | 45                | 21                      | 33                     | 66                   | 40                               | 24          | 83                              | 11                          | 81                           | 45                  | 26           | 30                       | 806           |
| 7 Upper Fraser Valley        | 216                  | 86               | 45                | 6                       | 61                     | 77                   | 67                               | 38          | 203                             | 2                           | 42                           | 40                  | 20           | 29                       | 932           |
| 8 Central Fraser Valley      | 217                  | 83               | 45                | 5                       | 55                     | 66                   | 47                               | 31          | 156                             | 5                           | 43                           | 36                  | 16           | 25                       | 830           |
| 9 Boundary                   | 436                  | 137              | 58                | 14                      | 92                     | 105                  | 75                               | 36          | 274                             | 17                          | 47                           | 88                  | 55           | 84                       | 1,518         |
| 10 Simon Fraser              | 623                  | 264              | 92                | 25                      | 84                     | 160                  | 177                              | 31          | 162                             | 15                          | 37                           | 46                  | 21           | 77                       | 1,814         |
| 11 Coast Garibaldi           | 49                   | 22               | 13                | 0                       | 26                     | 19                   | 7                                | 5           | 50                              | 0                           | 55                           | 18                  | 14           | 4                        | 282           |
| 13 Central Vancouver Island  | 229                  | 104              | 67                | 11                      | 46                     | 83                   | 52                               | 27          | 186                             | 6                           | 68                           | 77                  | 39           | 48                       | 1,043         |
| 14 Upper Island              | 132                  | 50               | 34                | 3                       | 28                     | 42                   | 31                               | 16          | 76                              | 0                           | 68                           | 37                  | 15           | 30                       | 562           |
| 15 Cariboo                   | 75                   | 26               | 23                | 0                       | 17                     | 27                   | 3                                | 5           | 35                              | 1                           | 51                           | 26                  | 10           | 11                       | 310           |
| 16 Skeena                    | 107                  | 46               | 32                | 1                       | 17                     | 56                   | 9                                | 20          | 25                              | 3                           | 59                           | 46                  | 13           | 18                       | 452           |
| 17 Peace River               | 54                   | 19               | 13                | 0                       | 22                     | 23                   | 8                                | 9           | 41                              | 2                           | 32                           | 25                  | 15           | 11                       | 274           |
| 18 Northern Interior         | 174                  | 68               | 35                | 6                       | 35                     | 87                   | 27                               | 43          | 54                              | 3                           | 82                           | 41                  | 16           | 34                       | 705           |
| 20 Vancouver                 | 1,849                | 962              | 316               | 118                     | 178                    | 548                  | 285                              | 490         | 706                             | 56                          | 152                          | 208                 | 112          | 366                      | 6,346         |
| 30 Burnaby                   | 229                  | 78               | 34                | 5                       | 39                     | 62                   | 28                               | 24          | 180                             | 15                          | 29                           | 45                  | 31           | 32                       | 831           |
| 40 North Shore               | 254                  | 117              | 49                | 8                       | 30                     | 68                   | 35                               | 28          | 164                             | 18                          | 60                           | 50                  | 23           | 47                       | 951           |
| 50 Richmond                  | 118                  | 47               | 24                | 3                       | 36                     | 55                   | 12                               | 12          | 65                              | 5                           | 21                           | 34                  | 22           | 15                       | 469           |
| 60 Capital Regional District | 846                  | 350              | 142               | 19                      | 99                     | 170                  | 178                              | 91          | 601                             | 28                          | 95                           | 158                 | 95           | 166                      | 3,038         |
| <b>TOTAL</b>                 | <b>6,566</b>         | <b>2,820</b>     | <b>1,209</b>      | <b>277</b>              | <b>1,023</b>           | <b>1,907</b>         | <b>1,227</b>                     | <b>998</b>  | <b>3,579</b>                    | <b>201</b>                  | <b>1,348</b>                 | <b>1,158</b>        | <b>648</b>   | <b>1,151</b>             | <b>24,112</b> |

... continued

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 5a (continued)**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Primary Area of Responsibility**  
**June 1993**

| Health Region                | Administration                              |  |                              |              | Education            |                       |                                  |                    |              | Research <sup>2</sup> | Unknown    | Total         |
|------------------------------|---|--|------------------------------|--------------|----------------------|-----------------------|----------------------------------|--------------------|--------------|-----------------------|------------|---------------|
|                              | Nursing<br>Education<br>Admin-<br>istration | Nursing<br>Services<br>Admin-<br>istration | Other<br>Admin-<br>istration | Subtotal     | Teaching<br>Students | Teaching<br>Employees | Teaching<br>Patients/<br>Clients | Other<br>Education | Subtotal     |                       |            |               |
| 1 East Kootenay              | 2   | 13   | 6                            | 21           | 6                    | 2                     | 4                                | 0                  | 12           | 0                     | 10         | 441           |
| 2 Central Kootenay           | 8   | 19   | 4                            | 31           | 13                   | 2                     | 8                                | 1                  | 24           | 0                     | 7          | 627           |
| 4 North Okanagan             | 3   | 13   | 12                           | 28           | 2                    | 1                     | 10                               | 2                  | 15           | 0                     | 7          | 677           |
| 5 South Okanagan             | 9   | 41   | 22                           | 72           | 31                   | 8                     | 8                                | 0                  | 47           | 0                     | 16         | 1,494         |
| 6 South Central              | 3   | 23   | 17                           | 43           | 37                   | 8                     | 3                                | 0                  | 48           | 0                     | 5          | 902           |
| 7 Upper Fraser Valley        | 7   | 23   | 13                           | 43           | 17                   | 8                     | 5                                | 1                  | 31           | 1                     | 19         | 1,026         |
| 8 Central Fraser Valley      | 3   | 34   | 13                           | 50           | 2                    | 3                     | 4                                | 1                  | 10           | 0                     | 11         | 901           |
| 9 Boundary                   | 13  | 39   | 23                           | 75           | 32                   | 7                     | 15                               | 8                  | 62           | 4                     | 26         | 1,685         |
| 10 Simon Fraser              | 18  | 49   | 23                           | 90           | 79                   | 23                    | 14                               | 7                  | 123          | 6                     | 17         | 2,050         |
| 11 Coast Garibaldi           | 4   | 13   | 7                            | 24           | 0                    | 2                     | 2                                | 0                  | 4            | 0                     | 11         | 321           |
| 13 Central Vancouver Island  | 7   | 35   | 19                           | 61           | 24                   | 5                     | 10                               | 2                  | 41           | 1                     | 21         | 1,167         |
| 14 Upper Island              | 4   | 22   | 14                           | 40           | 11                   | 1                     | 6                                | 0                  | 18           | 2                     | 12         | 634           |
| 15 Cariboo                   | 0   | 8  | 6                            | 14           | 1                    | 0                     | 1                                | 0                  | 2            | 0                     | 4          | 330           |
| 16 Skeena                    | 2   | 16   | 5                            | 23           | 10                   | 1                     | 4                                | 2                  | 17           | 0                     | 3          | 495           |
| 17 Peace River               | 3   | 12   | 5                            | 20           | 4                    | 3                     | 5                                | 0                  | 12           | 0                     | 4          | 310           |
| 18 Northern Interior         | 4   | 18   | 9                            | 31           | 32                   | 9                     | 9                                | 3                  | 53           | 1                     | 9          | 799           |
| 20 Vancouver                 | 55  | 163  | 132                          | 350          | 161                  | 81                    | 57                               | 17                 | 316          | 83                    | 93         | 7,188         |
| 30 Burnaby                   | 5   | 26   | 11                           | 42           | 59                   | 2                     | 3                                | 6                  | 70           | 1                     | 8          | 952           |
| 40 North Shore               | 4   | 27   | 22                           | 53           | 6                    | 16                    | 11                               | 2                  | 35           | 1                     | 17         | 1,057         |
| 50 Richmond                  | 5   | 12   | 7                            | 24           | 5                    | 9                     | 7                                | 6                  | 27           | 1                     | 10         | 531           |
| 60 Capital Regional District | 24  | 90   | 75                           | 189          | 55                   | 37                    | 33                               | 14                 | 139          | 8                     | 32         | 3,406         |
| <b>TOTAL</b>                 | <b>183</b>                                  | <b>696</b>                                 | <b>445</b>                   | <b>1,324</b> | <b>587</b>           | <b>228</b>            | <b>219</b>                       | <b>72</b>          | <b>1,106</b> | <b>109</b>            | <b>342</b> | <b>26,993</b> |

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

<sup>2</sup> Includes 17 RNs in nursing research only and 92 in other research.

**Table 5b**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Primary Area of Responsibility**  
**June 1993**

| Health Region                | Direct Patient Care  |                  |                   |                         |                        |                      |                                  |             |                                 |                             |                              |                     |              |                          | Subtotal     |
|------------------------------|----------------------|------------------|-------------------|-------------------------|------------------------|----------------------|----------------------------------|-------------|---------------------------------|-----------------------------|------------------------------|---------------------|--------------|--------------------------|--------------|
|                              | Medical/<br>Surgical | Critical<br>Care | Operating<br>Room | Ambul-<br>atory<br>Care | Emerg-<br>ency<br>Care | Maternal/<br>Newborn | Psychiatric/<br>Mental<br>Health | Paediatrics | Geriatrics/<br>Geront-<br>ology | Occupa-<br>tional<br>Health | Several<br>Clinical<br>Areas | Community<br>Health | Home<br>Care | Other<br>Patient<br>Care |              |
| 1 East Kootenay              | 13.32                | 1.98             | 2.41              | 0.14                    | 1.98                   | 2.55                 | 2.55                             | 0.00        | 9.49                            | 0.14                        | 14.74                        | 3.54                | 2.13         | 1.42                     | 56.40        |
| 2 Central Kootenay           | 18.65                | 7.11             | 3.62              | 0.81                    | 3.09                   | 5.23                 | 3.62                             | 1.07        | 13.95                           | 0.40                        | 9.53                         | 2.95                | 2.95         | 2.82                     | 75.81        |
| 4 North Okanagan             | 15.13                | 5.74             | 3.45              | 0.77                    | 3.54                   | 3.64                 | 3.06                             | 1.72        | 9.67                            | 0.19                        | 6.22                         | 2.68                | 2.11         | 2.11                     | 60.03        |
| 5 South Okanagan             | 18.39                | 6.73             | 3.12              | 0.85                    | 2.56                   | 4.92                 | 3.47                             | 2.11        | 12.36                           | 0.40                        | 4.32                         | 3.17                | 2.31         | 3.57                     | 68.28        |
| 6 South Central              | 17.65                | 8.78             | 3.95              | 1.84                    | 2.90                   | 5.79                 | 3.51                             | 2.11        | 7.29                            | 0.97                        | 7.11                         | 3.95                | 2.28         | 2.63                     | 70.77        |
| 7 Upper Fraser Valley        | 12.68                | 5.05             | 2.64              | 0.35                    | 3.58                   | 4.52                 | 3.93                             | 2.23        | 11.91                           | 0.12                        | 2.46                         | 2.35                | 1.17         | 1.70                     | 54.70        |
| 8 Central Fraser Valley      | 11.43                | 4.37             | 2.37              | 0.26                    | 2.90                   | 3.48                 | 2.47                             | 1.63        | 8.21                            | 0.26                        | 2.26                         | 1.90                | 0.84         | 1.32                     | 43.71        |
| 9 Boundary                   | 11.56                | 3.63             | 1.54              | 0.37                    | 2.44                   | 2.78                 | 1.99                             | 0.95        | 7.27                            | 0.45                        | 1.25                         | 2.33                | 1.46         | 2.23                     | 40.25        |
| 10 Simon Fraser              | 31.44                | 13.32            | 4.64              | 1.26                    | 4.24                   | 8.08                 | 8.93                             | 1.56        | 8.18                            | 0.76                        | 1.87                         | 2.32                | 1.06         | 3.89                     | 91.56        |
| 11 Coast Garibaldi           | 7.75                 | 3.48             | 2.06              | 0.00                    | 4.11                   | 3.01                 | 1.11                             | 0.79        | 7.91                            | 0.00                        | 8.70                         | 2.85                | 2.22         | 0.63                     | 44.63        |
| 13 Central Vancouver Island  | 11.07                | 5.03             | 3.24              | 0.53                    | 2.22                   | 4.01                 | 2.51                             | 1.31        | 8.99                            | 0.29                        | 3.29                         | 3.72                | 1.89         | 2.32                     | 50.43        |
| 14 Upper Island              | 12.92                | 4.89             | 3.33              | 0.29                    | 2.74                   | 4.11                 | 3.03                             | 1.57        | 7.44                            | 0.00                        | 6.66                         | 3.62                | 1.47         | 2.94                     | 55.01        |
| 15 Cariboo                   | 11.40                | 3.95             | 3.49              | 0.00                    | 2.58                   | 4.10                 | 0.46                             | 0.76        | 5.32                            | 0.15                        | 7.75                         | 3.95                | 1.52         | 1.67                     | 47.10        |
| 16 Skeena                    | 12.64                | 5.44             | 3.78              | 0.12                    | 2.01                   | 6.62                 | 1.06                             | 2.36        | 2.95                            | 0.35                        | 6.97                         | 5.44                | 1.54         | 2.13                     | 53.42        |
| 17 Peace River               | 9.16                 | 3.22             | 2.21              | 0.00                    | 3.73                   | 3.90                 | 1.36                             | 1.53        | 6.96                            | 0.34                        | 5.43                         | 4.24                | 2.54         | 1.87                     | 46.48        |
| 18 Northern Interior         | 15.03                | 5.87             | 3.02              | 0.52                    | 3.02                   | 7.52                 | 2.33                             | 3.71        | 4.67                            | 0.26                        | 7.08                         | 3.54                | 1.38         | 2.94                     | 60.91        |
| 20 Vancouver                 | 37.56                | 19.54            | 6.42              | 2.40                    | 3.62                   | 11.13                | 5.79                             | 9.95        | 14.34                           | 1.14                        | 3.09                         | 4.23                | 2.28         | 7.43                     | 128.90       |
| 30 Burnaby                   | 13.82                | 4.71             | 2.05              | 0.30                    | 2.35                   | 3.74                 | 1.69                             | 1.45        | 10.86                           | 0.91                        | 1.75                         | 2.72                | 1.87         | 1.93                     | 50.15        |
| 40 North Shore               | 15.43                | 7.11             | 2.98              | 0.49                    | 1.82                   | 4.13                 | 2.13                             | 1.70        | 9.96                            | 1.09                        | 3.64                         | 3.04                | 1.40         | 2.85                     | 57.76        |
| 50 Richmond                  | 8.92                 | 3.55             | 1.81              | 0.23                    | 2.72                   | 4.16                 | 0.91                             | 0.91        | 4.91                            | 0.38                        | 1.59                         | 2.57                | 1.66         | 1.13                     | 35.44        |
| 60 Capital Regional District | 27.15                | 11.23            | 4.56              | 0.61                    | 3.18                   | 5.46                 | 5.71                             | 2.92        | 19.29                           | 0.90                        | 3.05                         | 5.07                | 3.05         | 5.33                     | 97.51        |
| <b>TOTAL</b>                 | <b>18.97</b>         | <b>8.15</b>      | <b>3.49</b>       | <b>0.80</b>             | <b>2.96</b>            | <b>5.51</b>          | <b>3.54</b>                      | <b>2.88</b> | <b>10.34</b>                    | <b>0.58</b>                 | <b>3.89</b>                  | <b>3.34</b>         | <b>1.87</b>  | <b>3.32</b>              | <b>69.65</b> |

... continued

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 5b (continued)**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Primary Area of Responsibility**  
**June 1993**

| Health Region                | Administration                              |  |                              |             | Education            |                       |                                  |                    |             | Research <sup>2</sup> | Unknown     | Total        |
|------------------------------|---|--|------------------------------|-------------|----------------------|-----------------------|----------------------------------|--------------------|-------------|-----------------------|-------------|--------------|
|                              | Nursing<br>Education<br>Admin-<br>istration | Nursing<br>Services<br>Admin-<br>istration | Other<br>Admin-<br>istration | Subtotal    | Teaching<br>Students | Teaching<br>Employees | Teaching<br>Patients/<br>Clients | Other<br>Education | Subtotal    |                       |             |              |
| 1 East Kootenay              | 0.28  | 1.84                                       | 0.85                         | 2.98        | 0.85                 | 0.28                  | 0.57                             | 0.00               | 1.70        | 0.00                  | 1.42        | 62.50        |
| 2 Central Kootenay           | 1.07  | 2.55                                       | 0.54                         | 4.16        | 1.74                 | 0.27                  | 1.07                             | 0.13               | 3.22        | 0.00                  | 0.94        | 84.13        |
| 4 North Okanagan             | 0.29  | 1.24                                       | 1.15                         | 2.68        | 0.19                 | 0.10                  | 0.96                             | 0.19               | 1.44        | 0.00                  | 0.67        | 64.82        |
| 5 South Okanagan             | 0.45  | 2.06                                       | 1.11                         | 3.62        | 1.56                 | 0.40                  | 0.40                             | 0.00               | 2.36        | 0.00                  | 0.80        | 75.06        |
| 6 South Central              | 0.26  | 2.02                                       | 1.49                         | 3.78        | 3.25                 | 0.70                  | 0.26                             | 0.00               | 4.21        | 0.00                  | 0.44        | 79.19        |
| 7 Upper Fraser Valley        | 0.41  | 1.35                                       | 0.76                         | 2.52        | 1.00                 | 0.47                  | 0.29                             | 0.06               | 1.82        | 0.06                  | 1.12        | 60.22        |
| 8 Central Fraser Valley      | 0.16  | 1.79                                       | 0.68                         | 2.63        | 0.11                 | 0.16                  | 0.21                             | 0.05               | 0.53        | 0.00                  | 0.58        | 47.45        |
| 9 Boundary                   | 0.34  | 1.03                                       | 0.61                         | 1.99        | 0.85                 | 0.19                  | 0.40                             | 0.21               | 1.64        | 0.11                  | 0.69        | 44.68        |
| 10 Simon Fraser              | 0.91  | 2.47                                       | 1.16                         | 4.54        | 3.99                 | 1.16                  | 0.71                             | 0.35               | 6.21        | 0.30                  | 0.86        | 103.47       |
| 11 Coast Garibaldi           | 0.63  | 2.06                                       | 1.11                         | 3.80        | 0.00                 | 0.32                  | 0.32                             | 0.00               | 0.63        | 0.00                  | 1.74        | 50.80        |
| 13 Central Vancouver Island  | 0.34  | 1.69                                       | 0.92                         | 2.95        | 1.16                 | 0.24                  | 0.48                             | 0.10               | 1.98        | 0.05                  | 1.02        | 56.42        |
| 14 Upper Island              | 0.39  | 2.15                                       | 1.37                         | 3.92        | 1.08                 | 0.10                  | 0.59                             | 0.00               | 1.76        | 0.20                  | 1.17        | 62.06        |
| 15 Cariboo                   | 0.00  | 1.22                                       | 0.91                         | 2.13        | 0.15                 | 0.00                  | 0.15                             | 0.00               | 0.30        | 0.00                  | 0.61        | 50.14        |
| 16 Skeena                    | 0.24  | 1.89                                       | 0.59                         | 2.72        | 1.18                 | 0.12                  | 0.47                             | 0.24               | 2.01        | 0.00                  | 0.35        | 58.50        |
| 17 Peace River               | 0.51  | 2.04                                       | 0.85                         | 3.39        | 0.68                 | 0.51                  | 0.85                             | 0.00               | 2.04        | 0.00                  | 0.68        | 52.59        |
| 18 Northern Interior         | 0.35  | 1.56                                       | 0.78                         | 2.68        | 2.76                 | 0.78                  | 0.78                             | 0.26               | 4.58        | 0.09                  | 0.78        | 69.03        |
| 20 Vancouver                 | 1.12  | 3.31                                       | 2.68                         | 7.11        | 3.27                 | 1.65                  | 1.16                             | 0.35               | 6.42        | 1.69                  | 1.89        | 146.01       |
| 30 Burnaby                   | 0.30  | 1.57                                       | 0.66                         | 2.53        | 3.56                 | 0.12                  | 0.18                             | 0.36               | 4.22        | 0.06                  | 0.48        | 57.45        |
| 40 North Shore               | 0.24  | 1.64                                       | 1.34                         | 3.22        | 0.36                 | 0.97                  | 0.67                             | 0.12               | 2.13        | 0.06                  | 1.03        | 64.19        |
| 50 Richmond                  | 0.38  | 0.91                                       | 0.53                         | 1.81        | 0.38                 | 0.68                  | 0.53                             | 0.45               | 2.04        | 0.08                  | 0.76        | 40.12        |
| 60 Capital Regional District | 0.77  | 2.89                                       | 2.41                         | 6.07        | 1.77                 | 1.19                  | 1.06                             | 0.45               | 4.46        | 0.26                  | 1.03        | 109.32       |
| <b>TOTAL</b>                 | <b>0.53</b>                                 | <b>2.01</b>                                | <b>1.29</b>                  | <b>3.82</b> | <b>1.70</b>          | <b>0.66</b>           | <b>0.63</b>                      | <b>0.21</b>        | <b>3.19</b> | <b>0.31</b>           | <b>0.99</b> | <b>77.97</b> |

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

<sup>2</sup> Includes 17 RNs in nursing research only and 92 in other research.

**Table 6a**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Position**  
**June 1993**

| Health Region                | Chief<br>Nursing<br>Officer/<br>Director | Assistant/<br>Associate<br>Director | Supervisor/<br>Coordinator | Clinical<br>Nurse<br>Specialist/<br>Clinician | Head<br>Nurse/<br>Assistant<br>Head Nurse | Staff Nurse/<br>Home Care/<br>Community<br>Health Nurse | Office/Occu-<br>pational/<br>Industrial<br>Nurse | Instructor/<br>Professor | Consultant/<br>Counsellor | Researcher | Other        | Unknown    | Total         |
|------------------------------|--|-------------------------------------|----------------------------|---|---|---|--|--------------------------|---------------------------|------------|--------------|------------|---------------|
| 1 East Kootenay              | 11                                       | 2                                   | 14                         | 4   | 30  | 307   | 5  | 7                        | 5                         | 0          | 44           | 12         | 441           |
| 2 Central Kootenay           | 20                                       | 0                                   | 32                         | 1   | 41  | 434   | 8  | 14                       | 6                         | 0          | 62           | 9          | 627           |
| 4 North Okanagan             | 10                                       | 3                                   | 19                         | 9   | 38  | 506   | 9  | 3                        | 7                         | 0          | 63           | 10         | 677           |
| 5 South Okanagan             | 31                                       | 8                                   | 48                         | 15  | 74  | 1,054   | 23   | 37                       | 12                        | 0          | 170          | 22         | 1,494         |
| 6 South Central              | 14                                       | 3                                   | 21                         | 13  | 29  | 673   | 14   | 38                       | 6                         | 0          | 83           | 8          | 902           |
| 7 Upper Fraser Valley        | 22                                       | 7                                   | 29                         | 14  | 40  | 747   | 5  | 14                       | 5                         | 1          | 122          | 20         | 1,026         |
| 8 Central Fraser Valley      | 24                                       | 2                                   | 35                         | 5   | 36  | 654   | 8  | 8                        | 7                         | 0          | 110          | 12         | 901           |
| 9 Boundary                   | 38                                       | 8                                   | 39                         | 6   | 110                                       | 1,143   | 37   | 37                       | 17                        | 2          | 209          | 39         | 1,685         |
| 10 Simon Fraser              | 29                                       | 5                                   | 50                         | 32  | 121                                       | 1,423   | 24   | 93                       | 11                        | 4          | 226          | 32         | 2,050         |
| 11 Coast Garibaldi           | 7  | 0                                   | 20                         | 1   | 11  | 215   | 2  | 1                        | 5                         | 0          | 48           | 11         | 321           |
| 13 Central Vancouver Island  | 25                                       | 8                                   | 45                         | 7   | 44  | 833   | 20   | 26                       | 16                        | 0          | 119          | 24         | 1,167         |
| 14 Upper Island              | 9  | 2                                   | 30                         | 4   | 23  | 434   | 10   | 16                       | 10                        | 2          | 85           | 9          | 634           |
| 15 Cariboo                   | 5  | 0                                   | 18                         | 3   | 16  | 241   | 3  | 1                        | 0                         | 0          | 39           | 4          | 330           |
| 16 Skeena                    | 12                                       | 2                                   | 23                         | 2   | 25  | 355   | 7  | 10                       | 5                         | 0          | 49           | 5          | 495           |
| 17 Peace River               | 7  | 3                                   | 26                         | 1   | 14  | 213   | 5  | 6                        | 2                         | 0          | 32           | 1          | 310           |
| 18 Northern Interior         | 8  | 7                                   | 14                         | 9   | 30  | 584   | 13   | 38                       | 10                        | 0          | 78           | 8          | 799           |
| 20 Vancouver                 | 109                                      | 29                                  | 177                        | 181   | 303                                       | 4,972   | 44   | 249                      | 89                        | 56         | 860          | 119        | 7,188         |
| 30 Burnaby                   | 18                                       | 6                                   | 17                         | 12  | 45  | 628   | 11   | 55                       | 17                        | 2          | 118          | 23         | 952           |
| 40 North Shore               | 17                                       | 6                                   | 22                         | 15  | 41  | 708   | 21   | 17                       | 28                        | 0          | 159          | 23         | 1,057         |
| 50 Richmond                  | 12                                       | 3                                   | 12                         | 8   | 9   | 375   | 9  | 11                       | 14                        | 0          | 65           | 13         | 531           |
| 60 Capital Regional District | 61                                       | 15                                  | 117                        | 38  | 184                                       | 2,322   | 45   | 81                       | 58                        | 4          | 426          | 55         | 3,406         |
| <b>TOTAL</b>                 | <b>489</b>                               | <b>119</b>                          | <b>808</b>                 | <b>380</b>                                    | <b>1,264</b>                              | <b>18,821</b>   | <b>323</b>                                       | <b>762</b>               | <b>330</b>                | <b>71</b>  | <b>3,167</b> | <b>459</b> | <b>26,993</b> |

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 6b**  
**Practising Registered Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Position**  
**June 1993**

| Health Region                | Chief<br>Nursing<br>Officer/<br>Director | Assistant/<br>Associate<br>Director | Supervisor/<br>Coordinator | Clinical<br>Nurse<br>Specialist/<br>Clinician | Head<br>Nurse/<br>Assistant<br>Head Nurse | Staff Nurse/<br>Home Care/<br>Community<br>Health Nurse | Office/Occu-<br>pational/<br>Industrial<br>Nurse | Instructor/<br>Professor | Consultant/<br>Counsellor | Researcher  | Other       | Unknown     | Total        |
|------------------------------|--|-------------------------------------|----------------------------|---|---|---|--|--------------------------|---------------------------|-------------|-------------|-------------|--------------|
| 1 East Kootenay              | 1.56                                     | 0.28                                | 1.98                       | 0.57  | 4.25                                      | 43.51   | 0.71   | 0.99                     | 0.71                      | 0.00        | 6.24        | 1.70        | 62.50        |
| 2 Central Kootenay           | 2.68                                     | 0.00                                | 4.29                       | 0.13  | 5.50                                      | 58.23   | 1.07   | 1.88                     | 0.81                      | 0.00        | 8.32        | 1.21        | 84.13        |
| 4 North Okanagan             | 0.96                                     | 0.29                                | 1.82                       | 0.86  | 3.64                                      | 48.44   | 0.86   | 0.29                     | 0.67                      | 0.00        | 6.03        | 0.96        | 64.82        |
| 5 South Okanagan             | 1.56                                     | 0.40                                | 2.41                       | 0.75  | 3.72                                      | 52.96   | 1.16   | 1.86                     | 0.60                      | 0.00        | 8.54        | 1.11        | 75.06        |
| 6 South Central              | 1.23                                     | 0.26                                | 1.84                       | 1.14  | 2.55                                      | 59.09   | 1.23   | 3.34                     | 0.53                      | 0.00        | 7.29        | 0.70        | 79.19        |
| 7 Upper Fraser Valley        | 1.29                                     | 0.41                                | 1.70                       | 0.82  | 2.35                                      | 43.84   | 0.29   | 0.82                     | 0.29                      | 0.06        | 7.16        | 1.17        | 60.22        |
| 8 Central Fraser Valley      | 1.26                                     | 0.11                                | 1.84                       | 0.26  | 1.90                                      | 34.44   | 0.42   | 0.42                     | 0.37                      | 0.00        | 5.79        | 0.63        | 47.45        |
| 9 Boundary                   | 1.01                                     | 0.21                                | 1.03                       | 0.16  | 2.92                                      | 30.31   | 0.98   | 0.98                     | 0.45                      | 0.05        | 5.54        | 1.03        | 44.68        |
| 10 Simon Fraser              | 1.46                                     | 0.25                                | 2.52                       | 1.62  | 6.11                                      | 71.82   | 1.21   | 4.69                     | 0.56                      | 0.20        | 11.41       | 1.62        | 103.47       |
| 11 Coast Garibaldi           | 1.11                                     | 0.00                                | 3.17                       | 0.16  | 1.74                                      | 34.03   | 0.32   | 0.16                     | 0.79                      | 0.00        | 7.60        | 1.74        | 50.80        |
| 13 Central Vancouver Island  | 1.21                                     | 0.39                                | 2.18                       | 0.34  | 2.13                                      | 40.27   | 0.97   | 1.26                     | 0.77                      | 0.00        | 5.75        | 1.16        | 56.42        |
| 14 Upper Island              | 0.88                                     | 0.20                                | 2.94                       | 0.39  | 2.25                                      | 42.48   | 0.98   | 1.57                     | 0.98                      | 0.20        | 8.32        | 0.88        | 62.06        |
| 15 Cariboo                   | 0.76                                     | 0.00                                | 2.73                       | 0.46  | 2.43                                      | 36.62   | 0.46   | 0.15                     | 0.00                      | 0.00        | 5.93        | 0.61        | 50.14        |
| 16 Skeena                    | 1.42                                     | 0.24                                | 2.72                       | 0.24  | 2.95                                      | 41.95   | 0.83   | 1.18                     | 0.59                      | 0.00        | 5.79        | 0.59        | 58.50        |
| 17 Peace River               | 1.19                                     | 0.51                                | 4.41                       | 0.17  | 2.38                                      | 36.14   | 0.85   | 1.02                     | 0.34                      | 0.00        | 5.43        | 0.17        | 52.59        |
| 18 Northern Interior         | 0.69                                     | 0.60                                | 1.21                       | 0.78  | 2.59                                      | 50.45   | 1.12   | 3.28                     | 0.86                      | 0.00        | 6.74        | 0.69        | 69.03        |
| 20 Vancouver                 | 2.21                                     | 0.59                                | 3.60                       | 3.68  | 6.15                                      | 100.99  | 0.89   | 5.06                     | 1.81                      | 1.14        | 17.47       | 2.42        | 146.01       |
| 30 Burnaby                   | 1.09                                     | 0.36                                | 1.03                       | 0.72  | 2.72                                      | 37.90   | 0.66   | 3.32                     | 1.03                      | 0.12        | 7.12        | 1.39        | 57.45        |
| 40 North Shore               | 1.03                                     | 0.36                                | 1.34                       | 0.91  | 2.49                                      | 43.00   | 1.28   | 1.03                     | 1.70                      | 0.00        | 9.66        | 1.40        | 64.19        |
| 50 Richmond                  | 0.91                                     | 0.23                                | 0.91                       | 0.60  | 0.68                                      | 28.34   | 0.68   | 0.83                     | 1.06                      | 0.00        | 4.91        | 0.98        | 40.12        |
| 60 Capital Regional District | 1.96                                     | 0.48                                | 3.76                       | 1.22  | 5.91                                      | 74.53   | 1.44   | 2.60                     | 1.86                      | 0.13        | 13.67       | 1.77        | 109.32       |
| <b>TOTAL</b>                 | <b>1.41</b>                              | <b>0.34</b>                         | <b>2.33</b>                | <b>1.10</b>                                   | <b>3.65</b>                               | <b>54.37</b>  | <b>0.93</b>                                      | <b>2.20</b>              | <b>0.95</b>               | <b>0.21</b> | <b>9.15</b> | <b>1.33</b> | <b>77.97</b> |

<sup>1</sup> Excludes 164 RNs who are employed in other fields, 529 who are not employed and 193 who did not indicate their employment status.

**Table 7**  
**Analysis of Change in the Number of Registered Nurses in British Columbia**  
**by Health Region**  
**June 1991 to June 1993**

| Health Region                | June 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |              | Reactivation <sup>3</sup> | Attrition <sup>4</sup> | Net Intra-provincial Migration | June 1993     |
|------------------------------|------------------------|---|--------------|---------------|--------------|---------------------------|------------------------|--------------------------------|---------------|
|                              |                        | B.C.  | Other Canada | Other Country | Subtotal     |                           |                        |                                |               |
| 1 East Kootenay              | 484                    | 14  | 20           | 4             | 38           | 21                        | 49                     | 3                              | 497           |
| 2 Central Kootenay           | 697                    | 34  | 18           | 5             | 57           | 18                        | 64                     | 14                             | 722           |
| 4 North Okanagan             | 746                    | 25  | 25           | 2             | 52           | 29                        | 64                     | 23                             | 786           |
| 5 South Okanagan             | 1,585                  | 78  | 94           | 9             | 181          | 52                        | 161                    | 36                             | 1,693         |
| 6 South Central              | 977                    | 59  | 16           | 3             | 78           | 22                        | 75                     | 16                             | 1,018         |
| 7 Upper Fraser Valley        | 1,037                  | 55  | 70           | 14            | 139          | 40                        | 100                    | 50                             | 1,166         |
| 8 Central Fraser Valley      | 986                    | 37  | 39           | 14            | 90           | 36                        | 93                     | 16                             | 1,035         |
| 9 Boundary                   | 1,872                  | 90  | 85           | 44            | 219          | 77                        | 191                    | 67                             | 2,044         |
| 10 Simon Fraser              | 2,116                  | 130   | 49           | 29            | 208          | 57                        | 136                    | -25                            | 2,220         |
| 11 Coast Garibaldi           | 397                    | 10  | 13           | 3             | 26           | 16                        | 52                     | 16                             | 403           |
| 13 Central Vancouver Island  | 1,328                  | 33  | 41           | 13            | 87           | 64                        | 135                    | 66                             | 1,410         |
| 14 Upper Island              | 687                    | 22  | 23           | 10            | 55           | 28                        | 72                     | 50                             | 748           |
| 15 Cariboo                   | 351                    | 26  | 6            | 1             | 33           | 8                         | 28                     | 9                              | 373           |
| 16 Skeena                    | 546                    | 23  | 36           | 9             | 68           | 26                        | 53                     | -23                            | 564           |
| 17 Peace River               | 314                    | 14  | 34           | 3             | 51           | 10                        | 34                     | 6                              | 347           |
| 18 Northern Interior         | 837                    | 73  | 24           | 5             | 102          | 28                        | 74                     | -8                             | 885           |
| 20 Vancouver                 | 7,536                  | 382   | 202          | 170           | 754          | 248                       | 672                    | -216                           | 7,650         |
| 30 Burnaby                   | 1,039                  | 58  | 43           | 30            | 131          | 43                        | 93                     | -16                            | 1,104         |
| 40 North Shore               | 1,298                  | 47  | 23           | 19            | 89           | 42                        | 133                    | -34                            | 1,262         |
| 50 Richmond                  | 643                    | 26  | 19           | 20            | 65           | 25                        | 66                     | -14                            | 653           |
| 60 Capital Regional District | 3,798                  | 203   | 124          | 21            | 348          | 134                       | 338                    | -36                            | 3,906         |
| <b>TOTAL</b>                 | <b>29,274</b>          | <b>1,439</b>  | <b>1,004</b> | <b>428</b>    | <b>2,871</b> | <b>1,024</b>              | <b>2,683</b>           | <b>0</b>                       | <b>30,486</b> |

<sup>1</sup> Registered Nurses who reported B.C. addresses and were registered in June 1993 and whose date of initial registration was after June 1991.

<sup>2</sup> The figures for 1991 differ slightly from the corresponding figures for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net increase of 8 RNs.

<sup>3</sup> Registered Nurses who reported B.C. addresses and were registered in June 1993 but not in June 1991 and who were registered for the first time before June 1991.

<sup>4</sup> Registered Nurses who reported B.C. addresses and were registered in June 1991 but not in June 1993.

## LICENSED GRADUATE NURSES

**Definition:** A Licensed Graduate Nurse

- (a) was employed in British Columbia, in a capacity substantially equivalent to a registered nurse, at any time during the two years prior to September 30, 1988;
- (b) graduated from a school of nursing that has standards substantially equivalent to those of any approved school of nursing, and;
- (c) was never a registered nurse, and at the time of application to the RNABC did not qualify as a registered nurse.<sup>3</sup>

**Governing Statute:** Nurses (Registered) Act, Revised Statutes of British Columbia, 1979, Chapter 302; Nursing Statutes Amendment Act, 1988, Chapter 51, Sections 4-38; Health Statutes Amendment Act, 1990, Chapter 51, Sections 30-32; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 37-42; administered by the Ministry of Health.

**Governing Body:** Registered Nurses Association of British Columbia (RNABC). In order to practise as a Licensed Graduate Nurse in British Columbia, it is necessary to be registered by the RNABC. Applications for membership in the RNABC as a Licensed Graduate Nurse were not possible after September 30, 1990. Members of the RNABC who are licensed graduate nurses have exclusive use of the titles: *Licensed Graduate Nurse* or *LGN*.

**Date of Record:** December 1991 and December 1993.

**Source of Data:** Registered Nurses Association of British Columbia (RNABC).

### Preparation and Updating:

The tables are derived from the register of the RNABC and include licensed graduate nurses (LGNs) who reported a British Columbia address at the date of record. LGNs were included for the first time in *ROLLCALL 91* subsequent to the creation of this category and corresponding licensing requirements under the Nurses (Registered) Act, Revised Statutes of British Columbia, 1979, Chapter 302, as revised by the Nursing Statutes Amendment Act, 1988, Chapter 51. The data in the tables are presented based on employment address when the membership status is "practising", when employment in nursing is reported, and when employment address is available. In 1991 and 1993, employment address was available for 68% and 82% of practising LGNs employed in nursing, respectively. Home address is used for the remainder, as well as for practising LGNs who are not employed in nursing, and for LGNs with non-practising membership status.

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<sup>3</sup> Adapted from the Nursing Statutes Amendment Act, 1988, Chapter 51, Section 13.1.



## Definition of Terms:

### 1. Membership Status

An LGN may hold a practising or non-practising membership in the RNABC. A practising LGN may or may not be employed in nursing. A non-practising LGN who commences employment in nursing in British Columbia must convert to practising membership. Tables 1a and 1b report the number and number per 10,000 population of practising and non-practising LGNs in British Columbia; Table 1c reports the average annual rates of change in these figures.

### 2. Age and Sex

Age information on practising and non-practising LGNs, derived from the RNABC registration database, is shown in Table 2. In 1993, there were 435 female and 8 male LGNs. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### 3. Employment Status

Employment status for practising LGNs as reported on the registration renewal form is shown in Table 3. The categories used are:

- (a) Employed in Nursing;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) Seasonal/Casual
- (b) Not Employed.

### 4. Type of Employer

Type of employer is reported initially upon registration, and updated annually from the RNABC registration renewal form. Table 4 shows this information for practising LGNs employed in nursing. The RNABC made significant changes to this category on its registration renewal form in 1992. The categories that were altered are listed here as they appeared in 1991 and 1992:

#### 1991

Acute Care Hospital  
 Activation/Rehab. Hospital  
 Extended Care Hospital  
 Psychiatric Hospital  
 Long Term Care Facility/Nursing Home  
 Home Care/ Visiting Care Agency  
 Business/Industry

#### 1992

General Hospital  
 Rehabilitation  
 Extended Care  
 Psychiatric Hospital/Mental Health Centre  
 Long Term Care/ Nursing Home  
 Home Care  
 Business-Industry/Occupational Health

In addition, the categories "Private Nursing Agency/Private Duty", "Association/Government", and "Nursing Stations (Outpost/Nurse Clinics)" were added to the 1992 form. The categories on the 1993 form were not changed from 1992, and are as follows:

- (a) General Hospital;
- (b) Rehabilitation;
- (c) Extended Care;
- (d) Psychiatric Hospital/Mental Health Centre;
- (e) Long Term Care/Nursing Home;
- (f) Home Care;
- (g) Community Health Agency;
- (h) Business-Industry/Occupational Health;
- (i) Physician's Office/Family Practice Unit;
- (j) Educational Institution;
- (k) Self-employed;
- (l) Private Nursing Agency/Private Duty;
- (m) Association/Government;
- (n) Nursing Stations (Outpost/Nurse Clinics);
- (o) Other.

Some of these categories are combined in Table 4 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## 5. Primary Area of Responsibility

Primary area of responsibility is reported initially upon registration, and updated annually from the RNABC registration renewal form. Table 5 shows this information for practising LGNs employed in nursing. Changes on the registration renewal form from 1991 to 1992 included dropping the categories "Post-Anesthetic Recovery Room" and "Neurosciences" and adding "Emergency Care", "Ambulatory Care", "Community Health", and "Home Care". There were no changes to the form from 1992 to 1993. The categories used by the RNABC in 1993 were:

- (a) Direct Patient Care;
  - (i) Medical/Surgical
  - (ii) Critical Care (e.g., ICU, CCU, PAR)
  - (iii) Operating Room
  - (iv) Ambulatory Care
  - (v) Emergency Care
  - (vi) Maternal/Newborn
  - (vii) Psychiatric/Mental Health
  - (viii) Paediatrics
  - (ix) Geriatrics/Gerontology
  - (x) Occupational Health
  - (xi) Several Clinical Areas
  - (xii) Community Health
  - (xiii) Home Care
  - (xiv) Other Patient Care
- (b) Administration;
  - (i) Nursing Education Administration
  - (ii) Nursing Services Administration
  - (iii) Other Administration

- (c) Education;
  - (i) Teaching - Students
  - (ii) Teaching - Employees
  - (iii) Teaching - Patients/Clients
  - (iv) Teaching - Other Education
- (d) Research;
  - (i) Nursing research only
  - (ii) Other research.

Some of these categories are combined in Table 5 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## 6. Employment Position

Employment position is reported initially upon registration, and updated annually from the RNABC registration renewal form. Table 6 shows this information for practising LGNs employed in nursing. The RNABC made significant changes to this category on its registration renewal form in 1992. The categories that were altered are listed below as they appeared in 1991 and 1992:

### 1991

Director  
 Supervisor/Assistant Supervisor  
 Clinical Specialist/Clinician  
 Staff/General Duty Nurse  
  
 Community/Occupational Health/Home Care  
 Nurse

### 1992

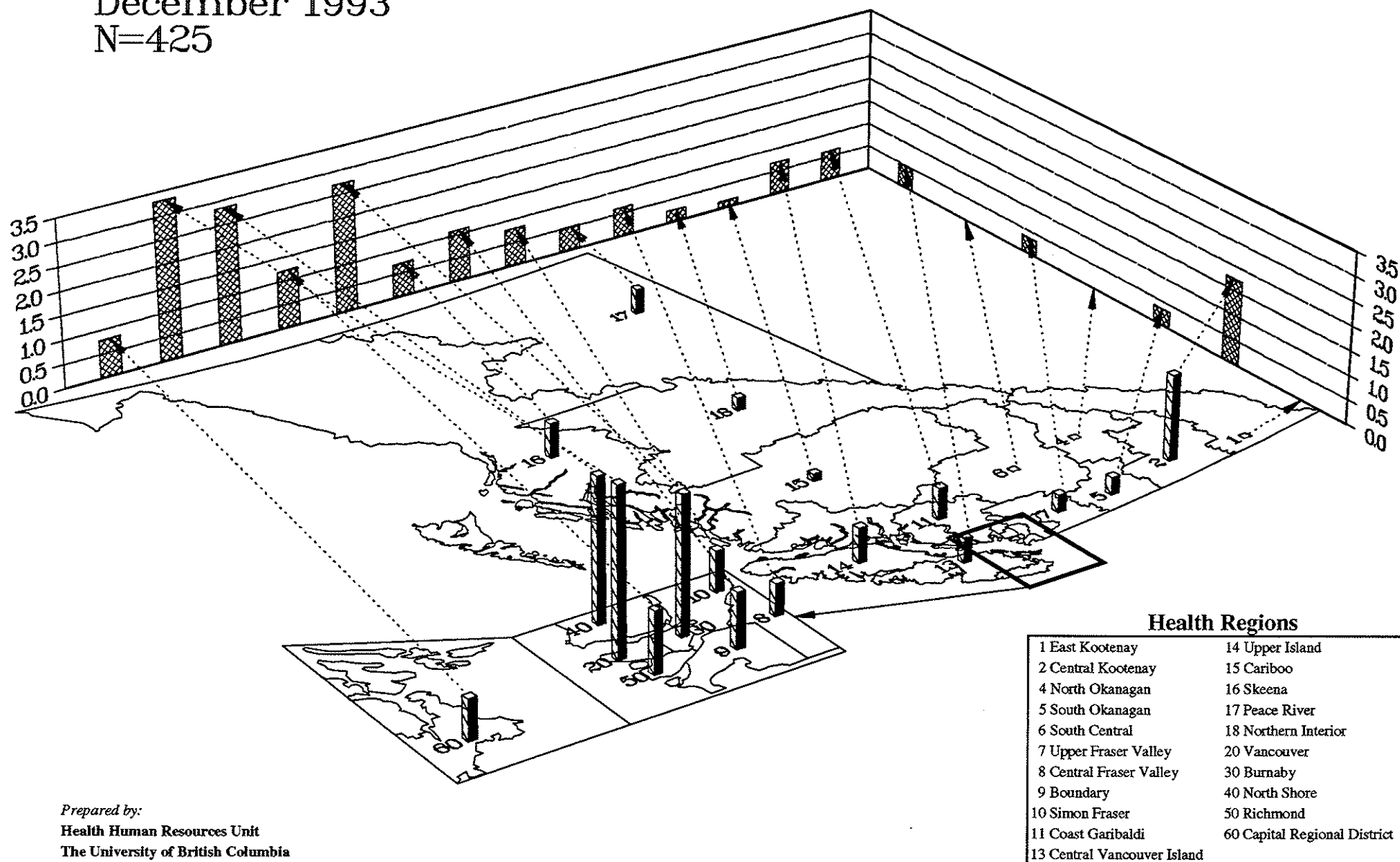
Chief Nursing Officer/Director  
 Supervisor/Co-ordinator  
 Clinical Nurse Specialist/Clinician  
 Staff Nurse/Home Care/Community Health  
 Nurse  
 Office/Occupational/Industrial Nurse

In addition, the category "Researcher" was added to the 1992 form. There were no changes on the form from 1992 to 1993. The full list of categories used in 1993 was:

- (a) Chief Nursing Officer/Director;
- (b) Assistant/Associate Director;
- (c) Supervisor/Co-ordinator;
- (d) Clinical Nurse Specialist/Clinician;
- (e) Head Nurse/Assistant Head Nurse;
- (f) Staff Nurse/Home Care/Community Health Nurse;
- (g) Office/Occupational/Industrial Nurse;
- (h) Instructor/Professor;
- (i) Consultant/Counsellor;
- (j) Researcher;
- (k) Other.

Some of these categories are combined in Table 6 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

Practising Licensed Graduate Nurses  
per 10,000 Population  
by Health Region  
December 1993  
N=425



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Licensed Graduate Nurses in British Columbia**  
**by Health Region by Registration Status**  
**December 1991 and December 1993**

| Health Region                | Practising |            | Non-Practising |           | Total      |            |
|------------------------------|------------|------------|----------------|-----------|------------|------------|
|                              | 1991       | 1993       | 1991           | 1993      | 1991       | 1993       |
| 1 East Kootenay              | 0          | 0          | 0              | 0         | 0          | 0          |
| 2 Central Kootenay           | 13         | 13         | 1              | 1         | 14         | 14         |
| 4 North Okanagan             | 0          | 0          | 0              | 0         | 0          | 0          |
| 5 South Okanagan             | 8          | 7          | 0              | 0         | 8          | 7          |
| 6 South Central              | 0          | 0          | 1              | 1         | 1          | 1          |
| 7 Upper Fraser Valley        | 6          | 6          | 0              | 0         | 6          | 6          |
| 8 Central Fraser Valley      | 16         | 12         | 0              | 1         | 16         | 13         |
| 9 Boundary                   | 53         | 41         | 0              | 1         | 53         | 42         |
| 10 Simon Fraser              | 16         | 16         | 2              | 2         | 18         | 18         |
| 11 Coast Garibaldi           | 5          | 4          | 0              | 0         | 5          | 4          |
| 13 Central Vancouver Island  | 11         | 10         | 1              | 1         | 12         | 11         |
| 14 Upper Island              | 8          | 7          | 0              | 1         | 8          | 8          |
| 15 Cariboo                   | 1          | 1          | 0              | 0         | 1          | 1          |
| 16 Skeena                    | 9          | 6          | 0              | 0         | 9          | 6          |
| 17 Peace River               | 3          | 3          | 0              | 0         | 3          | 3          |
| 18 Northern Interior         | 5          | 3          | 0              | 0         | 5          | 3          |
| 20 Vancouver                 | 174        | 163        | 3              | 6         | 177        | 169        |
| 30 Burnaby                   | 45         | 45         | 4              | 0         | 49         | 45         |
| 40 North Shore               | 47         | 47         | 0              | 1         | 47         | 48         |
| 50 Richmond                  | 20         | 16         | 0              | 2         | 20         | 18         |
| 60 Capital Regional District | 28         | 25         | 3              | 1         | 31         | 26         |
| <b>TOTAL</b>                 | <b>468</b> | <b>425</b> | <b>15</b>      | <b>18</b> | <b>483</b> | <b>443</b> |

**Table 1b**  
**Licensed Graduate Nurses in British Columbia**  
**per 10,000 Population by Health Region by Registration Status**  
**December 1991 and December 1993**

| Health Region                | Practising  |             | Non-Practising |             | Total       |             |
|------------------------------|-------------|-------------|----------------|-------------|-------------|-------------|
|                              | 1991        | 1993        | 1991           | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 0.00        | 0.00        | 0.00           | 0.00        | 0.00        | 0.00        |
| 2 Central Kootenay           | 1.81        | 1.74        | 0.14           | 0.13        | 1.95        | 1.88        |
| 4 North Okanagan             | 0.00        | 0.00        | 0.00           | 0.00        | 0.00        | 0.00        |
| 5 South Okanagan             | 0.45        | 0.35        | 0.00           | 0.00        | 0.45        | 0.35        |
| 6 South Central              | 0.00        | 0.00        | 0.09           | 0.09        | 0.09        | 0.09        |
| 7 Upper Fraser Valley        | 0.38        | 0.35        | 0.00           | 0.00        | 0.38        | 0.35        |
| 8 Central Fraser Valley      | 0.91        | 0.63        | 0.00           | 0.05        | 0.91        | 0.68        |
| 9 Boundary                   | 1.51        | 1.09        | 0.00           | 0.03        | 1.51        | 1.11        |
| 10 Simon Fraser              | 0.87        | 0.81        | 0.11           | 0.10        | 0.98        | 0.91        |
| 11 Coast Garibaldi           | 0.84        | 0.63        | 0.00           | 0.00        | 0.84        | 0.63        |
| 13 Central Vancouver Island  | 0.57        | 0.48        | 0.05           | 0.05        | 0.62        | 0.53        |
| 14 Upper Island              | 0.83        | 0.69        | 0.00           | 0.10        | 0.83        | 0.78        |
| 15 Cariboo                   | 0.15        | 0.15        | 0.00           | 0.00        | 0.15        | 0.15        |
| 16 Skeena                    | 1.08        | 0.71        | 0.00           | 0.00        | 1.08        | 0.71        |
| 17 Peace River               | 0.51        | 0.51        | 0.00           | 0.00        | 0.51        | 0.51        |
| 18 Northern Interior         | 0.44        | 0.26        | 0.00           | 0.00        | 0.44        | 0.26        |
| 20 Vancouver                 | 3.64        | 3.31        | 0.06           | 0.12        | 3.70        | 3.43        |
| 30 Burnaby                   | 2.83        | 2.72        | 0.25           | 0.00        | 3.08        | 2.72        |
| 40 North Shore               | 2.97        | 2.85        | 0.00           | 0.06        | 2.97        | 2.92        |
| 50 Richmond                  | 1.58        | 1.21        | 0.00           | 0.15        | 1.58        | 1.36        |
| 60 Capital Regional District | 0.93        | 0.80        | 0.10           | 0.03        | 1.03        | 0.83        |
| <b>TOTAL</b>                 | <b>1.42</b> | <b>1.23</b> | <b>0.05</b>    | <b>0.05</b> | <b>1.47</b> | <b>1.28</b> |

**Table 1c**  
**Average Annual Rate of Change: Licensed Graduate Nurses in British Columbia**  
**by Health Region by Registration Status**  
**December 1991 to December 1993**

| Health Region                | Practising          |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | *                   | *                  | *                   | *                  | *                   | *                  |
| 2 Central Kootenay           | 0.00                | -1.75              | *                   | *                  | 0.00                | -1.75              |
| 4 North Okanagan             | *                   | *                  | *                   | *                  | *                   | *                  |
| 5 South Okanagan             | *                   | *                  | *                   | *                  | *                   | *                  |
| 6 South Central              | *                   | *                  | *                   | *                  | *                   | *                  |
| 7 Upper Fraser Valley        | *                   | *                  | *                   | *                  | *                   | *                  |
| 8 Central Fraser Valley      | -13.40              | -16.56             | *                   | *                  | -9.86               | -13.15             |
| 9 Boundary                   | -12.05              | -15.11             | *                   | *                  | -10.98              | -14.08             |
| 10 Simon Fraser              | 0.00                | -3.76              | *                   | *                  | 0.00                | -3.76              |
| 11 Coast Garibaldi           | *                   | *                  | *                   | *                  | *                   | *                  |
| 13 Central Vancouver Island  | -4.65               | -7.67              | *                   | *                  | -4.26               | -7.28              |
| 14 Upper Island              | *                   | *                  | *                   | *                  | *                   | *                  |
| 15 Cariboo                   | *                   | *                  | *                   | *                  | *                   | *                  |
| 16 Skeena                    | *                   | *                  | *                   | *                  | *                   | *                  |
| 17 Peace River               | *                   | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | *                   | *                  | *                   | *                  | *                   | *                  |
| 20 Vancouver                 | -3.21               | -4.65              | *                   | *                  | -2.29               | -3.74              |
| 30 Burnaby                   | 0.00                | -2.09              | *                   | *                  | -4.17               | -6.17              |
| 40 North Shore               | 0.00                | -1.93              | *                   | *                  | 1.06                | -0.89              |
| 50 Richmond                  | -10.56              | -12.51             | *                   | *                  | -5.13               | -7.21              |
| 60 Capital Regional District | -5.51               | -7.32              | *                   | *                  | -8.42               | -10.17             |
| <b>TOTAL</b>                 | <b>-4.70</b>        | <b>-7.18</b>       | <b>9.54</b>         | <b>6.70</b>        | <b>-4.23</b>        | <b>-6.72</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Licensed Graduate Nurses in British Columbia**  
**by Health Region by Age<sup>1</sup>**  
**December 1993**

| Health Region                | < 25     | 25-34     | 35-44      | 45-54      | 55-64     | 65 +     | Subtotal   | Unknown  | Total      |
|------------------------------|----------|-----------|------------|------------|-----------|----------|------------|----------|------------|
| 1 East Kootenay              | 0        | 0         | 0          | 0          | 0         | 0        | 0          | 0        | 0          |
| 2 Central Kootenay           | 0        | 0         | 3          | 9          | 2         | 0        | 14         | 0        | 14         |
| 4 North Okanagan             | 0        | 0         | 0          | 0          | 0         | 0        | 0          | 0        | 0          |
| 5 South Okanagan             | 0        | 1         | 0          | 4          | 2         | 0        | 7          | 0        | 7          |
| 6 South Central              | 0        | 0         | 0          | 0          | 1         | 0        | 1          | 0        | 1          |
| 7 Upper Fraser Valley        | 0        | 0         | 1          | 3          | 2         | 0        | 6          | 0        | 6          |
| 8 Central Fraser Valley      | 0        | 0         | 4          | 7          | 2         | 0        | 13         | 0        | 13         |
| 9 Boundary                   | 0        | 6         | 16         | 13         | 5         | 2        | 42         | 0        | 42         |
| 10 Simon Fraser              | 0        | 1         | 8          | 7          | 2         | 0        | 18         | 0        | 18         |
| 11 Coast Garibaldi           | 0        | 0         | 1          | 2          | 1         | 0        | 4          | 0        | 4          |
| 13 Central Vancouver Island  | 0        | 0         | 3          | 3          | 5         | 0        | 11         | 0        | 11         |
| 14 Upper Island              | 0        | 0         | 2          | 3          | 3         | 0        | 8          | 0        | 8          |
| 15 Cariboo                   | 0        | 0         | 0          | 0          | 1         | 0        | 1          | 0        | 1          |
| 16 Skeena                    | 0        | 0         | 3          | 2          | 0         | 0        | 5          | 1        | 6          |
| 17 Peace River               | 0        | 1         | 1          | 1          | 0         | 0        | 3          | 0        | 3          |
| 18 Northern Interior         | 0        | 0         | 0          | 3          | 0         | 0        | 3          | 0        | 3          |
| 20 Vancouver                 | 0        | 18        | 71         | 60         | 17        | 2        | 168        | 1        | 169        |
| 30 Burnaby                   | 0        | 6         | 22         | 14         | 3         | 0        | 45         | 0        | 45         |
| 40 North Shore               | 0        | 4         | 26         | 13         | 5         | 0        | 48         | 0        | 48         |
| 50 Richmond                  | 0        | 3         | 6          | 4          | 5         | 0        | 18         | 0        | 18         |
| 60 Capital Regional District | 0        | 0         | 12         | 10         | 4         | 0        | 26         | 0        | 26         |
| <b>TOTAL</b>                 | <b>0</b> | <b>40</b> | <b>179</b> | <b>158</b> | <b>60</b> | <b>4</b> | <b>441</b> | <b>2</b> | <b>443</b> |

<sup>1</sup> At the date of record, RNABC membership included 435 female and 8 male Licensed Graduate Nurses.



**Table 3**  
**Practising Licensed Graduate Nurses in British Columbia**  
**by Health Region by Employment Status**  
**December 1993**

| Health Region                | Employed in Nursing |           |                     |          |            | Not<br>Employed | Unknown  | Total      |
|------------------------------|---------------------|-----------|---------------------|----------|------------|-----------------|----------|------------|
|                              | Full-Time           | Part-Time | Seasonal/<br>Casual | Unknown  | Subtotal   |                 |          |            |
| 1 East Kootenay              | 0                   | 0         | 0                   | 0        | 0          | 0               | 0        | 0          |
| 2 Central Kootenay           | 6                   | 3         | 4                   | 0        | 13         | 0               | 0        | 13         |
| 4 North Okanagan             | 0                   | 0         | 0                   | 0        | 0          | 0               | 0        | 0          |
| 5 South Okanagan             | 5                   | 2         | 0                   | 0        | 7          | 0               | 0        | 7          |
| 6 South Central              | 0                   | 0         | 0                   | 0        | 0          | 0               | 0        | 0          |
| 7 Upper Fraser Valley        | 3                   | 0         | 2                   | 1        | 6          | 0               | 0        | 6          |
| 8 Central Fraser Valley      | 8                   | 3         | 1                   | 0        | 12         | 0               | 0        | 12         |
| 9 Boundary                   | 36                  | 3         | 1                   | 0        | 40         | 1               | 0        | 41         |
| 10 Simon Fraser              | 12                  | 3         | 1                   | 0        | 16         | 0               | 0        | 16         |
| 11 Coast Garibaldi           | 2                   | 1         | 1                   | 0        | 4          | 0               | 0        | 4          |
| 13 Central Vancouver Island  | 6                   | 2         | 1                   | 0        | 9          | 1               | 0        | 10         |
| 14 Upper Island              | 6                   | 1         | 0                   | 0        | 7          | 0               | 0        | 7          |
| 15 Cariboo                   | 1                   | 0         | 0                   | 0        | 1          | 0               | 0        | 1          |
| 16 Skeena                    | 5                   | 1         | 0                   | 0        | 6          | 0               | 0        | 6          |
| 17 Peace River               | 2                   | 0         | 1                   | 0        | 3          | 0               | 0        | 3          |
| 18 Northern Interior         | 2                   | 0         | 1                   | 0        | 3          | 0               | 0        | 3          |
| 20 Vancouver                 | 117                 | 25        | 12                  | 4        | 158        | 1               | 4        | 163        |
| 30 Burnaby                   | 29                  | 6         | 7                   | 2        | 44         | 0               | 1        | 45         |
| 40 North Shore               | 34                  | 7         | 4                   | 1        | 46         | 0               | 1        | 47         |
| 50 Richmond                  | 11                  | 4         | 1                   | 0        | 16         | 0               | 0        | 16         |
| 60 Capital Regional District | 15                  | 4         | 4                   | 0        | 23         | 1               | 1        | 25         |
| <b>TOTAL</b>                 | <b>300</b>          | <b>65</b> | <b>41</b>           | <b>8</b> | <b>414</b> | <b>4</b>        | <b>7</b> | <b>425</b> |

**Table 4**  
**Practising Licensed Graduate Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Type of Employer**  
**December 1993**

| Health Region                | General Hospital | Rehabilitation | Extended Care | Long Term Care/<br>Nursing Home | Home Care/<br>Community Health Agency | Physician's<br>Office/<br>Family Practice Unit | Other <sup>2</sup> | Total      |
|------------------------------|------------------|----------------|---------------|---------------------------------|---------------------------------------|--|--------------------|------------|
| 1 East Kootenay              | 0                | 0              | 0             | 0                               | 0                                     | 0  | 0                  | 0          |
| 2 Central Kootenay           | 8                | 0              | 0             | 2                               | 1                                     | 2  | 0                  | 13         |
| 4 North Okanagan             | 0                | 0              | 0             | 0                               | 0                                     | 0  | 0                  | 0          |
| 5 South Okanagan             | 0                | 0              | 1             | 2                               | 1                                     | 1  | 2                  | 7          |
| 6 South Central              | 0                | 0              | 0             | 0                               | 0                                     | 0  | 0                  | 0          |
| 7 Upper Fraser Valley        | 2                | 0              | 1             | 2                               | 0                                     | 0  | 1                  | 6          |
| 8 Central Fraser Valley      | 2                | 0              | 0             | 7                               | 0                                     | 0  | 3                  | 12         |
| 9 Boundary                   | 1                | 1              | 1             | 36                              | 1                                     | 0  | 0                  | 40         |
| 10 Simon Fraser              | 0                | 0              | 4             | 9                               | 0                                     | 0  | 3                  | 16         |
| 11 Coast Garibaldi           | 0                | 0              | 3             | 1                               | 0                                     | 0  | 0                  | 4          |
| 13 Central Vancouver Island  | 4                | 0              | 2             | 2                               | 0                                     | 0  | 1                  | 9          |
| 14 Upper Island              | 2                | 0              | 0             | 2                               | 0                                     | 1  | 2                  | 7          |
| 15 Cariboo                   | 0                | 0              | 1             | 0                               | 0                                     | 0  | 0                  | 1          |
| 16 Skeena                    | 1                | 0              | 2             | 2                               | 0                                     | 0  | 1                  | 6          |
| 17 Peace River               | 1                | 0              | 1             | 0                               | 0                                     | 0  | 1                  | 3          |
| 18 Northern Interior         | 0                | 0              | 0             | 2                               | 0                                     | 1  | 0                  | 3          |
| 20 Vancouver                 | 5                | 6              | 23            | 118                             | 0                                     | 1  | 5                  | 158        |
| 30 Burnaby                   | 1                | 0              | 7             | 34                              | 0                                     | 0  | 2                  | 44         |
| 40 North Shore               | 1                | 0              | 9             | 34                              | 1                                     | 0  | 1                  | 46         |
| 50 Richmond                  | 0                | 0              | 0             | 14                              | 1                                     | 1  | 0                  | 16         |
| 60 Capital Regional District | 1                | 1              | 3             | 15                              | 1                                     | 1  | 1                  | 23         |
| <b>TOTAL</b>                 | <b>29</b>        | <b>8</b>       | <b>58</b>     | <b>282</b>                      | <b>6</b>                              | <b>8</b>                                       | <b>23</b>          | <b>414</b> |

<sup>1</sup> Excludes 4 LGNs who are not employed and 7 who did not indicate their employment status.

<sup>2</sup> Includes 3 LGNs who are self-employed, 4 who are employed at a psychiatric hospital/mental health centre and 1 who did not indicate his/her type of employer.

**Table 5**  
**Practising Licensed Graduate Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Primary Area of Responsibility**  
**December 1993**

| Health Region                | Critical Care <sup>2</sup> | Acute Care <sup>3</sup> | Psychiatric/<br>Mental<br>Health | Geriatrics/<br>Gerontology | Community<br>Care* | Other<br>Patient Care | Education/<br>Admin-<br>istration** | Unknown   | Total      |
|------------------------------|----------------------------|-------------------------|----------------------------------|----------------------------|--------------------|-----------------------|-------------------------------------|-----------|------------|
| 1 East Kootenay              | 0                          | 0                       | 0                                | 0                          | 0                  | 0                     | 0                                   | 0         | 0          |
| 2 Central Kootenay           | 1                          | 7                       | 1                                | 3                          | 0                  | 1                     | 0                                   | 0         | 13         |
| 4 North Okanagan             | 0                          | 0                       | 0                                | 0                          | 0                  | 0                     | 0                                   | 0         | 0          |
| 5 South Okanagan             | 0                          | 0                       | 2                                | 1                          | 2                  | 1                     | 0                                   | 1         | 7          |
| 6 South Central              | 0                          | 0                       | 0                                | 0                          | 0                  | 0                     | 0                                   | 0         | 0          |
| 7 Upper Fraser Valley        | 1                          | 2                       | 1                                | 2                          | 0                  | 0                     | 0                                   | 0         | 6          |
| 8 Central Fraser Valley      | 3                          | 0                       | 1                                | 8                          | 0                  | 0                     | 0                                   | 0         | 12         |
| 9 Boundary                   | 0                          | 3                       | 2                                | 34                         | 1                  | 0                     | 0                                   | 0         | 40         |
| 10 Simon Fraser              | 0                          | 0                       | 3                                | 11                         | 0                  | 0                     | 1                                   | 1         | 16         |
| 11 Coast Garibaldi           | 0                          | 1                       | 0                                | 3                          | 0                  | 0                     | 0                                   | 0         | 4          |
| 13 Central Vancouver Island  | 2                          | 1                       | 0                                | 4                          | 1                  | 0                     | 1                                   | 0         | 9          |
| 14 Upper Island              | 1                          | 2                       | 1                                | 2                          | 0                  | 1                     | 0                                   | 0         | 7          |
| 15 Cariboo                   | 0                          | 0                       | 0                                | 1                          | 0                  | 0                     | 0                                   | 0         | 1          |
| 16 Skeena                    | 0                          | 1                       | 0                                | 5                          | 0                  | 0                     | 0                                   | 0         | 6          |
| 17 Peace River               | 0                          | 2                       | 1                                | 0                          | 0                  | 0                     | 0                                   | 0         | 3          |
| 18 Northern Interior         | 0                          | 0                       | 0                                | 2                          | 0                  | 1                     | 0                                   | 0         | 3          |
| 20 Vancouver                 | 2                          | 3                       | 4                                | 137                        | 1                  | 6                     | 1                                   | 4         | 158        |
| 30 Burnaby                   | 1                          | 1                       | 2                                | 35                         | 2                  | 1                     | 0                                   | 2         | 44         |
| 40 North Shore               | 0                          | 0                       | 3                                | 42                         | 0                  | 0                     | 0                                   | 1         | 46         |
| 50 Richmond                  | 0                          | 0                       | 0                                | 13                         | 1                  | 2                     | 0                                   | 0         | 16         |
| 60 Capital Regional District | 0                          | 3                       | 0                                | 16                         | 0                  | 0                     | 2                                   | 2         | 23         |
| <b>TOTAL</b>                 | <b>11</b>                  | <b>26</b>               | <b>21</b>                        | <b>319</b>                 | <b>8</b>           | <b>13</b>             | <b>5</b>                            | <b>11</b> | <b>414</b> |

<sup>1</sup> Excludes 4 LGNs who are not employed and 7 who did not indicate their employment status.

<sup>2</sup> Includes 4 LGNs who are employed in critical care, 2 who are employed in emergency care and 5 who are employed in operating room (OR).

<sup>3</sup> Includes 15 LGNs who are employed in medical/surgical, 1 who is employed in maternal/newborn, 2 who are employed in paediatrics and 8 who are employed in several clinical areas.

\* Includes 3 LGNs who are employed in ambulatory care, 2 who are employed in community health and 3 who are employed in home care.

\*\* Includes 1 LGN who is employed in nursing education administration, 1 who is employed in nursing services administration, 2 who are employed in other administration and 1 who is employed in other education.

**Table 6**  
**Practising Licensed Graduate Nurses Employed in Nursing<sup>1</sup> in British Columbia**  
**by Health Region by Position**  
**December 1993**

| Health Region                | Chief Nursing<br>Officer/<br>Assistant/<br>Associate<br>Director | Supervisor/<br>Coordinator | Head Nurse/<br>Assistant<br>Head Nurse | Staff Nurse/<br>Home Care/<br>Community<br>Health Nurse | Other <sup>2</sup> | Total      |
|------------------------------|--|----------------------------|--|---|--------------------|------------|
| 1 East Kootenay              | 0  | 0                          | 0                                      | 0   | 0                  | 0          |
| 2 Central Kootenay           | 1  | 0                          | 0                                      | 12  | 0                  | 13         |
| 4 North Okanagan             | 0  | 0                          | 0                                      | 0   | 0                  | 0          |
| 5 South Okanagan             | 1  | 1                          | 0                                      | 3   | 2                  | 7          |
| 6 South Central              | 0  | 0                          | 0                                      | 0   | 0                  | 0          |
| 7 Upper Fraser Valley        | 1  | 0                          | 0                                      | 5   | 0                  | 6          |
| 8 Central Fraser Valley      | 0  | 0                          | 0                                      | 8   | 4                  | 12         |
| 9 Boundary                   | 1  | 1                          | 2                                      | 27  | 9                  | 40         |
| 10 Simon Fraser              | 1  | 0                          | 2                                      | 11  | 2                  | 16         |
| 11 Coast Garibaldi           | 0  | 0                          | 0                                      | 4   | 0                  | 4          |
| 13 Central Vancouver Island  | 0  | 0                          | 1                                      | 6   | 2                  | 9          |
| 14 Upper Island              | 1  | 0                          | 0                                      | 5   | 1                  | 7          |
| 15 Cariboo                   | 0  | 0                          | 0                                      | 1   | 0                  | 1          |
| 16 Skeena                    | 0  | 0                          | 0                                      | 3   | 3                  | 6          |
| 17 Peace River               | 0  | 1                          | 0                                      | 1   | 1                  | 3          |
| 18 Northern Interior         | 0  | 0                          | 0                                      | 1   | 2                  | 3          |
| 20 Vancouver                 | 6  | 3                          | 8                                      | 117   | 24                 | 158        |
| 30 Burnaby                   | 0  | 2                          | 1                                      | 35  | 6                  | 44         |
| 40 North Shore               | 0  | 1                          | 0                                      | 38  | 7                  | 46         |
| 50 Richmond                  | 0  | 0                          | 0                                      | 16  | 0                  | 16         |
| 60 Capital Regional District | 0  | 2                          | 0                                      | 13  | 8                  | 23         |
| <b>TOTAL</b>                 | <b>12</b>  | <b>11</b>                  | <b>14</b>                              | <b>306</b>  | <b>71</b>          | <b>414</b> |

<sup>1</sup> Excludes 4 LGNs who are not employed and 7 who did not indicate their employment status.

<sup>2</sup> Includes 1 LGN who is employed as an instructor/professor, 1 who is employed as an office/occupational/industrial nurse and 1 who did not indicate his/her position.



## REGISTERED PSYCHIATRIC NURSES

**Definition:** A registered psychiatric nurse

...practises in primary, secondary and tertiary care settings and provides service to individuals whose primary care needs relate to mental and developmental health.

The basis of psychiatric nursing is a caring, therapeutic relationship; the core knowledge and skills of psychiatric nursing are developed from the nursing, psycho-social, biological, and physical sciences.

Psychiatric nursing practice includes clinical, administrative, educational, consultative and research functions.<sup>1</sup>

**Governing Statute:** Nurses (Registered Psychiatric) Act, Revised Statutes of British Columbia, 1979, Chapter 301; Nursing Statutes Amendment Act, 1988, Chapter 51, Sections 39-40; Health Statutes Amendment Act, 1990, Chapter 51, Sections 33; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 43-46; administered by the Ministry of Health.

**Governing Body:** Registered Psychiatric Nurses Association of British Columbia (RPNABC). Registered members of the RPNABC have exclusive use of the titles *Registered Psychiatric Nurse* and *RPN*.

**Date of Record:** October 1991 and October 1993.

**Source of Data:** Registered Psychiatric Nurses Association of British Columbia (RPNABC).

### Preparation and Updating:

The tables, derived from the register of the RPNABC, include Registered Psychiatric Nurses (RPNs) who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when the membership status is "practising" and employment address is available. In both 1991 and 1993, employment address was available for 99% of practising RPNs. Home address is used for the remaining 1%, as well as for RPNs with non-practising status. A table on employment status has not been included in this chapter because the RPNABC considers all practising RPNs to be *employed* in nursing.

In 1993, 261 practising and 123 non-practising RPNs held dual registration with the RNABC. The numbers for 1991 were 298 practising and 116 non-practising. Dual registrants are included in both the RN and RPN tables.

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<sup>1</sup> Adapted from information provided by the Registered Psychiatric Nurses Association of British Columbia. See also *National Occupational Classification 1992*, Major Group 31, No. 3152, Ottawa; Employment and Immigration Canada.

## **Definition of Terms:**

### **1. Registration Status**

Tables 1a and 1b report the number and number per 10,000 population of RPNs in British Columbia by their registration status. Table 1c shows the average annual rates of change in the number of RPNs in British Columbia. An RPN may hold either a practising or non-practising membership in the RPNABC. A practising RPN must be employed in nursing. A non-practising RPN may not actively engage in the practise of psychiatric nursing.

### **2. Age and Sex**

Age and sex information on practising and non-practising RPNs, derived from the RPNABC registration database, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### **3. Type of Facility**

Employment by type of facility was reported by registrants on the RPNABC registration renewal form. Tables 3a and 3b show this information for practising RPNs by total number and number per 10,000 population. The categories used by the RPNABC were:

- (a) Psychiatric Hospital;
- (b) Mentally Handicapped Hospital/School;
- (c) Long Term Care/Intermediate Care;
- (d) Corrections;
- (e) Forensics;
- (f) Adolescent Psychiatry;
- (g) Child Psychiatry;
- (h) General Hospital Psychiatry;
- (i) General Hospital Medical;
- (j) Substance Abuse/Detox;
- (k) Community Mental Health Team;
- (l) Boarding Home/Group Home/Specialised Residential Care;
- (m) Educational Institution;
- (n) Geriatric Unit - Assessment/Discharge;
- (o) Community Health Agency;
- (p) Physicians Office/Medical Clinic;
- (q) Self-employed;
- (r) Other.

Some of these categories are combined in Tables 3a and 3b when the numbers responding in them are small. When this is done, a footnote is used to list specific responses for each category.

### **4. Primary Area of Responsibility**

Primary area of responsibility of practising RPNs, as indicated on their RPNABC registration renewal form, is reported in Tables 4a and 4b in total number and number per 10,000 population. The categories used are:

- (a) Adult Psychiatry - Acute;
- (b) Adult Psychiatry - Chronic;
- (c) Child/Adolescent Psychiatry;
- (d) Mentally Handicapped;
- (e) Psychogeriatrics;
- (f) Geriatrics;
- (g) Corrections ;
- (h) Forensics;
- (i) Substance Abuse;
- (j) Rehab./Vocational;
- (k) Education;
- (l) Counselling;
- (m) Administration ;
- (n) General Nursing;
- (o) Research;
- (p) Owner/Person in Charge;
- (q) Other.

## 5. Employment Position

Employment position for practising RPNs, as reported on the RPNABC registration renewal form, is shown in Tables 5a and 5b in total number and number per 10,000 population. Changes in the employment position category on the RPNABC registration renewal form between 1991 and 1992 included combining the categories "Assistant director" and "Associate Director" into "Assistant/Associate Director", and adding the categories "Owner" and "Consultant". The categories "Counsellor" and "Administrator/Manager" were then added in 1993. The full list of categories used on the 1993 form is as follows:

- (a) General Staff Nurse;
- (b) Assistant Head Nurse;
- (c) Community Nurse;
- (d) Head Nurse/Team Leader;
- (e) Supervisor/Co-ordinator;
- (f) Assistant/Associate Director;
- (g) Director;
- (h) Clinical Specialist;
- (i) Instructor;
- (j) Inservice/Staff Development;
- (k) Consultant;
- (l) Owner;
- (m) Counsellor;
- (n) Administrator/Manager;
- (o) Other.



## 6. Analysis of Change

Table 6 illustrates sources of change which affected the stock of practising RPNs from 1991 to 1993.

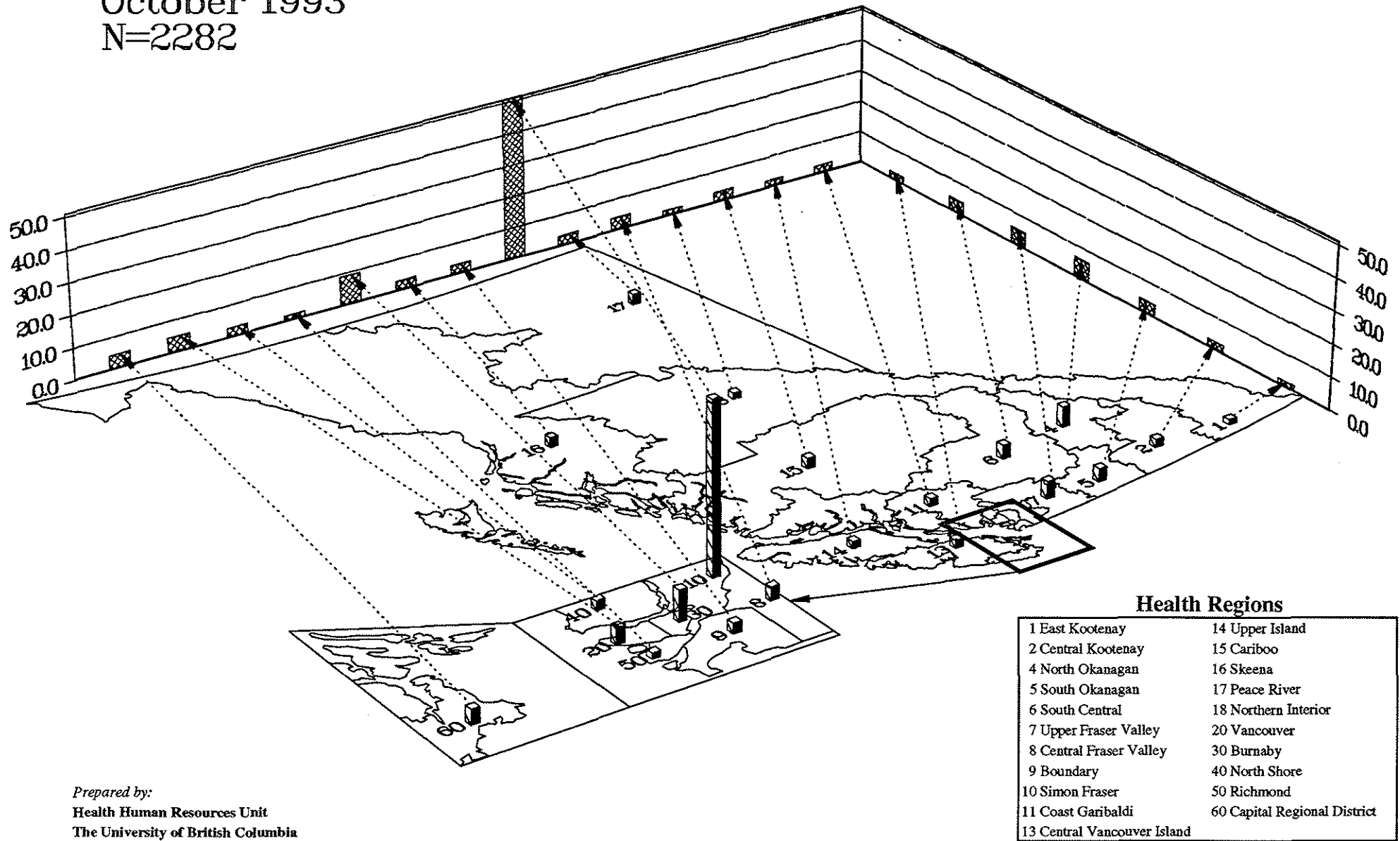
*New registrants* include RPNs who were practising members in British Columbia as of October 1993 and who registered with the RPNABC *for the first time* subsequent to October 1991. They are reported in the table according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent RPNs with British Columbia addresses who were not practising members in October 1991, but were practising members in the province in October 1993, and whose date of initial registration was before October 1991. Also included as reactivations are RPNs who reported out-of-province addresses in October 1991, but who reported British Columbia addresses in October 1993.

*Attrition* describes practising RPNs who were included in the 1991 RPN stock, but who, because of death, retirement, out-of-province relocation or non-renewal of practising registration, were not included in the 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of RPNs among different Health Regions. The net migration total is therefore zero.

Practising Registered Psychiatric Nurses  
per 10,000 Population  
by Health Region  
October 1993  
N=2282



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Registration Status**  
**October 1991 and October 1993**

| Health Region                | Practising   |              | Non-Practising |            | Total        |              |
|------------------------------|--------------|--------------|----------------|------------|--------------|--------------|
|                              | 1991         | 1993         | 1991           | 1993       | 1991         | 1993         |
| 1 East Kootenay              | 9            | 11           | 1              | 3          | 10           | 14           |
| 2 Central Kootenay           | 19           | 18           | 4              | 9          | 23           | 27           |
| 4 North Okanagan             | 58           | 64           | 13             | 14         | 71           | 78           |
| 5 South Okanagan             | 62           | 78           | 15             | 17         | 77           | 95           |
| 6 South Central              | 50           | 47           | 20             | 16         | 70           | 63           |
| 7 Upper Fraser Valley        | 84           | 89           | 19             | 16         | 103          | 105          |
| 8 Central Fraser Valley      | 64           | 76           | 47             | 54         | 111          | 130          |
| 9 Boundary                   | 99           | 114          | 50             | 55         | 149          | 169          |
| 10 Simon Fraser              | 1,026        | 1,013        | 55             | 59         | 1,081        | 1,072        |
| 11 Coast Garibaldi           | 15           | 15           | 6              | 9          | 21           | 24           |
| 13 Central Vancouver Island  | 34           | 49           | 20             | 17         | 54           | 66           |
| 14 Upper Island              | 14           | 22           | 5              | 6          | 19           | 28           |
| 15 Cariboo                   | 17           | 21           | 4              | 3          | 21           | 24           |
| 16 Skeena                    | 24           | 25           | 4              | 4          | 28           | 29           |
| 17 Peace River               | 18           | 19           | 5              | 3          | 23           | 22           |
| 18 Northern Interior         | 19           | 21           | 6              | 6          | 25           | 27           |
| 20 Vancouver                 | 246          | 240          | 42             | 35         | 288          | 275          |
| 30 Burnaby                   | 145          | 153          | 25             | 21         | 170          | 174          |
| 40 North Shore               | 40           | 48           | 16             | 14         | 56           | 62           |
| 50 Richmond                  | 29           | 22           | 4              | 7          | 33           | 29           |
| 60 Capital Regional District | 151          | 137          | 23             | 25         | 174          | 162          |
| <b>TOTAL</b>                 | <b>2,223</b> | <b>2,282</b> | <b>384</b>     | <b>393</b> | <b>2,607</b> | <b>2,675</b> |

**Table 1b**  
**Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Registration Status**  
**October 1991 and October 1993**

| Health Region                | Practising  |             | Non-Practising |             | Total       |             |
|------------------------------|-------------|-------------|----------------|-------------|-------------|-------------|
|                              | 1991        | 1993        | 1991           | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 1.29        | 1.56        | 0.14           | 0.43        | 1.44        | 1.98        |
| 2 Central Kootenay           | 2.64        | 2.42        | 0.56           | 1.21        | 3.20        | 3.62        |
| 4 North Okanagan             | 6.01        | 6.13        | 1.35           | 1.34        | 7.35        | 7.47        |
| 5 South Okanagan             | 3.47        | 3.92        | 0.84           | 0.85        | 4.31        | 4.77        |
| 6 South Central              | 4.59        | 4.13        | 1.84           | 1.40        | 6.43        | 5.53        |
| 7 Upper Fraser Valley        | 5.38        | 5.22        | 1.22           | 0.94        | 6.60        | 6.16        |
| 8 Central Fraser Valley      | 3.63        | 4.00        | 2.67           | 2.84        | 6.30        | 6.85        |
| 9 Boundary                   | 2.82        | 3.02        | 1.42           | 1.46        | 4.24        | 4.48        |
| 10 Simon Fraser              | 55.91       | 51.13       | 3.00           | 2.98        | 58.91       | 54.11       |
| 11 Coast Garibaldi           | 2.51        | 2.37        | 1.01           | 1.42        | 3.52        | 3.80        |
| 13 Central Vancouver Island  | 1.75        | 2.37        | 1.03           | 0.82        | 2.78        | 3.19        |
| 14 Upper Island              | 1.45        | 2.15        | 0.52           | 0.59        | 1.96        | 2.74        |
| 15 Cariboo                   | 2.62        | 3.19        | 0.62           | 0.46        | 3.24        | 3.65        |
| 16 Skeena                    | 2.89        | 2.95        | 0.48           | 0.47        | 3.37        | 3.43        |
| 17 Peace River               | 3.08        | 3.22        | 0.85           | 0.51        | 3.93        | 3.73        |
| 18 Northern Interior         | 1.67        | 1.81        | 0.53           | 0.52        | 2.20        | 2.33        |
| 20 Vancouver                 | 5.15        | 4.88        | 0.88           | 0.71        | 6.03        | 5.59        |
| 30 Burnaby                   | 9.13        | 9.23        | 1.57           | 1.27        | 10.70       | 10.50       |
| 40 North Shore               | 2.53        | 2.92        | 1.01           | 0.85        | 3.54        | 3.77        |
| 50 Richmond                  | 2.29        | 1.66        | 0.32           | 0.53        | 2.61        | 2.19        |
| 60 Capital Regional District | 5.04        | 4.40        | 0.77           | 0.80        | 5.81        | 5.20        |
| <b>TOTAL</b>                 | <b>6.77</b> | <b>6.59</b> | <b>1.17</b>    | <b>1.14</b> | <b>7.94</b> | <b>7.73</b> |

**Table 1c**  
**Average Annual Rate of Change: Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Registration Status**  
**October 1991 to October 1993**

| Health Region                | Practising          |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | *                   | *                  | *                   | *                  | 18.32               | 17.46              |
| 2 Central Kootenay           | -2.67               | -4.37              | *                   | *                  | 8.35                | 6.45               |
| 4 North Okanagan             | 5.05                | 1.00               | 3.77                | -0.22              | 4.81                | 0.78               |
| 5 South Okanagan             | 12.16               | 6.23               | 6.46                | 0.83               | 11.08               | 5.20               |
| 6 South Central              | -3.05               | -5.22              | -10.56              | -12.56             | -5.13               | -7.26              |
| 7 Upper Fraser Valley        | 2.93                | -1.50              | -8.23               | -12.18             | 0.97                | -3.38              |
| 8 Central Fraser Valley      | 8.97                | 5.00               | 7.19                | 3.28               | 8.22                | 4.27               |
| 9 Boundary                   | 7.31                | 3.57               | 4.88                | 1.23               | 6.50                | 2.79               |
| 10 Simon Fraser              | -0.64               | -4.37              | 3.57                | -0.32              | -0.42               | -4.16              |
| 11 Coast Garibaldi           | 0.00                | -2.83              | *                   | *                  | 6.90                | 3.88               |
| 13 Central Vancouver Island  | 20.05               | 16.25              | -7.80               | -10.72             | 10.55               | 7.06               |
| 14 Upper Island              | 25.36               | 22.01              | *                   | *                  | 21.40               | 18.16              |
| 15 Cariboo                   | 11.14               | 10.27              | *                   | *                  | 6.90                | 6.06               |
| 16 Skeena                    | 2.06                | 1.10               | *                   | *                  | 1.77                | 0.81               |
| 17 Peace River               | 2.74                | 2.34               | *                   | *                  | -2.20               | -2.58              |
| 18 Northern Interior         | 5.13                | 4.28               | *                   | *                  | 3.92                | 3.09               |
| 20 Vancouver                 | -1.23               | -2.70              | -8.71               | -10.07             | -2.28               | -3.74              |
| 30 Burnaby                   | 2.72                | 0.57               | -8.35               | -10.26             | 1.17                | -0.95              |
| 40 North Shore               | 9.54                | 7.43               | -6.46               | -8.27              | 5.22                | 3.19               |
| 50 Richmond                  | -12.90              | -14.81             | *                   | *                  | -6.26               | -8.31              |
| 60 Capital Regional District | -4.75               | -6.57              | 4.26                | 2.26               | -3.51               | -5.36              |
| <b>TOTAL</b>                 | <b>1.32</b>         | <b>-1.31</b>       | <b>1.17</b>         | <b>-1.46</b>       | <b>1.30</b>         | <b>-1.33</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Age and Sex**  
**October 1993**

| Health Region                | < 25     |           | 25-34     |            | 35-44      |            | 45-54      |            | 55-64      |            | 65 +     |           | Subtotal   |              | Unknown   | Total        |
|------------------------------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|----------|-----------|------------|--------------|-----------|--------------|
|                              | M        | F         | M         | F          | M          | F          | M          | F          | M          | F          | M        | F         | M          | F            |           |              |
| 1 East Kootenay              | 0        | 0         | 0         | 3          | 0          | 3          | 1          | 6          | 0          | 0          | 0        | 0         | 1          | 12           | 1         | 14           |
| 2 Central Kootenay           | 0        | 0         | 0         | 4          | 1          | 4          | 2          | 12         | 1          | 2          | 0        | 1         | 4          | 23           | 0         | 27           |
| 4 North Okanagan             | 0        | 0         | 1         | 6          | 0          | 19         | 9          | 25         | 2          | 12         | 1        | 0         | 13         | 62           | 3         | 78           |
| 5 South Okanagan             | 0        | 0         | 2         | 14         | 10         | 21         | 6          | 34         | 0          | 6          | 0        | 0         | 18         | 75           | 2         | 95           |
| 6 South Central              | 0        | 0         | 0         | 10         | 0          | 13         | 6          | 20         | 4          | 7          | 1        | 0         | 11         | 50           | 2         | 63           |
| 7 Upper Fraser Valley        | 1        | 1         | 4         | 7          | 7          | 26         | 14         | 25         | 10         | 6          | 0        | 1         | 36         | 66           | 3         | 105          |
| 8 Central Fraser Valley      | 0        | 1         | 4         | 23         | 7          | 37         | 7          | 33         | 2          | 11         | 1        | 2         | 21         | 107          | 2         | 130          |
| 9 Boundary                   | 0        | 3         | 2         | 38         | 3          | 45         | 10         | 44         | 3          | 14         | 1        | 3         | 19         | 147          | 3         | 169          |
| 10 Simon Fraser              | 4        | 29        | 40        | 153        | 60         | 192        | 171        | 255        | 54         | 82         | 1        | 4         | 330        | 715          | 27        | 1,072        |
| 11 Coast Garibaldi           | 0        | 1         | 2         | 3          | 2          | 11         | 0          | 4          | 1          | 0          | 0        | 0         | 5          | 19           | 0         | 24           |
| 13 Central Vancouver Island  | 0        | 1         | 0         | 14         | 7          | 23         | 5          | 12         | 0          | 3          | 0        | 0         | 12         | 53           | 1         | 66           |
| 14 Upper Island              | 0        | 0         | 0         | 5          | 2          | 14         | 0          | 2          | 2          | 1          | 0        | 0         | 4          | 22           | 2         | 28           |
| 15 Cariboo                   | 0        | 0         | 1         | 4          | 3          | 5          | 3          | 3          | 2          | 3          | 0        | 0         | 9          | 15           | 0         | 24           |
| 16 Skeena                    | 0        | 0         | 0         | 3          | 1          | 9          | 2          | 10         | 1          | 2          | 0        | 0         | 4          | 24           | 1         | 29           |
| 17 Peace River               | 0        | 0         | 2         | 6          | 3          | 4          | 5          | 1          | 0          | 0          | 0        | 0         | 10         | 11           | 1         | 22           |
| 18 Northern Interior         | 0        | 0         | 1         | 4          | 0          | 9          | 0          | 10         | 1          | 1          | 0        | 0         | 2          | 24           | 1         | 27           |
| 20 Vancouver                 | 0        | 10        | 9         | 68         | 24         | 68         | 14         | 45         | 8          | 20         | 0        | 1         | 55         | 212          | 8         | 275          |
| 30 Burnaby                   | 1        | 3         | 5         | 47         | 11         | 30         | 18         | 34         | 4          | 11         | 1        | 1         | 40         | 126          | 8         | 174          |
| 40 North Shore               | 0        | 4         | 1         | 15         | 3          | 21         | 1          | 7          | 2          | 5          | 0        | 0         | 7          | 52           | 3         | 62           |
| 50 Richmond                  | 0        | 1         | 0         | 9          | 1          | 7          | 4          | 7          | 0          | 0          | 0        | 0         | 5          | 24           | 0         | 29           |
| 60 Capital Regional District | 0        | 4         | 2         | 15         | 10         | 43         | 18         | 48         | 5          | 13         | 1        | 0         | 36         | 123          | 3         | 162          |
| <b>TOTAL</b>                 | <b>6</b> | <b>58</b> | <b>76</b> | <b>451</b> | <b>155</b> | <b>604</b> | <b>296</b> | <b>637</b> | <b>102</b> | <b>199</b> | <b>7</b> | <b>13</b> | <b>642</b> | <b>1,962</b> | <b>71</b> | <b>2,675</b> |

**Table 3a**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Type of Facility**  
**October 1993**

| Health Region                | Psychiatric<br>Hospital | Mentally<br>Handicapped<br>Hospital/<br>School | LTC/<br>Intermediate<br>Care | Corrections | Forensics  | Adolescent/<br>Child<br>Psychiatry <sup>1</sup> | General<br>Hospital<br>Psychiatry | General<br>Hospital<br>Medical | Substance<br>Abuse/<br>Detox |
|------------------------------|-------------------------|--|------------------------------|-------------|------------|---|-----------------------------------|--------------------------------|------------------------------|
| 1 East Kootenay              | 1                       | 0  | 1                            | 0           | 0          | 0   | 5                                 | 1                              | 0                            |
| 2 Central Kootenay           | 0                       | 0  | 6                            | 0           | 0          | 0   | 7                                 | 0                              | 0                            |
| 4 North Okanagan             | 1                       | 5  | 18                           | 0           | 0          | 0   | 6                                 | 5                              | 1                            |
| 5 South Okanagan             | 1                       | 1  | 21                           | 0           | 0          | 0   | 29                                | 1                              | 1                            |
| 6 South Central              | 1                       | 3  | 11                           | 0           | 1          | 0   | 4                                 | 2                              | 5                            |
| 7 Upper Fraser Valley        | 9                       | 0  | 7                            | 25          | 5          | 0   | 14                                | 4                              | 1                            |
| 8 Central Fraser Valley      | 2                       | 1  | 18                           | 1           | 2          | 1   | 10                                | 4                              | 0                            |
| 9 Boundary                   | 1                       | 2  | 26                           | 0           | 2          | 0   | 27                                | 2                              | 0                            |
| 10 Simon Fraser              | 531                     | 149  | 30                           | 0           | 119        | 0   | 34                                | 19                             | 15                           |
| 11 Coast Garibaldi           | 0                       | 0  | 5                            | 0           | 0          | 0   | 8                                 | 1                              | 0                            |
| 13 Central Vancouver Island  | 0                       | 1  | 5                            | 0           | 0          | 0   | 18                                | 0                              | 2                            |
| 14 Upper Island              | 0                       | 1  | 2                            | 0           | 0          | 1   | 10                                | 0                              | 0                            |
| 15 Cariboo                   | 0                       | 1  | 5                            | 0           | 2          | 0   | 0                                 | 1                              | 0                            |
| 16 Skeena                    | 0                       | 0  | 6                            | 0           | 1          | 0   | 9                                 | 1                              | 0                            |
| 17 Peace River               | 1                       | 0  | 5                            | 0           | 0          | 0   | 7                                 | 0                              | 0                            |
| 18 Northern Interior         | 0                       | 0  | 1                            | 1           | 1          | 1   | 6                                 | 3                              | 0                            |
| 20 Vancouver                 | 0                       | 2  | 38                           | 5           | 4          | 2   | 40                                | 17                             | 22                           |
| 30 Burnaby                   | 13                      | 1  | 26                           | 6           | 11         | 39  | 1                                 | 4                              | 0                            |
| 40 North Shore               | 3                       | 0  | 8                            | 0           | 0          | 0   | 18                                | 5                              | 0                            |
| 50 Richmond                  | 0                       | 0  | 2                            | 0           | 0          | 0   | 10                                | 0                              | 0                            |
| 60 Capital Regional District | 12                      | 39   | 30                           | 0           | 1          | 1   | 26                                | 2                              | 2                            |
| <b>TOTAL</b>                 | <b>576</b>              | <b>206</b>                                     | <b>271</b>                   | <b>38</b>   | <b>149</b> | <b>45</b>                                       | <b>289</b>                        | <b>72</b>                      | <b>49</b>                    |

... continued

<sup>1</sup> Includes 40 RPNs employed in adolescent psychiatry and 5 in child psychiatry.

**Table 3a (continued)**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Type of Facility**  
**October 1993**

| Health Region                | Community<br>Mental<br>Health Team | Boarding/<br>Group Home/<br>Specialized<br>Res. Care | Educational<br>Institution | Geriatric<br>Unit-<br>Assessment/<br>Discharge | Community<br>Health<br>Agency | Self<br>Employed | Other <sup>2</sup> | Unknown   | Total        |
|------------------------------|------------------------------------|--|----------------------------|--|-------------------------------|------------------|--------------------|-----------|--------------|
| 1 East Kootenay              | 1                                  | 0  | 0                          | 1  | 1                             | 0                | 0                  | 0         | 11           |
| 2 Central Kootenay           | 2                                  | 1  | 0                          | 0  | 2                             | 0                | 0                  | 0         | 18           |
| 4 North Okanagan             | 3                                  | 14   | 0                          | 1  | 1                             | 0                | 3                  | 6         | 64           |
| 5 South Okanagan             | 9                                  | 7  | 0                          | 0  | 2                             | 0                | 2                  | 4         | 78           |
| 6 South Central              | 3                                  | 10   | 0                          | 0  | 3                             | 2                | 0                  | 2         | 47           |
| 7 Upper Fraser Valley        | 5                                  | 13   | 0                          | 0  | 5                             | 0                | 0                  | 1         | 89           |
| 8 Central Fraser Valley      | 7                                  | 17   | 1                          | 0  | 4                             | 3                | 1                  | 4         | 76           |
| 9 Boundary                   | 17                                 | 14   | 5                          | 4  | 2                             | 4                | 5                  | 3         | 114          |
| 10 Simon Fraser              | 24                                 | 18   | 17                         | 15   | 8                             | 2                | 6                  | 26        | 1,013        |
| 11 Coast Garibaldi           | 1                                  | 0  | 0                          | 0  | 0                             | 0                | 0                  | 0         | 15           |
| 13 Central Vancouver Island  | 6                                  | 6  | 1                          | 0  | 5                             | 1                | 1                  | 3         | 49           |
| 14 Upper Island              | 4                                  | 0  | 0                          | 0  | 1                             | 0                | 1                  | 2         | 22           |
| 15 Cariboo                   | 6                                  | 3  | 0                          | 0  | 0                             | 1                | 2                  | 0         | 21           |
| 16 Skeena                    | 5                                  | 0  | 0                          | 0  | 2                             | 1                | 0                  | 0         | 25           |
| 17 Peace River               | 3                                  | 0  | 0                          | 0  | 2                             | 0                | 0                  | 1         | 19           |
| 18 Northern Interior         | 4                                  | 0  | 0                          | 0  | 0                             | 1                | 1                  | 2         | 21           |
| 20 Vancouver                 | 48                                 | 26   | 1                          | 8  | 3                             | 4                | 12                 | 8         | 240          |
| 30 Burnaby                   | 29                                 | 3  | 0                          | 1  | 2                             | 2                | 8                  | 7         | 153          |
| 40 North Shore               | 3                                  | 5  | 0                          | 1  | 0                             | 0                | 2                  | 3         | 48           |
| 50 Richmond                  | 3                                  | 6  | 0                          | 0  | 0                             | 0                | 1                  | 0         | 22           |
| 60 Capital Regional District | 8                                  | 8  | 1                          | 0  | 1                             | 4                | 2                  | 0         | 137          |
| <b>TOTAL</b>                 | <b>191</b>                         | <b>151</b>   | <b>26</b>                  | <b>31</b>                                      | <b>44</b>                     | <b>25</b>        | <b>47</b>          | <b>72</b> | <b>2,282</b> |

<sup>2</sup> Includes 4 RPNs employed in physicians office/medical clinic.



**Table 3b**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Type of Facility**  
**October 1993**

| Health Region                | Psychiatric<br>Hospital | Mentally<br>Handicapped |             | LTC/<br>Intermediate<br>Care | Corrections | Forensics   | Adolescent/<br>Child<br>Psychiatry <sup>1</sup> | General<br>Hospital<br>Psychiatry | General<br>Hospital<br>Medical | Substance<br>Abuse/<br>Detox |
|------------------------------|-------------------------|-------------------------|-------------|------------------------------|-------------|-------------|---|-----------------------------------|--------------------------------|------------------------------|
|                              |                         | Hospital/<br>School     |             |                              |             |             |   |                                   |                                |                              |
| 1 East Kootenay              | 0.14                    | 0.00                    | 0.14        | 0.00                         | 0.00        | 0.00        | 0.00  | 0.71                              | 0.14                           | 0.00                         |
| 2 Central Kootenay           | 0.00                    | 0.00                    | 0.81        | 0.00                         | 0.00        | 0.00        | 0.00  | 0.94                              | 0.00                           | 0.00                         |
| 4 North Okanagan             | 0.10                    | 0.48                    | 1.72        | 0.00                         | 0.00        | 0.00        | 0.00  | 0.57                              | 0.48                           | 0.10                         |
| 5 South Okanagan             | 0.05                    | 0.05                    | 1.06        | 0.00                         | 0.00        | 0.00        | 0.00  | 1.46                              | 0.05                           | 0.05                         |
| 6 South Central              | 0.09                    | 0.26                    | 0.97        | 0.00                         | 0.09        | 0.00        | 0.00  | 0.35                              | 0.18                           | 0.44                         |
| 7 Upper Fraser Valley        | 0.53                    | 0.00                    | 0.41        | 1.47                         | 0.29        | 0.00        | 0.00  | 0.82                              | 0.23                           | 0.06                         |
| 8 Central Fraser Valley      | 0.11                    | 0.05                    | 0.95        | 0.05                         | 0.11        | 0.05        | 0.05  | 0.53                              | 0.21                           | 0.00                         |
| 9 Boundary                   | 0.03                    | 0.05                    | 0.69        | 0.00                         | 0.05        | 0.00        | 0.00  | 0.72                              | 0.05                           | 0.00                         |
| 10 Simon Fraser              | 26.80                   | 7.52                    | 1.51        | 0.00                         | 6.01        | 0.00        | 0.00  | 1.72                              | 0.96                           | 0.76                         |
| 11 Coast Garibaldi           | 0.00                    | 0.00                    | 0.79        | 0.00                         | 0.00        | 0.00        | 0.00  | 1.27                              | 0.16                           | 0.00                         |
| 13 Central Vancouver Island  | 0.00                    | 0.05                    | 0.24        | 0.00                         | 0.00        | 0.00        | 0.00  | 0.87                              | 0.00                           | 0.10                         |
| 14 Upper Island              | 0.00                    | 0.10                    | 0.20        | 0.00                         | 0.00        | 0.10        | 0.00  | 0.98                              | 0.00                           | 0.00                         |
| 15 Cariboo                   | 0.00                    | 0.15                    | 0.76        | 0.00                         | 0.30        | 0.00        | 0.00  | 0.00                              | 0.15                           | 0.00                         |
| 16 Skeena                    | 0.00                    | 0.00                    | 0.71        | 0.00                         | 0.12        | 0.00        | 0.00  | 1.06                              | 0.12                           | 0.00                         |
| 17 Peace River               | 0.17                    | 0.00                    | 0.85        | 0.00                         | 0.00        | 0.00        | 0.00  | 1.19                              | 0.00                           | 0.00                         |
| 18 Northern Interior         | 0.00                    | 0.00                    | 0.09        | 0.09                         | 0.09        | 0.09        | 0.09  | 0.52                              | 0.26                           | 0.00                         |
| 20 Vancouver                 | 0.00                    | 0.04                    | 0.77        | 0.10                         | 0.08        | 0.04        | 0.00  | 0.81                              | 0.35                           | 0.45                         |
| 30 Burnaby                   | 0.78                    | 0.06                    | 1.57        | 0.36                         | 0.66        | 2.35        | 0.06  | 0.24                              | 0.00                           | 0.00                         |
| 40 North Shore               | 0.18                    | 0.00                    | 0.49        | 0.00                         | 0.00        | 0.00        | 1.09  | 0.30                              | 0.00                           | 0.00                         |
| 50 Richmond                  | 0.00                    | 0.00                    | 0.15        | 0.00                         | 0.00        | 0.00        | 0.76  | 0.00                              | 0.00                           | 0.00                         |
| 60 Capital Regional District | 0.39                    | 1.25                    | 0.96        | 0.00                         | 0.03        | 0.03        | 0.83  | 0.06                              | 0.06                           | 0.06                         |
| <b>TOTAL</b>                 | <b>1.66</b>             | <b>0.60</b>             | <b>0.78</b> | <b>0.11</b>                  | <b>0.43</b> | <b>0.13</b> | <b>0.83</b>                                     | <b>0.21</b>                       | <b>0.14</b>                    |                              |

*... continued*

<sup>1</sup> Includes 40 RPNs employed in adolescent psychiatry and 5 in child psychiatry.

**Table 3b (continued)**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Type of Facility**  
**October 1993**

| Health Region                | Community<br>Mental<br>Health Team | Boarding/<br>Group Home/<br>Specialized<br>Res. Care | Educational<br>Institution | Geriatric<br>Unit-<br>Assessment/<br>Discharge | Community<br>Health<br>Agency | Self<br>Employed | Other <sup>2</sup> | Unknown     | Total       |
|------------------------------|------------------------------------|--|----------------------------|--|-------------------------------|------------------|--------------------|-------------|-------------|
| 1 East Kootenay              | 0.14                               | 0.00   | 0.00                       | 0.14   | 0.14                          | 0.00             | 0.00               | 0.00        | 1.56        |
| 2 Central Kootenay           | 0.27                               | 0.13   | 0.00                       | 0.00   | 0.27                          | 0.00             | 0.00               | 0.00        | 2.42        |
| 4 North Okanagan             | 0.29                               | 1.34   | 0.00                       | 0.10   | 0.10                          | 0.00             | 0.29               | 0.57        | 6.13        |
| 5 South Okanagan             | 0.45                               | 0.35   | 0.00                       | 0.00   | 0.10                          | 0.00             | 0.10               | 0.20        | 3.92        |
| 6 South Central              | 0.26                               | 0.88   | 0.00                       | 0.00   | 0.26                          | 0.18             | 0.00               | 0.18        | 4.13        |
| 7 Upper Fraser Valley        | 0.29                               | 0.76   | 0.00                       | 0.00   | 0.29                          | 0.00             | 0.00               | 0.06        | 5.22        |
| 8 Central Fraser Valley      | 0.37                               | 0.90   | 0.05                       | 0.00   | 0.21                          | 0.16             | 0.05               | 0.21        | 4.00        |
| 9 Boundary                   | 0.45                               | 0.37   | 0.13                       | 0.11   | 0.05                          | 0.11             | 0.13               | 0.08        | 3.02        |
| 10 Simon Fraser              | 1.21                               | 0.91   | 0.86                       | 0.76   | 0.40                          | 0.10             | 0.30               | 1.31        | 51.13       |
| 11 Coast Garibaldi           | 0.16                               | 0.00   | 0.00                       | 0.00   | 0.00                          | 0.00             | 0.00               | 0.00        | 2.37        |
| 13 Central Vancouver Island  | 0.29                               | 0.29   | 0.05                       | 0.00   | 0.24                          | 0.05             | 0.05               | 0.15        | 2.37        |
| 14 Upper Island              | 0.39                               | 0.00   | 0.00                       | 0.00   | 0.10                          | 0.00             | 0.10               | 0.20        | 2.15        |
| 15 Cariboo                   | 0.91                               | 0.46   | 0.00                       | 0.00   | 0.00                          | 0.15             | 0.30               | 0.00        | 3.19        |
| 16 Skeena                    | 0.59                               | 0.00   | 0.00                       | 0.00   | 0.24                          | 0.12             | 0.00               | 0.00        | 2.95        |
| 17 Peace River               | 0.51                               | 0.00   | 0.00                       | 0.00   | 0.34                          | 0.00             | 0.00               | 0.17        | 3.22        |
| 18 Northern Interior         | 0.35                               | 0.00   | 0.00                       | 0.00   | 0.00                          | 0.09             | 0.09               | 0.17        | 1.81        |
| 20 Vancouver                 | 0.98                               | 0.53   | 0.02                       | 0.16   | 0.06                          | 0.08             | 0.24               | 0.16        | 4.88        |
| 30 Burnaby                   | 1.75                               | 0.18   | 0.00                       | 0.06   | 0.12                          | 0.12             | 0.48               | 0.42        | 9.23        |
| 40 North Shore               | 0.18                               | 0.30   | 0.00                       | 0.06   | 0.00                          | 0.00             | 0.12               | 0.18        | 2.92        |
| 50 Richmond                  | 0.23                               | 0.45   | 0.00                       | 0.00   | 0.00                          | 0.00             | 0.08               | 0.00        | 1.66        |
| 60 Capital Regional District | 0.26                               | 0.26   | 0.03                       | 0.00   | 0.03                          | 0.13             | 0.06               | 0.00        | 4.40        |
| <b>TOTAL</b>                 | <b>0.55</b>                        | <b>0.44</b>  | <b>0.08</b>                | <b>0.09</b>                                    | <b>0.13</b>                   | <b>0.07</b>      | <b>0.14</b>        | <b>0.21</b> | <b>6.59</b> |

<sup>2</sup> Includes 4 RPNs employed in physicians office/medical clinic.

**Table 4a**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Primary Area of Responsibility**  
**October 1993**

| Health Region                | Adult Psychiatry |            | Child/<br>Adolescent<br>Psychiatry | Mentally<br>Handicapped | Psycho-<br>geriatrics | Geriatrics | Corrections | Forensics  | Substance<br>Abuse | Rehab/<br>Vocational |
|------------------------------|------------------|------------|------------------------------------|-------------------------|-----------------------|------------|-------------|------------|--------------------|----------------------|
|                              | Acute            | Chronic    |                                    |                         |                       |            |             |            |                    |                      |
| 1 East Kootenay              | 4                | 2          | 0                                  | 0                       | 0                     | 1          | 0           | 0          | 0                  | 0                    |
| 2 Central Kootenay           | 5                | 2          | 0                                  | 0                       | 1                     | 6          | 0           | 0          | 0                  | 0                    |
| 4 North Okanagan             | 5                | 5          | 0                                  | 14                      | 10                    | 11         | 0           | 0          | 0                  | 0                    |
| 5 South Okanagan             | 29               | 6          | 3                                  | 4                       | 11                    | 9          | 0           | 0          | 1                  | 0                    |
| 6 South Central              | 4                | 3          | 0                                  | 11                      | 2                     | 10         | 0           | 1          | 4                  | 1                    |
| 7 Upper Fraser Valley        | 18               | 10         | 1                                  | 0                       | 3                     | 4          | 29          | 4          | 1                  | 2                    |
| 8 Central Fraser Valley      | 11               | 17         | 3                                  | 3                       | 3                     | 12         | 2           | 0          | 0                  | 2                    |
| 9 Boundary                   | 30               | 25         | 1                                  | 6                       | 6                     | 20         | 1           | 1          | 0                  | 2                    |
| 10 Simon Fraser              | 195              | 205        | 0                                  | 142                     | 126                   | 75         | 0           | 110        | 13                 | 9                    |
| 11 Coast Garibaldi           | 7                | 1          | 0                                  | 0                       | 0                     | 4          | 0           | 0          | 0                  | 0                    |
| 13 Central Vancouver Island  | 17               | 4          | 1                                  | 2                       | 2                     | 2          | 0           | 0          | 1                  | 0                    |
| 14 Upper Island              | 8                | 3          | 1                                  | 1                       | 3                     | 0          | 0           | 0          | 0                  | 0                    |
| 15 Cariboo                   | 2                | 3          | 0                                  | 2                       | 1                     | 3          | 0           | 2          | 0                  | 0                    |
| 16 Skeena                    | 8                | 3          | 0                                  | 1                       | 1                     | 5          | 0           | 0          | 0                  | 0                    |
| 17 Peace River               | 10               | 0          | 1                                  | 0                       | 0                     | 3          | 0           | 0          | 0                  | 0                    |
| 18 Northern Interior         | 7                | 2          | 0                                  | 0                       | 0                     | 1          | 1           | 1          | 0                  | 0                    |
| 20 Vancouver                 | 53               | 37         | 1                                  | 3                       | 15                    | 19         | 4           | 4          | 16                 | 13                   |
| 30 Burnaby                   | 29               | 8          | 28                                 | 2                       | 4                     | 21         | 7           | 13         | 0                  | 2                    |
| 40 North Shore               | 23               | 8          | 0                                  | 0                       | 3                     | 6          | 0           | 0          | 0                  | 0                    |
| 50 Richmond                  | 12               | 5          | 0                                  | 0                       | 1                     | 0          | 0           | 0          | 0                  | 0                    |
| 60 Capital Regional District | 36               | 6          | 0                                  | 40                      | 3                     | 24         | 0           | 3          | 2                  | 0                    |
| <b>TOTAL</b>                 | <b>513</b>       | <b>355</b> | <b>40</b>                          | <b>231</b>              | <b>195</b>            | <b>236</b> | <b>44</b>   | <b>139</b> | <b>38</b>          | <b>31</b>            |

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**Table 4a (continued)**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Primary Area of Responsibility**  
**October 1993**

| Health Region                | Education | Counselling | Admin-<br>istration | General<br>Nursing | Research  | Owner/<br>Person<br>in Charge | Other     | Unknown   | Total        |
|------------------------------|-----------|-------------|---------------------|--------------------|-----------|-------------------------------|-----------|-----------|--------------|
| 1 East Kootenay              | 0         | 3           | 0                   | 1                  | 0         | 0                             | 0         | 0         | 11           |
| 2 Central Kootenay           | 1         | 1           | 0                   | 1                  | 0         | 0                             | 1         | 0         | 18           |
| 4 North Okanagan             | 1         | 2           | 2                   | 4                  | 0         | 4                             | 0         | 6         | 64           |
| 5 South Okanagan             | 1         | 1           | 1                   | 4                  | 0         | 2                             | 2         | 4         | 78           |
| 6 South Central              | 0         | 5           | 3                   | 2                  | 0         | 0                             | 0         | 1         | 47           |
| 7 Upper Fraser Valley        | 0         | 4           | 2                   | 4                  | 0         | 2                             | 3         | 2         | 89           |
| 8 Central Fraser Valley      | 1         | 1           | 2                   | 8                  | 0         | 2                             | 5         | 4         | 76           |
| 9 Boundary                   | 2         | 1           | 3                   | 4                  | 2         | 4                             | 3         | 3         | 114          |
| 10 Simon Fraser              | 22        | 5           | 23                  | 30                 | 9         | 1                             | 17        | 31        | 1,013        |
| 11 Coast Garibaldi           | 0         | 1           | 1                   | 1                  | 0         | 0                             | 0         | 0         | 15           |
| 13 Central Vancouver Island  | 1         | 5           | 5                   | 1                  | 0         | 2                             | 2         | 4         | 49           |
| 14 Upper Island              | 0         | 3           | 0                   | 1                  | 0         | 0                             | 0         | 2         | 22           |
| 15 Cariboo                   | 1         | 3           | 2                   | 1                  | 0         | 0                             | 1         | 0         | 21           |
| 16 Skeena                    | 1         | 4           | 1                   | 1                  | 0         | 0                             | 0         | 0         | 25           |
| 17 Peace River               | 0         | 1           | 2                   | 1                  | 0         | 0                             | 0         | 1         | 19           |
| 18 Northern Interior         | 0         | 4           | 0                   | 2                  | 0         | 1                             | 0         | 2         | 21           |
| 20 Vancouver                 | 3         | 13          | 10                  | 20                 | 3         | 7                             | 9         | 10        | 240          |
| 30 Burnaby                   | 0         | 16          | 9                   | 6                  | 1         | 0                             | 2         | 5         | 153          |
| 40 North Shore               | 0         | 0           | 1                   | 2                  | 0         | 0                             | 2         | 3         | 48           |
| 50 Richmond                  | 1         | 0           | 2                   | 1                  | 0         | 0                             | 0         | 0         | 22           |
| 60 Capital Regional District | 3         | 3           | 9                   | 4                  | 0         | 3                             | 1         | 0         | 137          |
| <b>TOTAL</b>                 | <b>38</b> | <b>76</b>   | <b>78</b>           | <b>99</b>          | <b>15</b> | <b>28</b>                     | <b>48</b> | <b>78</b> | <b>2,282</b> |

**Table 4b**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Primary Area of Responsibility**  
**October 1993**

| Health Region                | Adult Psychiatry |             | Child/<br>Adolescent | Mentally    | Psycho-<br>geriatrics | Geriatrics  | Corrections | Forensics   | Substance<br>Abuse | Rehab/<br>Vocational |
|------------------------------|------------------|-------------|----------------------|-------------|-----------------------|-------------|-------------|-------------|--------------------|----------------------|
|                              | Acute            | Chronic     | Psychiatry           | Handicapped |                       |             |             |             |                    |                      |
| 1 East Kootenay              | 0.57             | 0.28        | 0.00                 | 0.00        | 0.00                  | 0.14        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 2 Central Kootenay           | 0.67             | 0.27        | 0.00                 | 0.00        | 0.13                  | 0.81        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 4 North Okanagan             | 0.48             | 0.48        | 0.00                 | 1.34        | 0.96                  | 1.05        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 5 South Okanagan             | 1.46             | 0.30        | 0.15                 | 0.20        | 0.55                  | 0.45        | 0.00        | 0.00        | 0.05               | 0.00                 |
| 6 South Central              | 0.35             | 0.26        | 0.00                 | 0.97        | 0.18                  | 0.88        | 0.00        | 0.09        | 0.35               | 0.09                 |
| 7 Upper Fraser Valley        | 1.06             | 0.59        | 0.06                 | 0.00        | 0.18                  | 0.23        | 1.70        | 0.23        | 0.06               | 0.12                 |
| 8 Central Fraser Valley      | 0.58             | 0.90        | 0.16                 | 0.16        | 0.16                  | 0.63        | 0.11        | 0.00        | 0.00               | 0.11                 |
| 9 Boundary                   | 0.80             | 0.66        | 0.03                 | 0.16        | 0.16                  | 0.53        | 0.03        | 0.03        | 0.00               | 0.05                 |
| 10 Simon Fraser              | 9.84             | 10.35       | 0.00                 | 7.17        | 6.36                  | 3.79        | 0.00        | 5.55        | 0.66               | 0.45                 |
| 11 Coast Garibaldi           | 1.11             | 0.16        | 0.00                 | 0.00        | 0.00                  | 0.63        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 13 Central Vancouver Island  | 0.82             | 0.19        | 0.05                 | 0.10        | 0.10                  | 0.10        | 0.00        | 0.00        | 0.05               | 0.00                 |
| 14 Upper Island              | 0.78             | 0.29        | 0.10                 | 0.10        | 0.29                  | 0.00        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 15 Cariboo                   | 0.30             | 0.46        | 0.00                 | 0.30        | 0.15                  | 0.46        | 0.00        | 0.30        | 0.00               | 0.00                 |
| 16 Skeena                    | 0.95             | 0.35        | 0.00                 | 0.12        | 0.12                  | 0.59        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 17 Peace River               | 1.70             | 0.00        | 0.17                 | 0.00        | 0.00                  | 0.51        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 18 Northern Interior         | 0.60             | 0.17        | 0.00                 | 0.00        | 0.00                  | 0.09        | 0.09        | 0.09        | 0.00               | 0.00                 |
| 20 Vancouver                 | 1.08             | 0.75        | 0.02                 | 0.06        | 0.30                  | 0.39        | 0.08        | 0.08        | 0.33               | 0.26                 |
| 30 Burnaby                   | 1.75             | 0.48        | 1.69                 | 0.12        | 0.24                  | 1.27        | 0.42        | 0.78        | 0.00               | 0.12                 |
| 40 North Shore               | 1.40             | 0.49        | 0.00                 | 0.00        | 0.18                  | 0.36        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 50 Richmond                  | 0.91             | 0.38        | 0.00                 | 0.00        | 0.08                  | 0.00        | 0.00        | 0.00        | 0.00               | 0.00                 |
| 60 Capital Regional District | 1.16             | 0.19        | 0.00                 | 1.28        | 0.10                  | 0.77        | 0.00        | 0.10        | 0.06               | 0.00                 |
| <b>TOTAL</b>                 | <b>1.48</b>      | <b>1.03</b> | <b>0.12</b>          | <b>0.67</b> | <b>0.56</b>           | <b>0.68</b> | <b>0.13</b> | <b>0.40</b> | <b>0.11</b>        | <b>0.09</b>          |

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**Table 4b (continued)**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Primary Area of Responsibility**  
**October 1993**

| Health Region                | Education   | Counselling | Admin-<br>istration | General<br>Nursing | Research    | Owner/<br>Person<br>in Charge | Other       | Unknown     | Total       |
|------------------------------|-------------|-------------|---------------------|--------------------|-------------|-------------------------------|-------------|-------------|-------------|
| 1 East Kootenay              | 0.00        | 0.43        | 0.00                | 0.14               | 0.00        | 0.00                          | 0.00        | 0.00        | 1.56        |
| 2 Central Kootenay           | 0.13        | 0.13        | 0.00                | 0.13               | 0.00        | 0.00                          | 0.13        | 0.00        | 2.42        |
| 4 North Okanagan             | 0.10        | 0.19        | 0.19                | 0.38               | 0.00        | 0.38                          | 0.00        | 0.57        | 6.13        |
| 5 South Okanagan             | 0.05        | 0.05        | 0.05                | 0.20               | 0.00        | 0.10                          | 0.10        | 0.20        | 3.92        |
| 6 South Central              | 0.00        | 0.44        | 0.26                | 0.18               | 0.00        | 0.00                          | 0.00        | 0.09        | 4.13        |
| 7 Upper Fraser Valley        | 0.00        | 0.23        | 0.12                | 0.23               | 0.00        | 0.12                          | 0.18        | 0.12        | 5.22        |
| 8 Central Fraser Valley      | 0.05        | 0.05        | 0.11                | 0.42               | 0.00        | 0.11                          | 0.26        | 0.21        | 4.00        |
| 9 Boundary                   | 0.05        | 0.03        | 0.08                | 0.11               | 0.05        | 0.11                          | 0.08        | 0.08        | 3.02        |
| 10 Simon Fraser              | 1.11        | 0.25        | 1.16                | 1.51               | 0.45        | 0.05                          | 0.86        | 1.56        | 51.13       |
| 11 Coast Garibaldi           | 0.00        | 0.16        | 0.16                | 0.16               | 0.00        | 0.00                          | 0.00        | 0.00        | 2.37        |
| 13 Central Vancouver Island  | 0.05        | 0.24        | 0.24                | 0.05               | 0.00        | 0.10                          | 0.10        | 0.19        | 2.37        |
| 14 Upper Island              | 0.00        | 0.29        | 0.00                | 0.10               | 0.00        | 0.00                          | 0.00        | 0.20        | 2.15        |
| 15 Cariboo                   | 0.15        | 0.46        | 0.30                | 0.15               | 0.00        | 0.00                          | 0.15        | 0.00        | 3.19        |
| 16 Skeena                    | 0.12        | 0.47        | 0.12                | 0.12               | 0.00        | 0.00                          | 0.00        | 0.00        | 2.95        |
| 17 Peace River               | 0.00        | 0.17        | 0.34                | 0.17               | 0.00        | 0.00                          | 0.00        | 0.17        | 3.22        |
| 18 Northern Interior         | 0.00        | 0.35        | 0.00                | 0.17               | 0.00        | 0.09                          | 0.00        | 0.17        | 1.81        |
| 20 Vancouver                 | 0.06        | 0.26        | 0.20                | 0.41               | 0.06        | 0.14                          | 0.18        | 0.20        | 4.88        |
| 30 Burnaby                   | 0.00        | 0.97        | 0.54                | 0.36               | 0.06        | 0.00                          | 0.12        | 0.30        | 9.23        |
| 40 North Shore               | 0.00        | 0.00        | 0.06                | 0.12               | 0.00        | 0.00                          | 0.12        | 0.18        | 2.92        |
| 50 Richmond                  | 0.08        | 0.00        | 0.15                | 0.08               | 0.00        | 0.00                          | 0.00        | 0.00        | 1.66        |
| 60 Capital Regional District | 0.10        | 0.10        | 0.29                | 0.13               | 0.00        | 0.10                          | 0.03        | 0.00        | 4.40        |
| <b>TOTAL</b>                 | <b>0.11</b> | <b>0.22</b> | <b>0.23</b>         | <b>0.29</b>        | <b>0.04</b> | <b>0.08</b>                   | <b>0.14</b> | <b>0.23</b> | <b>6.59</b> |

**Table 5a**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Employment Position**  
**October 1993**

| Health Region                | General<br>Staff<br>Nurse | Assistant<br>Head<br>Nurse | Community<br>Nurse | Head<br>Nurse/<br>Team<br>Leader | Supervisor/<br>Coordinator | Director<br>Assistant/<br>Associate<br>Director <sup>1</sup> | Clinical<br>Specialist | Instructor |
|------------------------------|---------------------------|----------------------------|--------------------|----------------------------------|----------------------------|--|------------------------|------------|
| 1 East Kootenay              | 7                         | 1                          | 1                  | 0                                | 1                          | 0  | 0                      | 0          |
| 2 Central Kootenay           | 7                         | 1                          | 3                  | 3                                | 1                          | 0  | 0                      | 0          |
| 4 North Okanagan             | 29                        | 0                          | 2                  | 2                                | 3                          | 6  | 0                      | 0          |
| 5 South Okanagan             | 51                        | 1                          | 7                  | 2                                | 4                          | 2  | 1                      | 0          |
| 6 South Central              | 22                        | 1                          | 2                  | 2                                | 3                          | 2  | 2                      | 0          |
| 7 Upper Fraser Valley        | 55                        | 3                          | 5                  | 1                                | 7                          | 5  | 4                      | 0          |
| 8 Central Fraser Valley      | 39                        | 3                          | 6                  | 3                                | 4                          | 3  | 1                      | 0          |
| 9 Boundary                   | 57                        | 1                          | 18                 | 3                                | 3                          | 8  | 0                      | 0          |
| 10 Simon Fraser              | 739                       | 78                         | 32                 | 40                               | 41                         | 8  | 3                      | 15         |
| 11 Coast Garibaldi           | 11                        | 1                          | 1                  | 0                                | 1                          | 1  | 0                      | 0          |
| 13 Central Vancouver Island  | 22                        | 0                          | 6                  | 1                                | 6                          | 2  | 1                      | 1          |
| 14 Upper Island              | 9                         | 0                          | 3                  | 2                                | 2                          | 0  | 1                      | 0          |
| 15 Cariboo                   | 7                         | 1                          | 3                  | 1                                | 1                          | 2  | 1                      | 0          |
| 16 Skeena                    | 14                        | 0                          | 4                  | 1                                | 2                          | 1  | 0                      | 0          |
| 17 Peace River               | 11                        | 1                          | 3                  | 0                                | 0                          | 3  | 0                      | 0          |
| 18 Northern Interior         | 7                         | 0                          | 6                  | 0                                | 1                          | 0  | 0                      | 0          |
| 20 Vancouver                 | 120                       | 17                         | 45                 | 7                                | 10                         | 7  | 3                      | 0          |
| 30 Burnaby                   | 77                        | 23                         | 22                 | 0                                | 8                          | 3  | 0                      | 0          |
| 40 North Shore               | 30                        | 0                          | 3                  | 4                                | 3                          | 1  | 1                      | 0          |
| 50 Richmond                  | 13                        | 0                          | 1                  | 1                                | 1                          | 3  | 0                      | 0          |
| 60 Capital Regional District | 87                        | 0                          | 12                 | 12                               | 6                          | 6  | 0                      | 0          |
| <b>TOTAL</b>                 | <b>1,414</b>              | <b>132</b>                 | <b>185</b>         | <b>85</b>                        | <b>108</b>                 | <b>63</b>  | <b>18</b>              | <b>16</b>  |

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<sup>1</sup> Includes 56 RPNs employed as directors and 7 employed as assistant/associate directors.

**Table 5a (continued)**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**by Health Region by Employment Position**  
**October 1993**

| Health Region                | Inservice/<br>Staff<br>Develop-<br>ment | Consultant | Owner     | Counsellor | Admin-<br>istrator/<br>Manager | Other     | Unknown   | Total        |
|------------------------------|---|------------|-----------|------------|--------------------------------|-----------|-----------|--------------|
| 1 East Kootenay              | 0                                       | 0          | 1         | 0          | 0                              | 0         | 0         | 11           |
| 2 Central Kootenay           | 0                                       | 0          | 0         | 2          | 0                              | 0         | 1         | 18           |
| 4 North Okanagan             | 0                                       | 0          | 7         | 3          | 1                              | 3         | 8         | 64           |
| 5 South Okanagan             | 1                                       | 1          | 3         | 0          | 1                              | 0         | 4         | 78           |
| 6 South Central              | 0                                       | 2          | 2         | 4          | 3                              | 0         | 2         | 47           |
| 7 Upper Fraser Valley        | 4                                       | 0          | 2         | 1          | 0                              | 0         | 2         | 89           |
| 8 Central Fraser Valley      | 0                                       | 0          | 5         | 3          | 0                              | 4         | 5         | 76           |
| 9 Boundary                   | 0                                       | 1          | 9         | 5          | 2                              | 3         | 4         | 114          |
| 10 Simon Fraser              | 9                                       | 2          | 3         | 3          | 8                              | 5         | 27        | 1,013        |
| 11 Coast Garibaldi           | 0                                       | 0          | 0         | 0          | 0                              | 0         | 0         | 15           |
| 13 Central Vancouver Island  | 0                                       | 2          | 0         | 2          | 3                              | 0         | 3         | 49           |
| 14 Upper Island              | 2                                       | 0          | 0         | 1          | 0                              | 0         | 2         | 22           |
| 15 Cariboo                   | 1                                       | 0          | 2         | 0          | 1                              | 1         | 0         | 21           |
| 16 Skeena                    | 0                                       | 0          | 1         | 2          | 0                              | 0         | 0         | 25           |
| 17 Peace River               | 0                                       | 0          | 0         | 0          | 0                              | 0         | 1         | 19           |
| 18 Northern Interior         | 0                                       | 0          | 1         | 2          | 1                              | 1         | 2         | 21           |
| 20 Vancouver                 | 3                                       | 1          | 7         | 2          | 5                              | 3         | 10        | 240          |
| 30 Burnaby                   | 3                                       | 0          | 2         | 5          | 2                              | 2         | 6         | 153          |
| 40 North Shore               | 1                                       | 0          | 0         | 1          | 1                              | 0         | 3         | 48           |
| 50 Richmond                  | 1                                       | 1          | 0         | 0          | 1                              | 0         | 0         | 22           |
| 60 Capital Regional District | 0                                       | 3          | 1         | 3          | 6                              | 1         | 0         | 137          |
| <b>TOTAL</b>                 | <b>25</b>                               | <b>13</b>  | <b>46</b> | <b>39</b>  | <b>35</b>                      | <b>23</b> | <b>80</b> | <b>2,282</b> |



**Table 5b**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Employment Position**  
**October 1993**

| Health Region                | General<br>Staff<br>Nurse | Assistant<br>Head<br>Nurse | Community<br>Nurse | Head<br>Nurse/<br>Team<br>Leader | Supervisor/<br>Coordinator | Director<br>Assistant/<br>Associate<br>Director <sup>1</sup> | Clinical<br>Specialist | Instructor  |
|------------------------------|---------------------------|----------------------------|--------------------|----------------------------------|----------------------------|--|------------------------|-------------|
| 1 East Kootenay              | 0.99                      | 0.14                       | 0.14               | 0.00                             | 0.14                       | 0.00   | 0.00                   | 0.00        |
| 2 Central Kootenay           | 0.94                      | 0.13                       | 0.40               | 0.40                             | 0.13                       | 0.00   | 0.00                   | 0.00        |
| 4 North Okanagan             | 2.78                      | 0.00                       | 0.19               | 0.19                             | 0.29                       | 0.57   | 0.00                   | 0.00        |
| 5 South Okanagan             | 2.56                      | 0.05                       | 0.35               | 0.10                             | 0.20                       | 0.10   | 0.05                   | 0.00        |
| 6 South Central              | 1.93                      | 0.09                       | 0.18               | 0.18                             | 0.26                       | 0.18   | 0.18                   | 0.00        |
| 7 Upper Fraser Valley        | 3.23                      | 0.18                       | 0.29               | 0.06                             | 0.41                       | 0.29   | 0.23                   | 0.00        |
| 8 Central Fraser Valley      | 2.05                      | 0.16                       | 0.32               | 0.16                             | 0.21                       | 0.16   | 0.05                   | 0.00        |
| 9 Boundary                   | 1.51                      | 0.03                       | 0.48               | 0.08                             | 0.08                       | 0.21   | 0.00                   | 0.00        |
| 10 Simon Fraser              | 37.30                     | 3.94                       | 1.62               | 2.02                             | 2.07                       | 0.40   | 0.15                   | 0.76        |
| 11 Coast Garibaldi           | 1.74                      | 0.16                       | 0.16               | 0.00                             | 0.16                       | 0.16   | 0.00                   | 0.00        |
| 13 Central Vancouver Island  | 1.06                      | 0.00                       | 0.29               | 0.05                             | 0.29                       | 0.10   | 0.05                   | 0.05        |
| 14 Upper Island              | 0.88                      | 0.00                       | 0.29               | 0.20                             | 0.20                       | 0.00   | 0.10                   | 0.00        |
| 15 Cariboo                   | 1.06                      | 0.15                       | 0.46               | 0.15                             | 0.15                       | 0.30   | 0.15                   | 0.00        |
| 16 Skeena                    | 1.65                      | 0.00                       | 0.47               | 0.12                             | 0.24                       | 0.12   | 0.00                   | 0.00        |
| 17 Peace River               | 1.87                      | 0.17                       | 0.51               | 0.00                             | 0.00                       | 0.51   | 0.00                   | 0.00        |
| 18 Northern Interior         | 0.60                      | 0.00                       | 0.52               | 0.00                             | 0.09                       | 0.00   | 0.00                   | 0.00        |
| 20 Vancouver                 | 2.44                      | 0.35                       | 0.91               | 0.14                             | 0.20                       | 0.14   | 0.06                   | 0.00        |
| 30 Burnaby                   | 4.65                      | 1.39                       | 1.33               | 0.00                             | 0.48                       | 0.18   | 0.00                   | 0.00        |
| 40 North Shore               | 1.82                      | 0.00                       | 0.18               | 0.24                             | 0.18                       | 0.06   | 0.06                   | 0.00        |
| 50 Richmond                  | 0.98                      | 0.00                       | 0.08               | 0.08                             | 0.08                       | 0.23   | 0.00                   | 0.00        |
| 60 Capital Regional District | 2.79                      | 0.00                       | 0.39               | 0.39                             | 0.19                       | 0.19   | 0.00                   | 0.00        |
| <b>TOTAL</b>                 | <b>4.08</b>               | <b>0.38</b>                | <b>0.53</b>        | <b>0.25</b>                      | <b>0.31</b>                | <b>0.18</b>  | <b>0.05</b>            | <b>0.05</b> |

... continued

<sup>1</sup> Includes 56 RPNs employed as directors and 7 employed as assistant/associate directors.

**Table 5b (continued)**  
**Practising Registered Psychiatric Nurses in British Columbia**  
**per 10,000 Population by Health Region by Employment Position**  
**October 1993**

| Health Region                | Inservice/<br>Staff<br>Develop-<br>ment | Consultant  | Owner       | Counsellor  | Admin-<br>istrator/<br>Manager | Other       | Unknown     | Total       |
|------------------------------|---|-------------|-------------|-------------|--------------------------------|-------------|-------------|-------------|
| 1 East Kootenay              | 0.00                                    | 0.00        | 0.14        | 0.00        | 0.00                           | 0.00        | 0.00        | 1.56        |
| 2 Central Kootenay           | 0.00                                    | 0.00        | 0.00        | 0.27        | 0.00                           | 0.00        | 0.13        | 2.42        |
| 4 North Okanagan             | 0.00                                    | 0.00        | 0.67        | 0.29        | 0.10                           | 0.29        | 0.77        | 6.13        |
| 5 South Okanagan             | 0.05                                    | 0.05        | 0.15        | 0.00        | 0.05                           | 0.00        | 0.20        | 3.92        |
| 6 South Central              | 0.00                                    | 0.18        | 0.18        | 0.35        | 0.26                           | 0.00        | 0.18        | 4.13        |
| 7 Upper Fraser Valley        | 0.23                                    | 0.00        | 0.12        | 0.06        | 0.00                           | 0.00        | 0.12        | 5.22        |
| 8 Central Fraser Valley      | 0.00                                    | 0.00        | 0.26        | 0.16        | 0.00                           | 0.21        | 0.26        | 4.00        |
| 9 Boundary                   | 0.00                                    | 0.03        | 0.24        | 0.13        | 0.05                           | 0.08        | 0.11        | 3.02        |
| 10 Simon Fraser              | 0.45                                    | 0.10        | 0.15        | 0.15        | 0.40                           | 0.25        | 1.36        | 51.13       |
| 11 Coast Garibaldi           | 0.00                                    | 0.00        | 0.00        | 0.00        | 0.00                           | 0.00        | 0.00        | 2.37        |
| 13 Central Vancouver Island  | 0.00                                    | 0.10        | 0.00        | 0.10        | 0.15                           | 0.00        | 0.15        | 2.37        |
| 14 Upper Island              | 0.20                                    | 0.00        | 0.00        | 0.10        | 0.00                           | 0.00        | 0.20        | 2.15        |
| 15 Cariboo                   | 0.15                                    | 0.00        | 0.30        | 0.00        | 0.15                           | 0.15        | 0.00        | 3.19        |
| 16 Skeena                    | 0.00                                    | 0.00        | 0.12        | 0.24        | 0.00                           | 0.00        | 0.00        | 2.95        |
| 17 Peace River               | 0.00                                    | 0.00        | 0.00        | 0.00        | 0.00                           | 0.00        | 0.17        | 3.22        |
| 18 Northern Interior         | 0.00                                    | 0.00        | 0.09        | 0.17        | 0.09                           | 0.09        | 0.17        | 1.81        |
| 20 Vancouver                 | 0.06                                    | 0.02        | 0.14        | 0.04        | 0.10                           | 0.06        | 0.20        | 4.88        |
| 30 Burnaby                   | 0.18                                    | 0.00        | 0.12        | 0.30        | 0.12                           | 0.12        | 0.36        | 9.23        |
| 40 North Shore               | 0.06                                    | 0.00        | 0.00        | 0.06        | 0.06                           | 0.00        | 0.18        | 2.92        |
| 50 Richmond                  | 0.08                                    | 0.08        | 0.00        | 0.00        | 0.08                           | 0.00        | 0.00        | 1.66        |
| 60 Capital Regional District | 0.00                                    | 0.10        | 0.03        | 0.10        | 0.19                           | 0.03        | 0.00        | 4.40        |
| <b>TOTAL</b>                 | <b>0.07</b>                             | <b>0.04</b> | <b>0.13</b> | <b>0.11</b> | <b>0.10</b>                    | <b>0.07</b> | <b>0.23</b> | <b>6.59</b> |

**Table 6**  
**Analysis of Change in the Number of Practising Registered Psychiatric Nurses**  
**in British Columbia by Health Region**  
**October 1991 to October 1993**

| Health Region                | October 1991 | New Registrants <sup>1</sup> by Place of Graduation |              |               |          |            | Reactivation <sup>2</sup> | Attrition <sup>3</sup> | Net Intra-provincial Migration | October 1993 |
|------------------------------|--------------|---|--------------|---------------|----------|------------|---------------------------|------------------------|--------------------------------|--------------|
|                              |              | B.C.  | Other Canada | Other Country | Unknown  | Subtotal   |                           |                        |                                |              |
| 1 East Kootenay              | 9            | 0   | 3            | 0             | 0        | 3          | 0                         | 1                      | 0                              | 11           |
| 2 Central Kootenay           | 19           | 0   | 0            | 0             | 0        | 0          | 0                         | 4                      | 3                              | 18           |
| 4 North Okanagan             | 58           | 1   | 4            | 0             | 0        | 5          | 9                         | 10                     | 2                              | 64           |
| 5 South Okanagan             | 62           | 0   | 9            | 0             | 1        | 10         | 6                         | 5                      | 5                              | 78           |
| 6 South Central              | 50           | 0   | 2            | 0             | 0        | 2          | 5                         | 10                     | 0                              | 47           |
| 7 Upper Fraser Valley        | 84           | 4   | 3            | 0             | 0        | 7          | 6                         | 13                     | 5                              | 89           |
| 8 Central Fraser Valley      | 64           | 5   | 1            | 0             | 0        | 6          | 12                        | 8                      | 2                              | 76           |
| 9 Boundary                   | 99           | 10  | 2            | 1             | 1        | 14         | 2                         | 9                      | 8                              | 114          |
| 10 Simon Fraser              | 1,026        | 68  | 25           | 1             | 1        | 95         | 14                        | 89                     | -33                            | 1,013        |
| 11 Coast Garibaldi           | 15           | 0   | 0            | 0             | 0        | 0          | 0                         | 2                      | 2                              | 15           |
| 13 Central Vancouver Island  | 34           | 1   | 2            | 0             | 0        | 3          | 8                         | 7                      | 11                             | 49           |
| 14 Upper Island              | 14           | 0   | 4            | 1             | 0        | 5          | 0                         | 1                      | 4                              | 22           |
| 15 Cariboo                   | 17           | 1   | 1            | 0             | 0        | 2          | 0                         | 0                      | 2                              | 21           |
| 16 Skeena                    | 24           | 1   | 0            | 1             | 0        | 2          | 0                         | 2                      | 1                              | 25           |
| 17 Peace River               | 18           | 0   | 4            | 0             | 0        | 4          | 1                         | 1                      | -3                             | 19           |
| 18 Northern Interior         | 19           | 0   | 0            | 0             | 0        | 0          | 2                         | 0                      | 0                              | 21           |
| 20 Vancouver                 | 246          | 15  | 6            | 3             | 0        | 24         | 16                        | 47                     | 1                              | 240          |
| 30 Burnaby                   | 145          | 16  | 2            | 0             | 0        | 18         | 10                        | 16                     | -4                             | 153          |
| 40 North Shore               | 40           | 3   | 0            | 1             | 1        | 5          | 0                         | 3                      | 6                              | 48           |
| 50 Richmond                  | 29           | 4   | 0            | 0             | 0        | 4          | 0                         | 6                      | -5                             | 22           |
| 60 Capital Regional District | 151          | 1   | 4            | 1             | 0        | 6          | 7                         | 20                     | -7                             | 137          |
| <b>TOTAL</b>                 | <b>2,223</b> | <b>130</b>  | <b>72</b>    | <b>9</b>      | <b>4</b> | <b>215</b> | <b>98</b>                 | <b>254</b>             | <b>0</b>                       | <b>2,282</b> |

<sup>1</sup> Registered Psychiatric Nurses who reported B.C. addresses and were practising registrants in October 1993 and whose date of initial registration was after October 1991.

<sup>2</sup> Registered Psychiatric Nurses who reported B.C. addresses and were practising registrants in October 1993 but not in October 1991 and who were registered for the first time before October 1991.

<sup>3</sup> Registered Psychiatric Nurses who reported B.C. addresses and were practising registrants in October 1991 but not in October 1993.

## **VII. NUTRITION & DIETARY SERVICES**

## DIETITIANS AND NUTRITIONISTS

**Definition:** A dietitian/nutritionist

...is a professional uniquely prepared for the practise of nutrition care through university education and required practicum in food and nutrition as well as biological, social, and management sciences. The dietitian/nutritionist applies knowledge and skills in normal and therapeutic nutrition and in food service systems management to individuals, groups, institutions, organisations, and the community.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the British Columbia Dietitians' and Nutritionists' Association (BCDNA) is voluntary. However, members of the BCDNA have exclusive use of the titles: *Registered Dietitian, Registered Nutritionist, Registered Dietitian/Nutritionist, and R.D.N.*

**Date of Record:** December 1991 and December 1993.

**Source of Data:** The British Columbia Dietitians' and Nutritionists' Association (BCDNA).

### Preparation and Updating:

The tables, derived solely from the membership database of the BCDNA, include dietitians and nutritionists who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when the membership status is "practising", when employment in dietetics/nutrition is reported, and when employment address is available. In 1991 and 1993, employment address was available for 96% and 97% of practising RDNs employed in dietetics/nutrition, respectively. Home address is used for the remainder, as well as for RDNs with practising status who are not employed in dietetics/nutrition, and for RDNs with non-practising status.

### Definition of Terms:

#### 1. Membership Category

Dietitians and nutritionists may hold a practising or non-practising membership with the BCDNA, as shown in Tables 1a, 1b, and 1c. Tables 1a and 1b show dietitians and nutritionists in total number and number per 10,000 population. Table 1c presents the average annual rates of change in these numbers from 1991 to 1993.

#### 2. Age and Sex

Age information for dietitians and nutritionists, derived from the BCDNA membership database, is shown in Table 2 grouped according to adaptations of standard age categories developed and used by Statistics Canada. At the date of record, BCDNA membership included 699 females and 6 males. The

<sup>1</sup>Adapted from information provided by the Canadian Dietetic Association. See also *National Occupational Classification 1992*, Major Group 31, No. 3132, Ottawa; Employment and Immigration Canada.

age distribution of male BCDNA members is not shown separately.

### 3. Employment Status

Table 3 displays employment status of practising members of the BCDNA as reported on their annual registration renewal form. The renewal form used the following categories:

- (a) Employed in dietetics/nutrition;
  - (i) Full-time
  - (ii) Part-time
  - (iii) Casual
  - (iv) Temporary
  - (v) On leave
- (b) Employed in other field;
- (c) Not employed (includes unemployed, retired, and student).

### 4. Principal Employer

Table 4 shows type of principal employer for practising BCDNA members employed in nutrition/dietetics. The following categories are used:

- (a) General/Acute Care Facility;
- (b) Extended Care Facility;
- (c) Acute/Extended Care Facility;
- (d) Rehabilitation Facility;
- (e) Paediatric Facility;
- (f) Psychiatric Facility;
- (g) Continuing/Long Term Care Facility;
- (h) Other Health Care Facility;
- (i) Government/Community Health Agency;
- (j) Voluntary/Non-Profit Agency;
- (k) Education/University/College;
- (l) Business/Industry;
- (m) Self Employed;
- (n) Other.

### 5. Principal Area of Responsibility

Table 5 reports principal area of responsibility for practising BCDNA members employed in nutrition/dietetics, as indicated on the BCDNA registration form. "Sales/Marketing" as an area of responsibility was added in 1993. The categories used on the registration form were:

- (a) Administrative/Food Service;
- (b) Administrative/Clinical;
- (c) Clinical/Therapeutic;
- (d) Community/Public Health;
- (e) Private Consultation;
- (f) Outpatient/Counselling;
- (g) Education;

- (h) Research;
- (i) Sales/Marketing;
- (j) Other.

## 6. Principal Employment Position

Principal employment position is reported annually on the BCDNA registration form. Table 6 shows this information for practising BCDNA members employed in nutrition/dietetics. "Sales Representative" as a principal employment position was added in 1993. The categories used on the registration form were:

- (a) Staff Dietitian/Nutritionist;
- (b) Senior Dietitian/Nutritionist;
- (c) Sole Charge;
- (d) Manager/Co-ordinator;
- (e) Department Head/Director;
- (f) Assistant Department Head/Director/Manager;
- (g) Instructor/Faculty Position;
- (h) Researcher;
- (i) Consultant;
- (j) Sales Representative;
- (k) Other.

## 7. Analysis of Change

Table 7 illustrates sources of change which affected the stock of dietitians and nutritionists who were registered members of the British Columbia Dietitians and Nutritionists Association from 1991 to 1993.

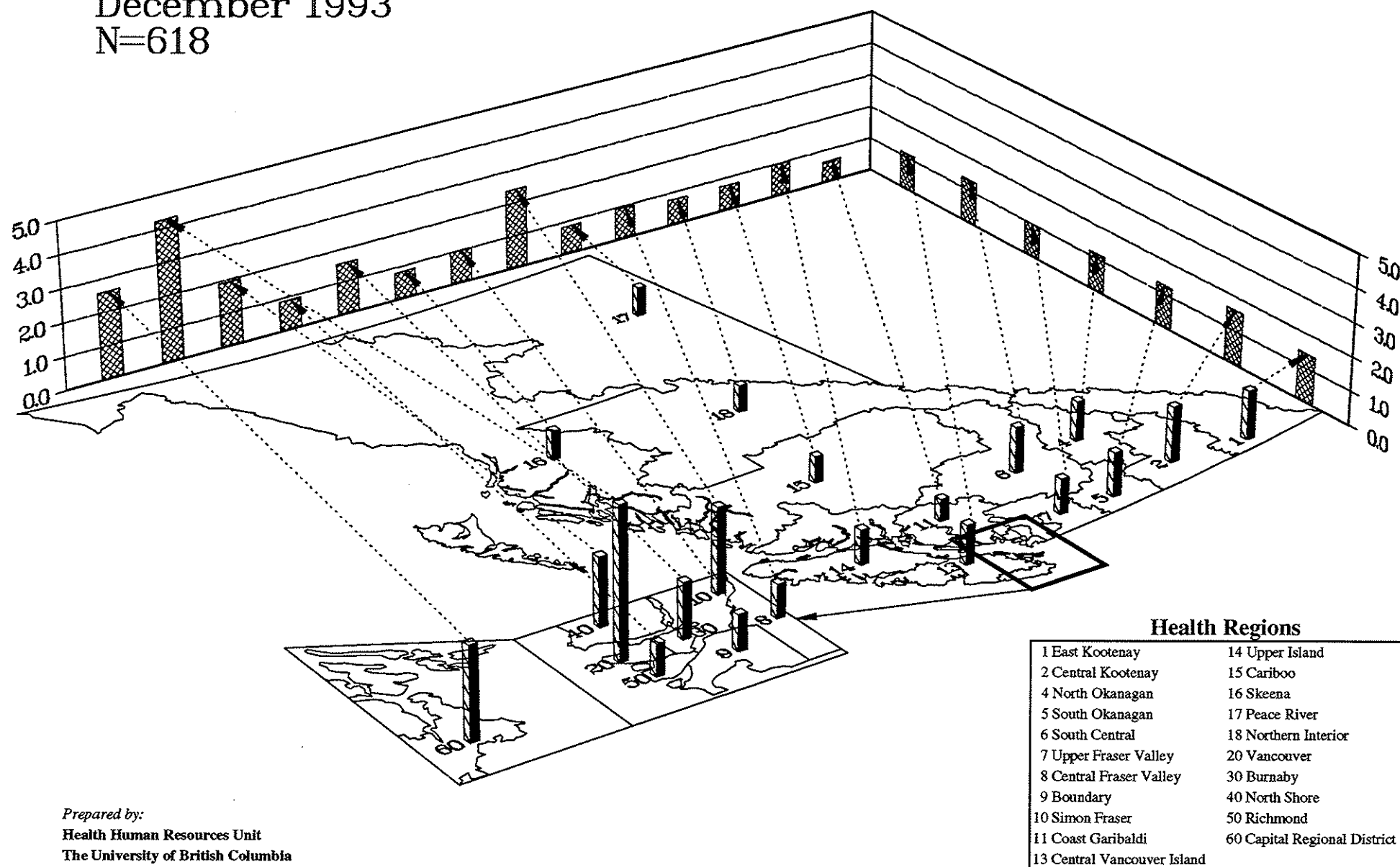
*New registrants* include dietitians and nutritionists who were practising members of the BCDNA as of December 1993 and who registered with the BCDNA *for the first time* subsequent to December 1991. They are reported in the table according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new members who reported out-of-province addresses.

*Reactivations* represent dietitians and nutritionists in British Columbia who were not practising members of the BCDNA in December 1991, but were practising members in the province in December 1993, and whose date of initial registration was before December 1991. Also included as reactivations are practising dietitians and nutritionists who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in December 1993.

*Attrition* describes dietitians and nutritionists who were practising members of the BCDNA and were included in the 1991 stock of dietitians and nutritionists, but who, because of death, retirement, out-of-province relocation or non-renewal of practising membership, were not included in the 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of dietitians and nutritionists who were registered members of the BCDNA among different Health Regions. The net migration total is therefore zero.

Practising Dietitians and Nutritionists  
(BCDNA Members) per 10,000 Population  
by Health Region  
December 1993  
N=618



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1a**  
**Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia**  
**by Health Region by Membership Category**  
**December 1991 and December 1993**

| Health Region                | Practising        |            | Non-Practising |           | Total             |            |
|------------------------------|-------------------|------------|----------------|-----------|-------------------|------------|
|                              | 1991 <sup>2</sup> | 1993       | 1991           | 1993      | 1991 <sup>2</sup> | 1993       |
| 1 East Kootenay              | 7                 | 10         | 0              | 2         | 7                 | 12         |
| 2 Central Kootenay           | 9                 | 12         | 2              | 1         | 11                | 13         |
| 4 North Okanagan             | 12                | 12         | 2              | 2         | 14                | 14         |
| 5 South Okanagan             | 20                | 25         | 4              | 3         | 24                | 28         |
| 6 South Central              | 13                | 15         | 2              | 2         | 15                | 17         |
| 7 Upper Fraser Valley        | 14                | 17         | 3              | 2         | 17                | 19         |
| 8 Central Fraser Valley      | 14                | 18         | 1              | 0         | 15                | 18         |
| 9 Boundary                   | 31                | 38         | 12             | 8         | 43                | 46         |
| 10 Simon Fraser              | 41                | 48         | 2              | 9         | 43                | 57         |
| 11 Coast Garibaldi           | 3                 | 4          | 1              | 1         | 4                 | 5          |
| 13 Central Vancouver Island  | 17                | 23         | 3              | 4         | 20                | 27         |
| 14 Upper Island              | 8                 | 10         | 2              | 2         | 10                | 12         |
| 15 Cariboo                   | 4                 | 5          | 1              | 0         | 5                 | 5          |
| 16 Skeena                    | 6                 | 7          | 1              | 1         | 7                 | 8          |
| 17 Peace River               | 3                 | 5          | 0              | 0         | 3                 | 5          |
| 18 Northern Interior         | 9                 | 9          | 0              | 3         | 9                 | 12         |
| 20 Vancouver                 | 191               | 209        | 18             | 20        | 209               | 229        |
| 30 Burnaby                   | 22                | 26         | 2              | 7         | 24                | 33         |
| 40 North Shore               | 32                | 32         | 7              | 11        | 39                | 43         |
| 50 Richmond                  | 16                | 12         | 4              | 3         | 20                | 15         |
| 60 Capital Regional District | 73                | 81         | 3              | 6         | 76                | 87         |
| <b>TOTAL</b>                 | <b>545</b>        | <b>618</b> | <b>70</b>      | <b>87</b> | <b>615</b>        | <b>705</b> |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 1 RDN whose employment address was outside B.C.

**Table 1b**  
**Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Membership Category**  
**December 1991 and December 1993**

| Health Region                | Practising  |             | Non-Practising |             | Total       |             |
|------------------------------|-------------|-------------|----------------|-------------|-------------|-------------|
|                              | 1991        | 1993        | 1991           | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 1.01        | 1.42        | 0.00           | 0.28        | 1.01        | 1.70        |
| 2 Central Kootenay           | 1.25        | 1.61        | 0.28           | 0.13        | 1.53        | 1.74        |
| 4 North Okanagan             | 1.24        | 1.15        | 0.21           | 0.19        | 1.45        | 1.34        |
| 5 South Okanagan             | 1.12        | 1.26        | 0.22           | 0.15        | 1.34        | 1.41        |
| 6 South Central              | 1.19        | 1.32        | 0.18           | 0.18        | 1.38        | 1.49        |
| 7 Upper Fraser Valley        | 0.90        | 1.00        | 0.19           | 0.12        | 1.09        | 1.12        |
| 8 Central Fraser Valley      | 0.79        | 0.95        | 0.06           | 0.00        | 0.85        | 0.95        |
| 9 Boundary                   | 0.88        | 1.01        | 0.34           | 0.21        | 1.22        | 1.22        |
| 10 Simon Fraser              | 2.23        | 2.42        | 0.11           | 0.45        | 2.34        | 2.88        |
| 11 Coast Garibaldi           | 0.50        | 0.63        | 0.17           | 0.16        | 0.67        | 0.79        |
| 13 Central Vancouver Island  | 0.88        | 1.11        | 0.15           | 0.19        | 1.03        | 1.31        |
| 14 Upper Island              | 0.83        | 0.98        | 0.21           | 0.20        | 1.03        | 1.17        |
| 15 Cariboo                   | 0.62        | 0.76        | 0.15           | 0.00        | 0.77        | 0.76        |
| 16 Skeena                    | 0.72        | 0.83        | 0.12           | 0.12        | 0.84        | 0.95        |
| 17 Peace River               | 0.51        | 0.85        | 0.00           | 0.00        | 0.51        | 0.85        |
| 18 Northern Interior         | 0.79        | 0.78        | 0.00           | 0.26        | 0.79        | 1.04        |
| 20 Vancouver                 | 4.00        | 4.25        | 0.38           | 0.41        | 4.37        | 4.65        |
| 30 Burnaby                   | 1.38        | 1.57        | 0.13           | 0.42        | 1.51        | 1.99        |
| 40 North Shore               | 2.02        | 1.94        | 0.44           | 0.67        | 2.46        | 2.61        |
| 50 Richmond                  | 1.26        | 0.91        | 0.32           | 0.23        | 1.58        | 1.13        |
| 60 Capital Regional District | 2.44        | 2.60        | 0.10           | 0.19        | 2.54        | 2.79        |
| <b>TOTAL</b>                 | <b>1.66</b> | <b>1.79</b> | <b>0.21</b>    | <b>0.25</b> | <b>1.87</b> | <b>2.04</b> |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

**Table 1c**  
**Average Annual Rate of Change: Dietitians and Nutritionists (BCDNA Members)<sup>1</sup>**  
**in British Columbia by Health Region by Membership Category**  
**December 1991 to December 1993**

| Health Region                | Practising          |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | *                   | *                  | *                   | *                  | *                   | *                  |
| 2 Central Kootenay           | *                   | *                  | *                   | *                  | 8.71                | 6.81               |
| 4 North Okanagan             | 0.00                | -3.85              | *                   | *                  | 0.00                | -3.85              |
| 5 South Okanagan             | 11.80               | 5.89               | *                   | *                  | 8.01                | 2.30               |
| 6 South Central              | 7.42                | 5.01               | *                   | *                  | 6.46                | 4.07               |
| 7 Upper Fraser Valley        | 10.19               | 5.45               | *                   | *                  | 5.72                | 1.17               |
| 8 Central Fraser Valley      | 13.39               | 9.25               | *                   | *                  | 9.54                | 5.55               |
| 9 Boundary                   | 10.72               | 6.86               | -18.35              | -21.19             | 3.43                | -0.17              |
| 10 Simon Fraser              | 8.20                | 4.13               | *                   | *                  | 15.13               | 10.81              |
| 11 Coast Garibaldi           | *                   | *                  | *                   | *                  | *                   | *                  |
| 13 Central Vancouver Island  | 16.32               | 12.64              | *                   | *                  | 16.19               | 12.52              |
| 14 Upper Island              | *                   | *                  | *                   | *                  | 9.54                | 6.62               |
| 15 Cariboo                   | *                   | *                  | *                   | *                  | *                   | *                  |
| 16 Skeena                    | *                   | *                  | *                   | *                  | *                   | *                  |
| 17 Peace River               | *                   | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | *                   | *                  | *                   | *                  | *                   | *                  |
| 20 Vancouver                 | 4.61                | 3.05               | 5.41                | 3.84               | 4.68                | 3.12               |
| 30 Burnaby                   | 8.71                | 6.44               | *                   | *                  | 17.26               | 14.81              |
| 40 North Shore               | 0.00                | -1.93              | *                   | *                  | 5.00                | 2.98               |
| 50 Richmond                  | -13.40              | -15.29             | *                   | *                  | -13.40              | -15.29             |
| 60 Capital Regional District | 5.34                | 3.32               | *                   | *                  | 6.99                | 4.94               |
| <b>TOTAL</b>                 | <b>6.49</b>         | <b>3.72</b>        | <b>11.48</b>        | <b>8.59</b>        | <b>7.07</b>         | <b>4.29</b>        |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia**  
**by Health Region by Age<sup>2</sup>**  
**December 1993**

| Health Region                | < 25      | 25-34      | 35-44      | 45-54      | 55-64     | 65 +     | Subtotal   | Unknown   | Total      |
|------------------------------|-----------|------------|------------|------------|-----------|----------|------------|-----------|------------|
| 1 East Kootenay              | 0         | 4          | 1          | 5          | 0         | 0        | 10         | 2         | 12         |
| 2 Central Kootenay           | 0         | 6          | 3          | 2          | 1         | 0        | 12         | 1         | 13         |
| 4 North Okanagan             | 0         | 6          | 6          | 2          | 0         | 0        | 14         | 0         | 14         |
| 5 South Okanagan             | 0         | 14         | 9          | 3          | 1         | 0        | 27         | 1         | 28         |
| 6 South Central              | 0         | 7          | 7          | 1          | 1         | 0        | 16         | 1         | 17         |
| 7 Upper Fraser Valley        | 0         | 8          | 7          | 4          | 0         | 0        | 19         | 0         | 19         |
| 8 Central Fraser Valley      | 0         | 6          | 10         | 1          | 0         | 0        | 17         | 1         | 18         |
| 9 Boundary                   | 1         | 14         | 16         | 7          | 3         | 0        | 41         | 5         | 46         |
| 10 Simon Fraser              | 5         | 19         | 18         | 8          | 4         | 0        | 54         | 3         | 57         |
| 11 Coast Garibaldi           | 0         | 2          | 1          | 2          | 0         | 0        | 5          | 0         | 5          |
| 13 Central Vancouver Island  | 1         | 7          | 9          | 8          | 1         | 0        | 26         | 1         | 27         |
| 14 Upper Island              | 0         | 2          | 6          | 2          | 2         | 0        | 12         | 0         | 12         |
| 15 Cariboo                   | 0         | 2          | 1          | 1          | 0         | 0        | 4          | 1         | 5          |
| 16 Skeena                    | 0         | 3          | 3          | 2          | 0         | 0        | 8          | 0         | 8          |
| 17 Peace River               | 0         | 4          | 1          | 0          | 0         | 0        | 5          | 0         | 5          |
| 18 Northern Interior         | 0         | 4          | 5          | 2          | 1         | 0        | 12         | 0         | 12         |
| 20 Vancouver                 | 2         | 87         | 84         | 23         | 12        | 2        | 210        | 19        | 229        |
| 30 Burnaby                   | 1         | 15         | 10         | 1          | 3         | 0        | 30         | 3         | 33         |
| 40 North Shore               | 1         | 10         | 15         | 9          | 6         | 0        | 41         | 2         | 43         |
| 50 Richmond                  | 0         | 2          | 7          | 2          | 1         | 0        | 12         | 3         | 15         |
| 60 Capital Regional District | 1         | 12         | 35         | 23         | 8         | 0        | 79         | 8         | 87         |
| <b>TOTAL</b>                 | <b>12</b> | <b>234</b> | <b>254</b> | <b>108</b> | <b>44</b> | <b>2</b> | <b>654</b> | <b>51</b> | <b>705</b> |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> At the date of record, BCDNA membership included 699 females and 6 males.

**Table 3**  
**Practising Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Status**  
**December 1993**

| Health Region                | Employed in Dietetics/Nutrition |            |           |           |             |          |            | Employed<br>in Other<br>Field | Not<br>Employed | Unknown  | Total      |
|------------------------------|---------------------------------|------------|-----------|-----------|-------------|----------|------------|-------------------------------|-----------------|----------|------------|
|                              | Full-Time                       | Part-Time  | Casual    | Temporary | On<br>Leave | Unknown  | Subtotal   |                               |                 |          |            |
| 1 East Kootenay              | 8                               | 1          | 0         | 0         | 0           | 0        | 9          | 0                             | 0               | 1        | 10         |
| 2 Central Kootenay           | 3                               | 7          | 1         | 0         | 0           | 0        | 11         | 0                             | 0               | 1        | 12         |
| 4 North Okanagan             | 7                               | 2          | 0         | 1         | 0           | 0        | 10         | 1                             | 1               | 0        | 12         |
| 5 South Okanagan             | 13                              | 10         | 0         | 0         | 1           | 0        | 24         | 0                             | 1               | 0        | 25         |
| 6 South Central              | 7                               | 8          | 0         | 0         | 0           | 0        | 15         | 0                             | 0               | 0        | 15         |
| 7 Upper Fraser Valley        | 9                               | 5          | 0         | 0         | 2           | 0        | 16         | 0                             | 0               | 1        | 17         |
| 8 Central Fraser Valley      | 8                               | 9          | 0         | 0         | 1           | 0        | 18         | 0                             | 0               | 0        | 18         |
| 9 Boundary                   | 17                              | 19         | 0         | 0         | 0           | 0        | 36         | 0                             | 1               | 1        | 38         |
| 10 Simon Fraser              | 29                              | 13         | 3         | 0         | 0           | 1        | 46         | 1                             | 1               | 0        | 48         |
| 11 Coast Garibaldi           | 3                               | 1          | 0         | 0         | 0           | 0        | 4          | 0                             | 0               | 0        | 4          |
| 13 Central Vancouver Island  | 14                              | 9          | 0         | 0         | 0           | 0        | 23         | 0                             | 0               | 0        | 23         |
| 14 Upper Island              | 4                               | 4          | 1         | 0         | 0           | 1        | 10         | 0                             | 0               | 0        | 10         |
| 15 Cariboo                   | 3                               | 2          | 0         | 0         | 0           | 0        | 5          | 0                             | 0               | 0        | 5          |
| 16 Skeena                    | 3                               | 4          | 0         | 0         | 0           | 0        | 7          | 0                             | 0               | 0        | 7          |
| 17 Peace River               | 2                               | 1          | 1         | 0         | 0           | 0        | 4          | 0                             | 1               | 0        | 5          |
| 18 Northern Interior         | 6                               | 3          | 0         | 0         | 0           | 0        | 9          | 0                             | 0               | 0        | 9          |
| 20 Vancouver                 | 121                             | 52         | 12        | 7         | 1           | 1        | 194        | 7                             | 8               | 0        | 209        |
| 30 Burnaby                   | 14                              | 8          | 1         | 0         | 1           | 0        | 24         | 1                             | 0               | 1        | 26         |
| 40 North Shore               | 11                              | 16         | 1         | 0         | 1           | 0        | 29         | 1                             | 2               | 0        | 32         |
| 50 Richmond                  | 3                               | 6          | 0         | 0         | 0           | 1        | 10         | 1                             | 1               | 0        | 12         |
| 60 Capital Regional District | 46                              | 23         | 6         | 0         | 3           | 1        | 79         | 0                             | 1               | 1        | 81         |
| <b>TOTAL</b>                 | <b>331</b>                      | <b>203</b> | <b>26</b> | <b>8</b>  | <b>10</b>   | <b>5</b> | <b>583</b> | <b>12</b>                     | <b>17</b>       | <b>6</b> | <b>618</b> |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

**Table 4**  
**Practising Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> Employed in Nutrition/Dietetics<sup>2</sup>**  
**in British Columbia by Health Region by Principal Employer**  
**December 1993**

| Health Region                | General/<br>Acute Care<br>Facility | Extended<br>Care<br>Facility | Acute/<br>Extended Care<br>Facility | Rehabilitation<br>Facility | Paediatric<br>Facility | Psychiatric<br>Facility | Continuing/<br>LTC<br>Facility | Other<br>Health Care<br>Facility |
|------------------------------|------------------------------------|------------------------------|-------------------------------------|----------------------------|------------------------|-------------------------|--------------------------------|----------------------------------|
| 1 East Kootenay              | 1                                  | 0                            | 6                                   | 0                          | 0                      | 0                       | 1                              | 0                                |
| 2 Central Kootenay           | 3                                  | 0                            | 6                                   | 0                          | 0                      | 0                       | 1                              | 0                                |
| 4 North Okanagan             | 4                                  | 0                            | 3                                   | 0                          | 0                      | 0                       | 1                              | 1                                |
| 5 South Okanagan             | 15                                 | 1                            | 2                                   | 0                          | 0                      | 0                       | 4                              | 0                                |
| 6 South Central              | 8                                  | 2                            | 0                                   | 0                          | 0                      | 0                       | 1                              | 1                                |
| 7 Upper Fraser Valley        | 11                                 | 1                            | 2                                   | 0                          | 0                      | 0                       | 1                              | 0                                |
| 8 Central Fraser Valley      | 5                                  | 1                            | 6                                   | 0                          | 0                      | 0                       | 4                              | 1                                |
| 9 Boundary                   | 10                                 | 1                            | 6                                   | 0                          | 0                      | 1                       | 8                              | 0                                |
| 10 Simon Fraser              | 23                                 | 3                            | 1                                   | 0                          | 0                      | 7                       | 5                              | 1                                |
| 11 Coast Garibaldi           | 0                                  | 0                            | 2                                   | 0                          | 0                      | 0                       | 0                              | 0                                |
| 13 Central Vancouver Island  | 6                                  | 0                            | 6                                   | 0                          | 0                      | 0                       | 6                              | 1                                |
| 14 Upper Island              | 3                                  | 0                            | 3                                   | 0                          | 0                      | 0                       | 2                              | 0                                |
| 15 Cariboo                   | 1                                  | 0                            | 1                                   | 0                          | 0                      | 0                       | 1                              | 0                                |
| 16 Skeena                    | 3                                  | 0                            | 1                                   | 0                          | 0                      | 0                       | 1                              | 0                                |
| 17 Peace River               | 2                                  | 0                            | 0                                   | 0                          | 0                      | 0                       | 0                              | 0                                |
| 18 Northern Interior         | 3                                  | 0                            | 4                                   | 0                          | 0                      | 0                       | 1                              | 0                                |
| 20 Vancouver                 | 79                                 | 3                            | 14                                  | 7                          | 13                     | 0                       | 24                             | 5                                |
| 30 Burnaby                   | 6                                  | 2                            | 2                                   | 0                          | 0                      | 0                       | 7                              | 0                                |
| 40 North Shore               | 11                                 | 3                            | 1                                   | 0                          | 0                      | 0                       | 8                              | 0                                |
| 50 Richmond                  | 6                                  | 1                            | 0                                   | 0                          | 0                      | 0                       | 0                              | 0                                |
| 60 Capital Regional District | 35                                 | 4                            | 6                                   | 2                          | 1                      | 0                       | 13                             | 2                                |
| <b>TOTAL</b>                 | <b>235</b>                         | <b>22</b>                    | <b>72</b>                           | <b>9</b>                   | <b>14</b>              | <b>8</b>                | <b>89</b>                      | <b>12</b>                        |

... continued

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> Excludes 12 RDNs who are employed in other fields, 17 who are not employed and 6 who did not indicate their employment status.

**Table 4 (continued)**  
**Practising Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> Employed in Nutrition/Dietetics<sup>2</sup>**  
**in British Columbia by Health Region by Principal Employer**  
**December 1993**

| <b>Health Region</b>         | <b>Government/<br/>Community<br/>Health Agency</b> | <b>Voluntary/<br/>Non-Profit<br/>Agency</b> | <b>Education/<br/>University/<br/>College</b> | <b>Business/<br/>Industry</b> | <b>Self<br/>Employed</b> | <b>Total</b> |
|------------------------------|--|---|---|-------------------------------|--------------------------|--------------|
| 1 East Kootenay              | 1  | 0   | 0   | 0                             | 0                        | 9            |
| 2 Central Kootenay           | 1  | 0   | 0   | 0                             | 0                        | 11           |
| 4 North Okanagan             | 1  | 0   | 0   | 0                             | 0                        | 10           |
| 5 South Okanagan             | 2  | 0   | 0   | 0                             | 0                        | 24           |
| 6 South Central              | 3  | 0   | 0   | 0                             | 0                        | 15           |
| 7 Upper Fraser Valley        | 1  | 0   | 0   | 0                             | 0                        | 16           |
| 8 Central Fraser Valley      | 1  | 0   | 0   | 0                             | 0                        | 18           |
| 9 Boundary                   | 4  | 1   | 1   | 0                             | 4                        | 36           |
| 10 Simon Fraser              | 4  | 0   | 0   | 1                             | 1                        | 46           |
| 11 Coast Garibaldi           | 1  | 0   | 0   | 0                             | 1                        | 4            |
| 13 Central Vancouver Island  | 3  | 1   | 0   | 0                             | 0                        | 23           |
| 14 Upper Island              | 1  | 0   | 0   | 0                             | 1                        | 10           |
| 15 Cariboo                   | 2  | 0   | 0   | 0                             | 0                        | 5            |
| 16 Skeena                    | 1  | 1   | 0   | 0                             | 0                        | 7            |
| 17 Peace River               | 1  | 0   | 0   | 1                             | 0                        | 4            |
| 18 Northern Interior         | 1  | 0   | 0   | 0                             | 0                        | 9            |
| 20 Vancouver                 | 22   | 3   | 7   | 10                            | 7                        | 194          |
| 30 Burnaby                   | 3  | 0   | 0   | 3                             | 1                        | 24           |
| 40 North Shore               | 1  | 0   | 1   | 2                             | 2                        | 29           |
| 50 Richmond                  | 1  | 0   | 0   | 1                             | 1                        | 10           |
| 60 Capital Regional District | 11   | 0   | 1   | 2                             | 2                        | 79           |
| <b>TOTAL</b>                 | <b>66</b>  | <b>6</b>                                    | <b>10</b>                                     | <b>20</b>                     | <b>20</b>                | <b>583</b>   |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> Excludes 12 RDNs who are employed in other fields, 17 who are not employed and 6 who did not indicate their employment status.

**Table 5**  
**Practising Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> Employed in Nutrition/Dietetics<sup>2</sup>**  
**in British Columbia by Health Region by Principal Area of Responsibility**  
**December 1993**

| Health Region                | Administrative/<br>Food<br>Service | Administrative/<br>Clinical | Clinical/<br>Therapeutic | Community/<br>Public<br>Health | Private<br>Consultation | Outpatient/<br>Counselling | Education/<br>Research <sup>3</sup> | Sales/<br>Marketing | Unknown  | Total      |
|------------------------------|------------------------------------|-----------------------------|--------------------------|--------------------------------|-------------------------|----------------------------|-------------------------------------|---------------------|----------|------------|
| 1 East Kootenay              | 2                                  | 4                           | 0                        | 1                              | 1                       | 1                          | 0                                   | 0                   | 0        | 9          |
| 2 Central Kootenay           | 0                                  | 6                           | 2                        | 1                              | 0                       | 2                          | 0                                   | 0                   | 0        | 11         |
| 4 North Okanagan             | 1                                  | 2                           | 5                        | 2                              | 0                       | 0                          | 0                                   | 0                   | 0        | 10         |
| 5 South Okanagan             | 3                                  | 5                           | 7                        | 2                              | 2                       | 5                          | 0                                   | 0                   | 0        | 24         |
| 6 South Central              | 3                                  | 1                           | 6                        | 3                              | 0                       | 2                          | 0                                   | 0                   | 0        | 15         |
| 7 Upper Fraser Valley        | 3                                  | 2                           | 8                        | 1                              | 0                       | 2                          | 0                                   | 0                   | 0        | 16         |
| 8 Central Fraser Valley      | 3                                  | 6                           | 5                        | 1                              | 0                       | 3                          | 0                                   | 0                   | 0        | 18         |
| 9 Boundary                   | 6                                  | 6                           | 8                        | 6                              | 3                       | 3                          | 3                                   | 0                   | 1        | 36         |
| 10 Simon Fraser              | 11                                 | 7                           | 21                       | 3                              | 1                       | 3                          | 0                                   | 0                   | 0        | 46         |
| 11 Coast Garibaldi           | 2                                  | 0                           | 0                        | 1                              | 1                       | 0                          | 0                                   | 0                   | 0        | 4          |
| 13 Central Vancouver Island  | 6                                  | 4                           | 8                        | 4                              | 0                       | 1                          | 0                                   | 0                   | 0        | 23         |
| 14 Upper Island              | 3                                  | 1                           | 3                        | 2                              | 0                       | 1                          | 0                                   | 0                   | 0        | 10         |
| 15 Cariboo                   | 4                                  | 0                           | 0                        | 1                              | 0                       | 0                          | 0                                   | 0                   | 0        | 5          |
| 16 Skeena                    | 0                                  | 3                           | 0                        | 2                              | 0                       | 2                          | 0                                   | 0                   | 0        | 7          |
| 17 Peace River               | 0                                  | 2                           | 0                        | 1                              | 0                       | 0                          | 1                                   | 0                   | 0        | 4          |
| 18 Northern Interior         | 2                                  | 1                           | 3                        | 1                              | 0                       | 2                          | 0                                   | 0                   | 0        | 9          |
| 20 Vancouver                 | 25                                 | 26                          | 82                       | 21                             | 9                       | 20                         | 8                                   | 3                   | 0        | 194        |
| 30 Burnaby                   | 4                                  | 6                           | 6                        | 3                              | 0                       | 2                          | 3                                   | 0                   | 0        | 24         |
| 40 North Shore               | 5                                  | 4                           | 12                       | 1                              | 2                       | 2                          | 1                                   | 1                   | 1        | 29         |
| 50 Richmond                  | 0                                  | 1                           | 5                        | 2                              | 0                       | 2                          | 0                                   | 0                   | 0        | 10         |
| 60 Capital Regional District | 14                                 | 10                          | 22                       | 13                             | 8                       | 9                          | 2                                   | 1                   | 0        | 79         |
| <b>TOTAL</b>                 | <b>97</b>                          | <b>97</b>                   | <b>203</b>               | <b>72</b>                      | <b>27</b>               | <b>62</b>                  | <b>18</b>                           | <b>5</b>            | <b>2</b> | <b>583</b> |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> Excludes 12 RDNs who are employed in other fields, 17 who are not employed and 6 who did not indicate their employment status.

<sup>3</sup> Includes 16 RDNs employed in education and 2 in research.



**Table 6**  
**Practising Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> Employed in Nutrition/Dietetics<sup>2</sup>**  
**in British Columbia by Health Region by Principal Position**  
**December 1993**

| Health Region                | Staff<br>Dietitian/<br>Nutritionist | Senior<br>Dietitian/<br>Nutritionist | Sole<br>Charge | Manager/<br>Co-ordinator | Department<br>Head/<br>Director | Assistant<br>Department<br>Head/<br>Director | Instructor/<br>Faculty<br>Position <sup>3</sup> | Consultant | Sales<br>Representative | Total      |
|------------------------------|-------------------------------------|--------------------------------------|----------------|--------------------------|---------------------------------|--|---|------------|-------------------------|------------|
| 1 East Kootenay              | 1                                   | 1                                    | 4              | 1                        | 1                               | 0  | 0   | 1          | 0                       | 9          |
| 2 Central Kootenay           | 7                                   | 0                                    | 1              | 0                        | 3                               | 0  | 0   | 0          | 0                       | 11         |
| 4 North Okanagan             | 5                                   | 0                                    | 1              | 2                        | 2                               | 0  | 0   | 0          | 0                       | 10         |
| 5 South Okanagan             | 13                                  | 0                                    | 2              | 0                        | 4                               | 3  | 0   | 2          | 0                       | 24         |
| 6 South Central              | 9                                   | 1                                    | 0              | 2                        | 2                               | 1  | 0   | 0          | 0                       | 15         |
| 7 Upper Fraser Valley        | 9                                   | 2                                    | 0              | 2                        | 2                               | 0  | 0   | 1          | 0                       | 16         |
| 8 Central Fraser Valley      | 8                                   | 2                                    | 1              | 0                        | 5                               | 0  | 0   | 2          | 0                       | 18         |
| 9 Boundary                   | 16                                  | 1                                    | 0              | 3                        | 4                               | 0  | 2   | 10         | 0                       | 36         |
| 10 Simon Fraser              | 28                                  | 2                                    | 2              | 4                        | 7                               | 2  | 0   | 1          | 0                       | 46         |
| 11 Coast Garibaldi           | 1                                   | 0                                    | 0              | 0                        | 2                               | 0  | 0   | 1          | 0                       | 4          |
| 13 Central Vancouver Island  | 10                                  | 3                                    | 3              | 2                        | 4                               | 1  | 0   | 0          | 0                       | 23         |
| 14 Upper Island              | 1                                   | 2                                    | 2              | 1                        | 3                               | 0  | 0   | 1          | 0                       | 10         |
| 15 Cariboo                   | 0                                   | 0                                    | 4              | 0                        | 0                               | 0  | 0   | 1          | 0                       | 5          |
| 16 Skeena                    | 2                                   | 0                                    | 1              | 3                        | 1                               | 0  | 0   | 0          | 0                       | 7          |
| 17 Peace River               | 2                                   | 0                                    | 0              | 0                        | 1                               | 0  | 0   | 1          | 0                       | 4          |
| 18 Northern Interior         | 4                                   | 0                                    | 1              | 1                        | 1                               | 1  | 0   | 1          | 0                       | 9          |
| 20 Vancouver                 | 109                                 | 9                                    | 7              | 24                       | 18                              | 3  | 5   | 16         | 3                       | 194        |
| 30 Burnaby                   | 11                                  | 1                                    | 7              | 1                        | 2                               | 0  | 0   | 2          | 0                       | 24         |
| 40 North Shore               | 11                                  | 2                                    | 0              | 5                        | 4                               | 0  | 1   | 5          | 1                       | 29         |
| 50 Richmond                  | 6                                   | 0                                    | 1              | 1                        | 0                               | 0  | 0   | 2          | 0                       | 10         |
| 60 Capital Regional District | 32                                  | 4                                    | 4              | 11                       | 9                               | 3  | 0   | 15         | 1                       | 79         |
| <b>TOTAL</b>                 | <b>285</b>                          | <b>30</b>                            | <b>41</b>      | <b>63</b>                | <b>75</b>                       | <b>14</b>                                    | <b>8</b>  | <b>62</b>  | <b>5</b>                | <b>583</b> |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association is voluntary.

<sup>2</sup> Excludes 12 RDNs who are employed in other fields, 17 who are not employed and 6 who did not indicate their employment status.

<sup>3</sup> Includes 1 RDN employed as a researcher.

**Table 7**  
**Analysis of Change in the Number of Practising Dietitians and Nutritionists (BCDNA Members)<sup>1</sup>**  
**in British Columbia by Health Region**  
**December 1991 to December 1993**

| Health Region                | December 1991 <sup>3</sup> | New Registrants <sup>2</sup> by Place of Graduation |              |               |          |           | Reactivation* | Attrition** | Net Intra-provincial Migration | December 1993 |
|------------------------------|----------------------------|---|--------------|---------------|----------|-----------|---------------|-------------|--------------------------------|---------------|
|                              |                            | B.C.  | Other Canada | Other Country | Unknown  | Subtotal  |               |             |                                |               |
| 1 East Kootenay              | 7                          | 1   | 2            | 1             | 0        | 4         | 0             | 1           | 0                              | 10            |
| 2 Central Kootenay           | 9                          | 0   | 2            | 0             | 1        | 3         | 1             | 1           | 0                              | 12            |
| 4 North Okanagan             | 12                         | 1   | 1            | 0             | 0        | 2         | 2             | 4           | 0                              | 12            |
| 5 South Okanagan             | 20                         | 1   | 2            | 0             | 0        | 3         | 2             | 1           | 1                              | 25            |
| 6 South Central              | 13                         | 1   | 2            | 0             | 0        | 3         | 1             | 2           | 0                              | 15            |
| 7 Upper Fraser Valley        | 14                         | 1   | 1            | 0             | 1        | 3         | 1             | 1           | 0                              | 17            |
| 8 Central Fraser Valley      | 14                         | 1   | 2            | 0             | 0        | 3         | 2             | 0           | -1                             | 18            |
| 9 Boundary                   | 31                         | 5   | 1            | 0             | 0        | 6         | 2             | 2           | 1                              | 38            |
| 10 Simon Fraser              | 41                         | 5   | 3            | 0             | 0        | 8         | 2             | 5           | 2                              | 48            |
| 11 Coast Garibaldi           | 3                          | 0   | 0            | 0             | 0        | 0         | 1             | 0           | 0                              | 4             |
| 13 Central Vancouver Island  | 17                         | 1   | 3            | 0             | 1        | 5         | 1             | 0           | 0                              | 23            |
| 14 Upper Island              | 8                          | 0   | 1            | 1             | 0        | 2         | 0             | 0           | 0                              | 10            |
| 15 Cariboo                   | 4                          | 0   | 2            | 0             | 0        | 2         | 0             | 0           | -1                             | 5             |
| 16 Skeena                    | 6                          | 0   | 1            | 0             | 0        | 1         | 1             | 1           | 0                              | 7             |
| 17 Peace River               | 3                          | 0   | 2            | 0             | 1        | 3         | 0             | 1           | 0                              | 5             |
| 18 Northern Interior         | 9                          | 0   | 0            | 0             | 0        | 0         | 0             | 0           | 0                              | 9             |
| 20 Vancouver                 | 191                        | 9   | 10           | 0             | 2        | 21        | 11            | 18          | 4                              | 209           |
| 30 Burnaby                   | 22                         | 2   | 1            | 0             | 1        | 4         | 1             | 2           | 1                              | 26            |
| 40 North Shore               | 32                         | 1   | 1            | 0             | 0        | 2         | 1             | 2           | -1                             | 32            |
| 50 Richmond                  | 16                         | 2   | 1            | 1             | 0        | 4         | 1             | 1           | -8                             | 12            |
| 60 Capital Regional District | 73                         | 1   | 11           | 1             | 0        | 13        | 1             | 8           | 2                              | 81            |
| <b>TOTAL</b>                 | <b>545</b>                 | <b>32</b>   | <b>49</b>    | <b>4</b>      | <b>7</b> | <b>92</b> | <b>31</b>     | <b>50</b>   | <b>0</b>                       | <b>618</b>    |

<sup>1</sup> Membership in the B.C. Dietitians and Nutritionists Association (BCDNA) is voluntary.

<sup>2</sup> Dietitians and nutritionists who reported B.C. addresses and were practising members in December 1993 and whose date of initial registration was after December 1991.

<sup>3</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 1 RDN whose employment address was outside B.C.

\* Dietitians and nutritionists who reported B.C. addresses and were practising members in December 1993 but not in December 1991 and who were registered for the first time before December 1991.

\*\* Dietitians and nutritionists who reported B.C. addresses and were practising members in December 1991 but not in December 1993.

## FOOD SERVICE SUPERVISORS

**Definition:** A food service supervisor

...is a first-line manager constantly involved with the day-to-day operations of the food service department. A food service supervisor provides a link between management and food service personnel. He/she is trained in problem-solving and is capable of quick and accurate decisions where necessary.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the Pacific Society of Nutrition Management and the Canadian Society of Nutrition Management is voluntary.

**Date of Record:** August 1993.

**Sources of Data:** Pacific Society of Nutrition Management (PSNM) and Canadian Society of Nutrition Management (CSNM).

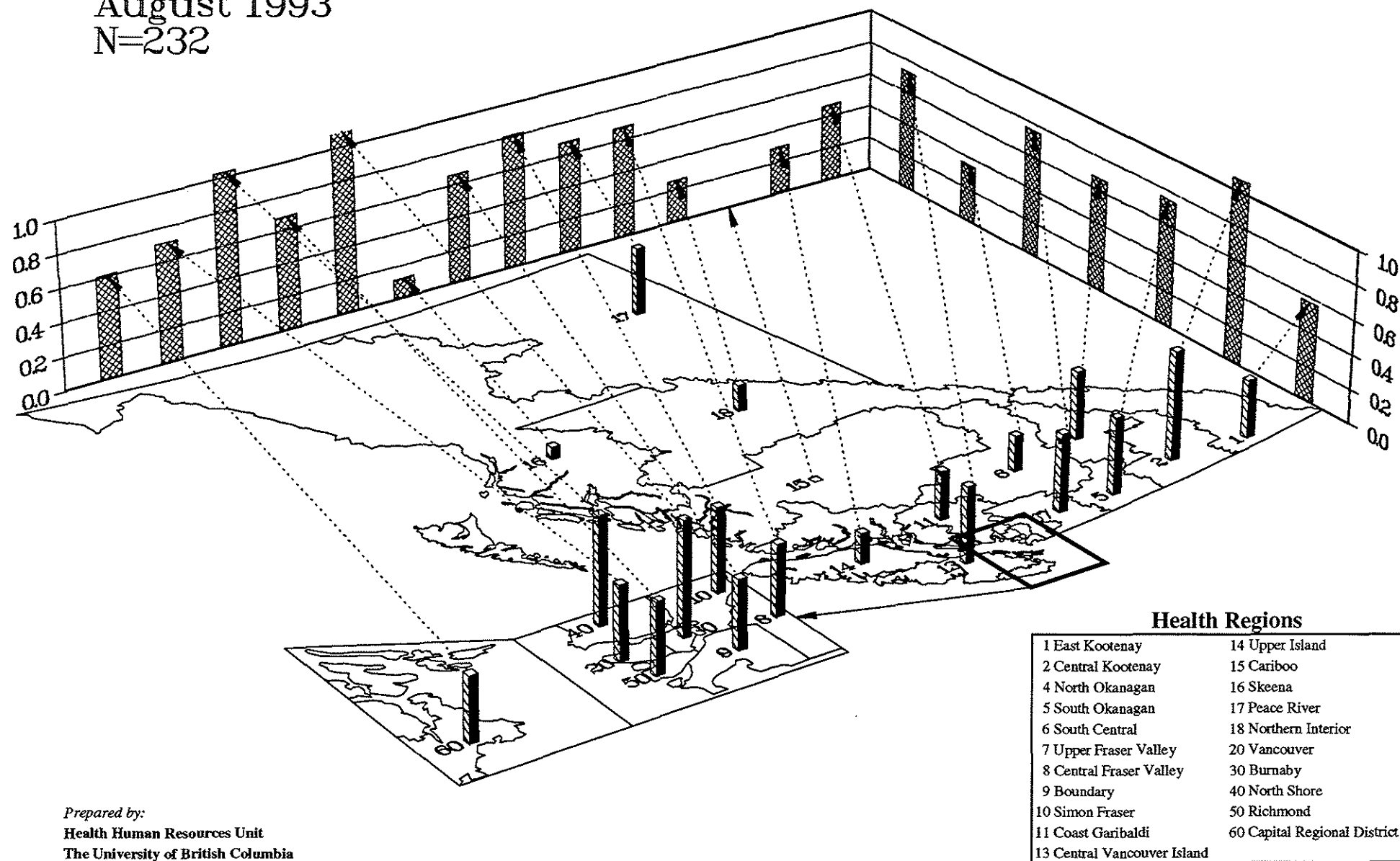
### **Preparation and Updating:**

The table, derived from the membership lists of the PSNM and the CSNM, includes members who were British Columbia residents at the date of record. The total number is greater than that reported in *ROLLCALL 91* mainly because of the addition of members from the list of the Canadian Society of Nutrition Management. Data presented in the tables are based on home address for all food service supervisors.

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<sup>1</sup>From information provided by the Pacific Society of Nutrition Management.

Food Service Supervisors (PSNM & CSNM Members)  
per 10,000 Population  
by Health Region  
August 1993  
N=232

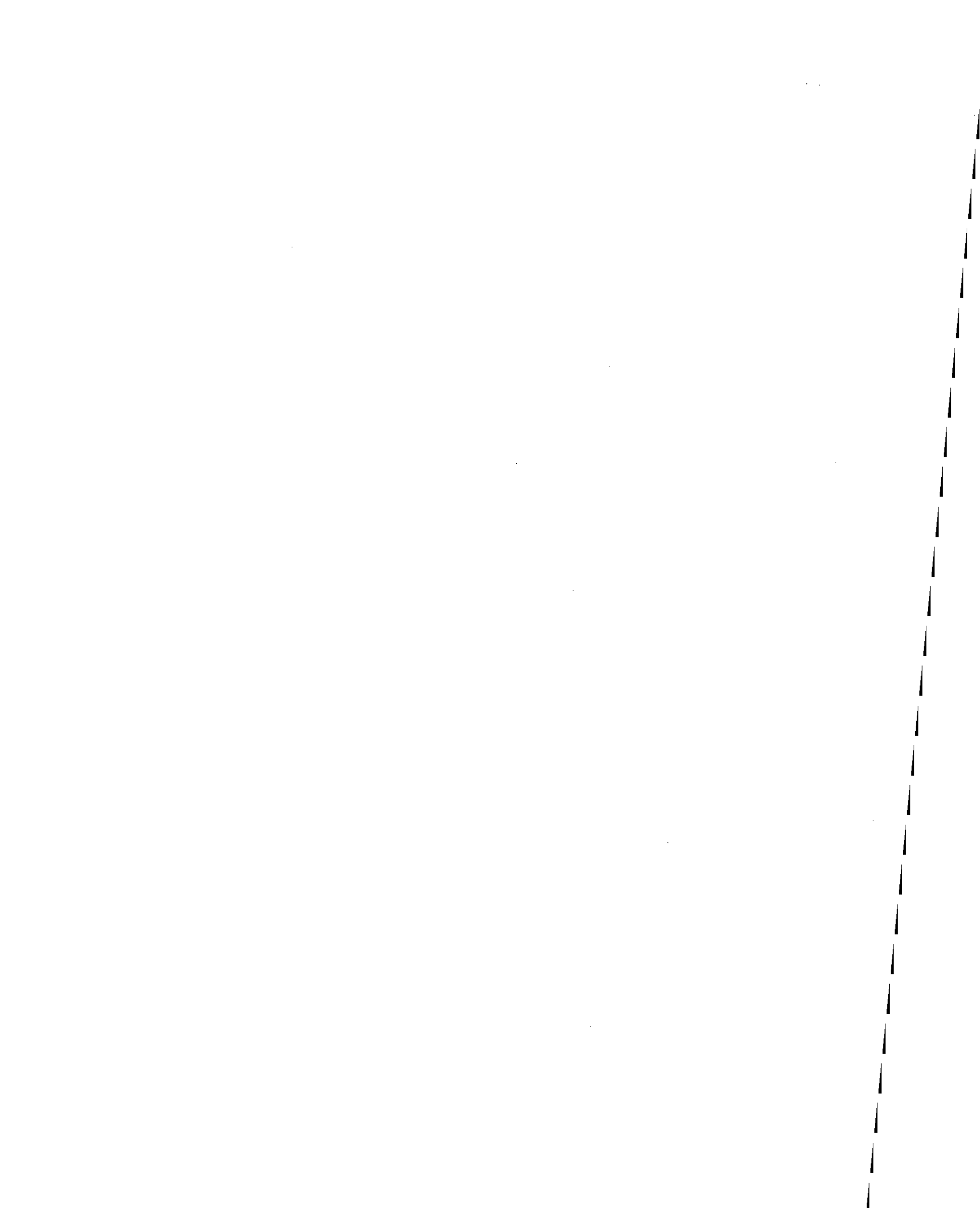


Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Food Service Supervisors (PSNM & CSNM Members)<sup>1</sup>**  
**in British Columbia by Health Region**  
**August 1993**

| Health Region                | Number     | Number per<br>10,000 Population |
|------------------------------|------------|---------------------------------|
| 1 East Kootenay              | 4          | 0.57                            |
| 2 Central Kootenay           | 8          | 1.07                            |
| 4 North Okanagan             | 7          | 0.67                            |
| 5 South Okanagan             | 15         | 0.75                            |
| 6 South Central              | 4          | 0.35                            |
| 7 Upper Fraser Valley        | 13         | 0.76                            |
| 8 Central Fraser Valley      | 13         | 0.68                            |
| 9 Boundary                   | 25         | 0.66                            |
| 10 Simon Fraser              | 16         | 0.81                            |
| 11 Coast Garibaldi           | 3          | 0.47                            |
| 13 Central Vancouver Island  | 15         | 0.73                            |
| 14 Upper Island              | 3          | 0.29                            |
| 15 Cariboo                   | 0          | 0.00                            |
| 16 Skeena                    | 1          | 0.12                            |
| 17 Peace River               | 4          | 0.68                            |
| 18 Northern Interior         | 3          | 0.26                            |
| 20 Vancouver                 | 35         | 0.71                            |
| 30 Burnaby                   | 18         | 1.09                            |
| 40 North Shore               | 17         | 1.03                            |
| 50 Richmond                  | 9          | 0.68                            |
| 60 Capital Regional District | 19         | 0.61                            |
| <b>TOTAL</b>                 | <b>232</b> | <b>0.67</b>                     |

<sup>1</sup> Membership in the Pacific Society of Nutrition Management (PSNM) and the Canadian Society of Nutrition Management (CSNM) is voluntary.



## **VIII. PSYCHOLOGICAL SERVICES**





## PSYCHOLOGISTS

**Definition:** A psychologist

...diagnoses psychological and emotional disorders, counsels clients, provides therapy and research, and applies theory relating to behaviour and mental processes.

Psychologists perform some or all of the following duties:

- (a) examine behaviour, diagnose psychological and emotional disorders, counsel clients, and provide therapy;
- (b) counsel individuals and groups to achieve more effective personal, social, and vocational development and adjustment;
- (c) apply psychological theory and principles regarding behaviour and mental processes such as learning, memory, perception, and language development;
- (d) formulate hypotheses and experimental designs, review literature, conduct studies, and publish research papers.<sup>1</sup>

**Governing Statute:** Psychologists Act, Revised Statutes of British Columbia, 1979, Chapter 342; Health Professions Amendment Act, 1989, Chapter 29, Sections 19-23; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 59-64; administered by the Ministry of Health.

**Governing Body:** College of Psychologists of British Columbia (CPBC). In order to practise as a psychologist in British Columbia, it is necessary to be registered by the CPBC.

**Date of Record:** December 1991 and December 1993.

**Source of Data:** College of Psychologists of British Columbia (CPBC).

### Preparation and Updating:

The tables were prepared from registration data maintained by the CPBC and include registered psychologists who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when psychologists report employment in psychology and employment address is available. In both 1991 and 1993, employment address was available for 98% of psychologists employed in psychology. Home address is used for the remainder, as well as for psychologists not employed in psychology.

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<sup>1</sup> Adapted from *National Occupational Classification 1992*, Major Group 41, No. 4151, Ottawa: Employment and Immigration Canada.

## **Definition of Terms:**

### **1. Registered Psychologists**

Psychologists must be registered with the CPBC in order to practice in British Columbia. Table 1 reports the number of psychologists registered in British Columbia, the number of registered psychologists per 10,000 population, and the average annual rates of change in these figures.

### **2. Age and Sex**

Age and sex information on registered psychologists, derived from the CPBC registration database, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### **3. Employment Status**

Employment status of registered psychologists in British Columbia is shown in Table 3. The categories used are:

- (a) Employed in psychology;
- (b) Employed in other field;
- (c) Not employed.

### **4. Primary Work Setting**

The primary work setting of registered psychologists employed in psychology in British Columbia is reported in Table 4. The categories used on the registration form by the CPBC were:

- (a) Educational Facility - primary/secondary;
- (b) Educational Facility - post-secondary;
- (c) Psychiatric Hospital;
- (d) Mental Health Clinic;
- (e) Child Development Centre;
- (f) General Hospital;
- (g) Rehabilitation Facility;
- (h) Addiction Treatment Centre;
- (i) Correction Facility;
- (j) Industrial/Commercial Firm;
- (k) Federal Government Ministry;
- (l) Provincial Government Ministry;
- (m) Municipal Government Department;
- (n) Social Agency;
- (o) Consulting Firm (non-industrial);
- (p) Private Practice;
- (q) Other.

Some of these categories are combined in Table 4 when the numbers are small. When this is done, a footnote is used list specific responses for each category.

## 5. Main Psychological Activity

The main psychological activity of registered psychologists employed in British Columbia, as reported in the annual CPBC registration form, is reported in Table 5. The categories used are as follows:

- (a) Direct Service;
- (b) Consulting;
- (c) Administration;
- (d) Teaching;
- (e) Research.

## 6. Analysis of Change

Table 6 illustrates the sources of change which affected the stock of psychologists from 1991 to 1993.

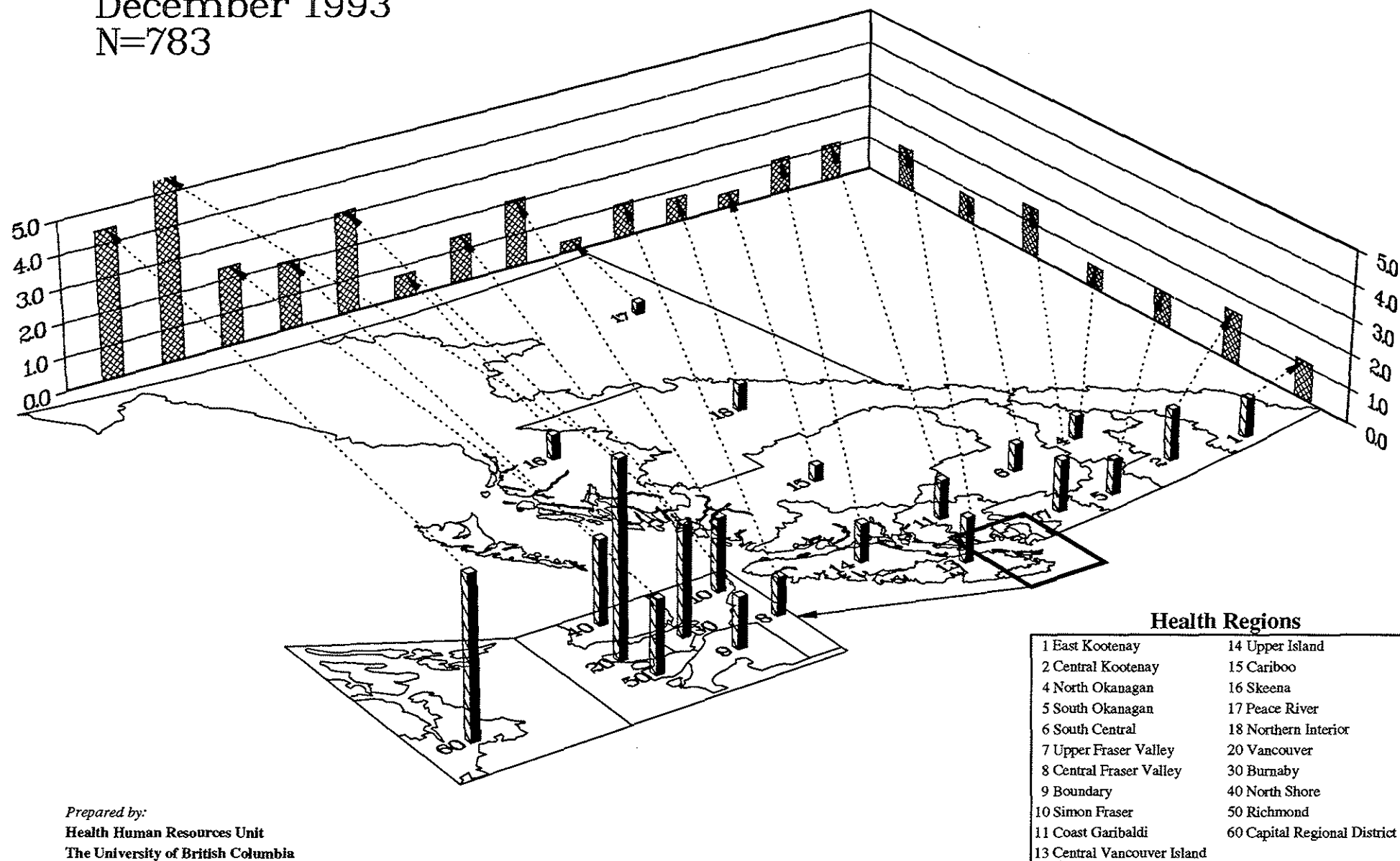
*New registrants* are psychologists included in the December 1993 stock who registered with the CPBC *for the first time* subsequent to December 1991. They are reported in the table according to their place of graduation: i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent psychologists who were not registered in British Columbia in December 1991, but were registered in the province in December 1993, and whose date of initial registration was before December 1991. Also included as reactivations are registered psychologists who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in December 1993.

*Attrition* describes psychologists who were included in the December 1991 stock but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of registration were not included in the December 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of psychologists among different Health Regions. The net migration total is therefore zero.

Psychologists  
per 10,000 Population  
by Health Region  
December 1993  
N=783



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Psychologists in British Columbia**  
**by Health Region**  
**December 1991 and December 1993**

| Health Region                | Number            |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|-------------------|------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991 <sup>1</sup> | 1993       | 1991                            | 1993        | Number <sup>2</sup>              | Ratio <sup>3</sup> |
| 1 East Kootenay              | 6                 | 8          | 0.86                            | 1.13        | *                                | *                  |
| 2 Central Kootenay           | 11                | 11         | 1.53                            | 1.48        | 0.00                             | -1.75              |
| 4 North Okanagan             | 7                 | 7          | 0.72                            | 0.67        | *                                | *                  |
| 5 South Okanagan             | 17                | 20         | 0.95                            | 1.00        | 8.47                             | 2.73               |
| 6 South Central              | 9                 | 9          | 0.83                            | 0.79        | *                                | *                  |
| 7 Upper Fraser Valley        | 24                | 25         | 1.54                            | 1.47        | 2.06                             | -2.33              |
| 8 Central Fraser Valley      | 18                | 20         | 1.02                            | 1.05        | 5.41                             | 1.57               |
| 9 Boundary                   | 48                | 54         | 1.37                            | 1.43        | 6.07                             | 2.37               |
| 10 Simon Fraser              | 38                | 41         | 2.07                            | 2.07        | 3.87                             | -0.03              |
| 11 Coast Garibaldi           | 7                 | 7          | 1.17                            | 1.11        | *                                | *                  |
| 13 Central Vancouver Island  | 24                | 26         | 1.24                            | 1.26        | 4.08                             | 0.79               |
| 14 Upper Island              | 11                | 11         | 1.14                            | 1.08        | 0.00                             | -2.67              |
| 15 Cariboo                   | 4                 | 3          | 0.62                            | 0.46        | *                                | *                  |
| 16 Skeena                    | 5                 | 6          | 0.60                            | 0.71        | *                                | *                  |
| 17 Peace River               | 3                 | 2          | 0.51                            | 0.34        | *                                | *                  |
| 18 Northern Interior         | 7                 | 9          | 0.61                            | 0.78        | *                                | *                  |
| 20 Vancouver                 | 264               | 269        | 5.53                            | 5.46        | 0.94                             | -0.56              |
| 30 Burnaby                   | 46                | 51         | 2.90                            | 3.08        | 5.29                             | 3.09               |
| 40 North Shore               | 36                | 39         | 2.27                            | 2.37        | 4.08                             | 2.07               |
| 50 Richmond                  | 23                | 27         | 1.82                            | 2.04        | 8.35                             | 5.98               |
| 60 Capital Regional District | 129               | 138        | 4.30                            | 4.43        | 3.43                             | 1.45               |
| <b>TOTAL</b>                 | <b>737</b>        | <b>783</b> | <b>2.24</b>                     | <b>2.26</b> | <b>3.07</b>                      | <b>0.40</b>        |

<sup>1</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 7 psychologists whose employment address was outside B.C.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Psychologists in British Columbia**  
**by Health Region by Age and Sex**  
**December 1993**

| Health Region                | 25-34    |           | 35-44     |            | 45-54      |            | 55-64     |           | 65 +      |           | Subtotal   |            | Total      |
|------------------------------|----------|-----------|-----------|------------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|
|                              | M        | F         | M         | F          | M          | F          | M         | F         | M         | F         | M          | F          |            |
| 1 East Kootenay              | 0        | 0         | 0         | 1          | 4          | 1          | 2         | 0         | 0         | 0         | 6          | 2          | 8          |
| 2 Central Kootenay           | 0        | 0         | 2         | 1          | 2          | 5          | 1         | 0         | 0         | 0         | 5          | 6          | 11         |
| 4 North Okanagan             | 0        | 0         | 1         | 1          | 3          | 1          | 0         | 0         | 1         | 0         | 5          | 2          | 7          |
| 5 South Okanagan             | 0        | 0         | 1         | 4          | 9          | 1          | 4         | 0         | 1         | 0         | 15         | 5          | 20         |
| 6 South Central              | 0        | 0         | 0         | 0          | 6          | 1          | 2         | 0         | 0         | 0         | 8          | 1          | 9          |
| 7 Upper Fraser Valley        | 0        | 1         | 4         | 1          | 8          | 4          | 5         | 2         | 0         | 0         | 17         | 8          | 25         |
| 8 Central Fraser Valley      | 1        | 1         | 1         | 1          | 9          | 2          | 2         | 2         | 1         | 0         | 14         | 6          | 20         |
| 9 Boundary                   | 0        | 2         | 6         | 6          | 19         | 10         | 7         | 2         | 1         | 1         | 33         | 21         | 54         |
| 10 Simon Fraser              | 2        | 1         | 10        | 7          | 12         | 6          | 1         | 2         | 0         | 0         | 25         | 16         | 41         |
| 11 Coast Garibaldi           | 0        | 0         | 1         | 0          | 3          | 1          | 1         | 0         | 1         | 0         | 6          | 1          | 7          |
| 13 Central Vancouver Island  | 0        | 0         | 2         | 5          | 9          | 6          | 2         | 0         | 2         | 0         | 15         | 11         | 26         |
| 14 Upper Island              | 0        | 0         | 1         | 0          | 4          | 5          | 1         | 0         | 0         | 0         | 6          | 5          | 11         |
| 15 Cariboo                   | 0        | 0         | 0         | 1          | 1          | 0          | 0         | 1         | 0         | 0         | 1          | 2          | 3          |
| 16 Skeena                    | 0        | 0         | 2         | 0          | 3          | 1          | 0         | 0         | 0         | 0         | 5          | 1          | 6          |
| 17 Peace River               | 0        | 0         | 0         | 1          | 1          | 0          | 0         | 0         | 0         | 0         | 1          | 1          | 2          |
| 18 Northern Interior         | 0        | 1         | 4         | 0          | 3          | 1          | 0         | 0         | 0         | 0         | 7          | 2          | 9          |
| 20 Vancouver                 | 4        | 9         | 32        | 40         | 67         | 68         | 14        | 20        | 7         | 8         | 124        | 145        | 269        |
| 30 Burnaby                   | 1        | 2         | 5         | 6          | 12         | 10         | 8         | 6         | 1         | 0         | 27         | 24         | 51         |
| 40 North Shore               | 0        | 2         | 3         | 3          | 13         | 9          | 4         | 2         | 1         | 2         | 21         | 18         | 39         |
| 50 Richmond                  | 0        | 2         | 4         | 5          | 10         | 3          | 2         | 0         | 1         | 0         | 17         | 10         | 27         |
| 60 Capital Regional District | 0        | 2         | 11        | 17         | 39         | 36         | 14        | 10        | 3         | 6         | 67         | 71         | 138        |
| <b>TOTAL</b>                 | <b>8</b> | <b>23</b> | <b>90</b> | <b>100</b> | <b>237</b> | <b>171</b> | <b>70</b> | <b>47</b> | <b>20</b> | <b>17</b> | <b>425</b> | <b>358</b> | <b>783</b> |

**Table 3**  
**Psychologists in British Columbia**  
**by Health Region by Employment Status**  
**December 1993**

| Health Region                | Employed in<br>Psychology | Employed in<br>Other Field | Not<br>Employed | Total      |
|------------------------------|---------------------------|----------------------------|-----------------|------------|
| 1 East Kootenay              | 8                         | 0                          | 0               | 8          |
| 2 Central Kootenay           | 11                        | 0                          | 0               | 11         |
| 4 North Okanagan             | 7                         | 0                          | 0               | 7          |
| 5 South Okanagan             | 20                        | 0                          | 0               | 20         |
| 6 South Central              | 9                         | 0                          | 0               | 9          |
| 7 Upper Fraser Valley        | 23                        | 1                          | 1               | 25         |
| 8 Central Fraser Valley      | 16                        | 3                          | 1               | 20         |
| 9 Boundary                   | 48                        | 4                          | 2               | 54         |
| 10 Simon Fraser              | 38                        | 2                          | 1               | 41         |
| 11 Coast Garibaldi           | 6                         | 0                          | 1               | 7          |
| 13 Central Vancouver Island  | 26                        | 0                          | 0               | 26         |
| 14 Upper Island              | 9                         | 1                          | 1               | 11         |
| 15 Cariboo                   | 3                         | 0                          | 0               | 3          |
| 16 Skeena                    | 6                         | 0                          | 0               | 6          |
| 17 Peace River               | 1                         | 1                          | 0               | 2          |
| 18 Northern Interior         | 8                         | 1                          | 0               | 9          |
| 20 Vancouver                 | 248                       | 15                         | 6               | 269        |
| 30 Burnaby                   | 46                        | 4                          | 1               | 51         |
| 40 North Shore               | 33                        | 3                          | 3               | 39         |
| 50 Richmond                  | 25                        | 2                          | 0               | 27         |
| 60 Capital Regional District | 125                       | 9                          | 4               | 138        |
| <b>TOTAL</b>                 | <b>716</b>                | <b>46</b>                  | <b>21</b>       | <b>783</b> |

**Table 4**  
**Psychologists Employed in Psychology<sup>1</sup> in British Columbia**  
**by Health Region by Primary Work Setting**  
**December 1993**

| Health Region                | Educational Facility |                | Psychiatric Hospital | General Hospital | Physical Medicine/ | Mental Health | Government <sup>2</sup> | Private Practice | Consulting Firm | Other <sup>3</sup> | Unknown   | Total      |
|------------------------------|----------------------|----------------|----------------------|------------------|--------------------|---------------|-------------------------|------------------|-----------------|--------------------|-----------|------------|
|                              | Primary/Secondary    | Post-Secondary |                      |                  | Rehab. Facility    | Clinic        |                         |                  |                 |                    |           |            |
| 1 East Kootenay              | 1                    | 2              | 0                    | 0                | 0                  | 1             | 1                       | 2                | 0               | 1                  | 0         | 8          |
| 2 Central Kootenay           | 1                    | 0              | 0                    | 0                | 0                  | 4             | 1                       | 3                | 0               | 1                  | 1         | 11         |
| 4 North Okanagan             | 1                    | 0              | 0                    | 0                | 0                  | 1             | 0                       | 3                | 0               | 1                  | 1         | 7          |
| 5 South Okanagan             | 4                    | 4              | 0                    | 1                | 0                  | 3             | 0                       | 6                | 1               | 1                  | 0         | 20         |
| 6 South Central              | 3                    | 1              | 0                    | 0                | 0                  | 2             | 1                       | 1                | 0               | 1                  | 0         | 9          |
| 7 Upper Fraser Valley        | 1                    | 3              | 3                    | 0                | 0                  | 5             | 0                       | 5                | 1               | 4                  | 1         | 23         |
| 8 Central Fraser Valley      | 4                    | 1              | 0                    | 0                | 0                  | 6             | 1                       | 1                | 0               | 3                  | 0         | 16         |
| 9 Boundary                   | 8                    | 6              | 1                    | 0                | 0                  | 11            | 5                       | 9                | 1               | 5                  | 2         | 48         |
| 10 Simon Fraser              | 2                    | 6              | 11                   | 2                | 0                  | 3             | 1                       | 7                | 1               | 4                  | 1         | 38         |
| 11 Coast Garibaldi           | 1                    | 0              | 0                    | 0                | 0                  | 2             | 1                       | 2                | 0               | 0                  | 0         | 6          |
| 13 Central Vancouver Island  | 4                    | 5              | 0                    | 2                | 1                  | 4             | 0                       | 9                | 0               | 1                  | 0         | 26         |
| 14 Upper Island              | 1                    | 1              | 0                    | 0                | 0                  | 2             | 0                       | 4                | 0               | 1                  | 0         | 9          |
| 15 Cariboo                   | 1                    | 0              | 0                    | 0                | 0                  | 0             | 0                       | 0                | 0               | 1                  | 1         | 3          |
| 16 Skeena                    | 0                    | 1              | 0                    | 0                | 0                  | 3             | 0                       | 1                | 0               | 0                  | 1         | 6          |
| 17 Peace River               | 1                    | 0              | 0                    | 0                | 0                  | 0             | 0                       | 0                | 0               | 0                  | 0         | 1          |
| 18 Northern Interior         | 2                    | 2              | 0                    | 0                | 0                  | 1             | 0                       | 1                | 1               | 1                  | 0         | 8          |
| 20 Vancouver                 | 17                   | 43             | 1                    | 38               | 9                  | 8             | 6                       | 72               | 23              | 22                 | 9         | 248        |
| 30 Burnaby                   | 6                    | 20             | 2                    | 0                | 0                  | 6             | 6                       | 0                | 1               | 4                  | 1         | 46         |
| 40 North Shore               | 0                    | 6              | 0                    | 2                | 0                  | 6             | 4                       | 12               | 1               | 2                  | 0         | 33         |
| 50 Richmond                  | 5                    | 1              | 0                    | 1                | 7                  | 0             | 3                       | 3                | 0               | 3                  | 2         | 25         |
| 60 Capital Regional District | 10                   | 25             | 1                    | 4                | 4                  | 9             | 15                      | 36               | 4               | 14                 | 3         | 125        |
| <b>TOTAL</b>                 | <b>73</b>            | <b>127</b>     | <b>19</b>            | <b>50</b>        | <b>21</b>          | <b>77</b>     | <b>45</b>               | <b>177</b>       | <b>34</b>       | <b>70</b>          | <b>23</b> | <b>716</b> |

<sup>1</sup> Excludes 46 psychologists who are employed in other fields and 21 who are not employed.

<sup>2</sup> Includes 4 psychologists employed by the federal government, 32 by the provincial government and 9 by municipal governments.

<sup>3</sup> Includes 12 psychologists employed by mental retardation centres, 7 by addiction treatment centres, 18 by correction facilities, 9 by industrial/commercial firms, 12 by social agencies and 12 others.



**Table 5**  
**Psychologists Employed in Psychology<sup>1</sup> in British Columbia**  
**by Health Region by Main Psychological Activity**  
**December 1993**

| Health Region                | Direct<br>Service | Consulting | Admin-<br>istration | Teaching  | Research  | Unknown  | Total      |
|------------------------------|-------------------|------------|---------------------|-----------|-----------|----------|------------|
| 1 East Kootenay              | 5                 | 1          | 1                   | 1         | 0         | 0        | 8          |
| 2 Central Kootenay           | 9                 | 1          | 0                   | 1         | 0         | 0        | 11         |
| 4 North Okanagan             | 6                 | 1          | 0                   | 0         | 0         | 0        | 7          |
| 5 South Okanagan             | 12                | 4          | 1                   | 3         | 0         | 0        | 20         |
| 6 South Central              | 3                 | 5          | 0                   | 1         | 0         | 0        | 9          |
| 7 Upper Fraser Valley        | 17                | 3          | 0                   | 3         | 0         | 0        | 23         |
| 8 Central Fraser Valley      | 14                | 1          | 1                   | 0         | 0         | 0        | 16         |
| 9 Boundary                   | 39                | 2          | 5                   | 2         | 0         | 0        | 48         |
| 10 Simon Fraser              | 28                | 6          | 1                   | 2         | 1         | 0        | 38         |
| 11 Coast Garibaldi           | 4                 | 1          | 1                   | 0         | 0         | 0        | 6          |
| 13 Central Vancouver Island  | 17                | 3          | 3                   | 3         | 0         | 0        | 26         |
| 14 Upper Island              | 8                 | 1          | 0                   | 0         | 0         | 0        | 9          |
| 15 Cariboo                   | 3                 | 0          | 0                   | 0         | 0         | 0        | 3          |
| 16 Skeena                    | 5                 | 0          | 0                   | 1         | 0         | 0        | 6          |
| 17 Peace River               | 0                 | 0          | 1                   | 0         | 0         | 0        | 1          |
| 18 Northern Interior         | 4                 | 2          | 0                   | 1         | 0         | 1        | 8          |
| 20 Vancouver                 | 168               | 37         | 8                   | 23        | 10        | 2        | 248        |
| 30 Burnaby                   | 26                | 5          | 3                   | 7         | 4         | 1        | 46         |
| 40 North Shore               | 26                | 3          | 0                   | 4         | 0         | 0        | 33         |
| 50 Richmond                  | 15                | 6          | 2                   | 1         | 0         | 1        | 25         |
| 60 Capital Regional District | 86                | 11         | 9                   | 14        | 4         | 1        | 125        |
| <b>TOTAL</b>                 | <b>495</b>        | <b>93</b>  | <b>36</b>           | <b>67</b> | <b>19</b> | <b>6</b> | <b>716</b> |

<sup>1</sup> Excludes 46 psychologists who are employed in other fields and 21 who are not employed.

**Table 6**  
**Analysis of Change in the Number of Psychologists in British Columbia**  
**by Health Region**  
**December 1991 to December 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |           | Reactivation <sup>3</sup> | Attrition <sup>*</sup> | Net Intra-provincial Migration | December 1993 |
|------------------------------|----------------------------|---|--------------|---------------|-----------|---------------------------|------------------------|--------------------------------|---------------|
|                              |                            | B.C.  | Other Canada | Other Country | Subtotal  |                           |                        |                                |               |
| 1 East Kootenay              | 6                          | 0   | 1            | 0             | 1         | 1                         | 0                      | 0                              | 8             |
| 2 Central Kootenay           | 11                         | 0   | 0            | 0             | 0         | 0                         | 1                      | 1                              | 11            |
| 4 North Okanagan             | 7                          | 0   | 0            | 0             | 0         | 0                         | 1                      | 1                              | 7             |
| 5 South Okanagan             | 17                         | 0   | 0            | 0             | 0         | 0                         | 0                      | 3                              | 20            |
| 6 South Central              | 9                          | 0   | 0            | 0             | 0         | 0                         | 1                      | 1                              | 9             |
| 7 Upper Fraser Valley        | 24                         | 2   | 1            | 1             | 4         | 0                         | 5                      | 2                              | 25            |
| 8 Central Fraser Valley      | 18                         | 1   | 0            | 1             | 2         | 0                         | 0                      | 0                              | 20            |
| 9 Boundary                   | 48                         | 2   | 2            | 1             | 5         | 1                         | 0                      | 0                              | 54            |
| 10 Simon Fraser              | 38                         | 2   | 1            | 2             | 5         | 0                         | 1                      | -1                             | 41            |
| 11 Coast Garibaldi           | 7                          | 1   | 0            | 0             | 1         | 0                         | 1                      | 0                              | 7             |
| 13 Central Vancouver Island  | 24                         | 1   | 2            | 0             | 3         | 1                         | 2                      | 0                              | 26            |
| 14 Upper Island              | 11                         | 0   | 0            | 0             | 0         | 0                         | 0                      | 0                              | 11            |
| 15 Cariboo                   | 4                          | 0   | 0            | 0             | 0         | 0                         | 0                      | -1                             | 3             |
| 16 Skeena                    | 5                          | 0   | 1            | 0             | 1         | 0                         | 0                      | 0                              | 6             |
| 17 Peace River               | 3                          | 0   | 0            | 0             | 0         | 0                         | 1                      | 0                              | 2             |
| 18 Northern Interior         | 7                          | 0   | 2            | 0             | 2         | 0                         | 0                      | 0                              | 9             |
| 20 Vancouver                 | 264                        | 15  | 9            | 9             | 33        | 2                         | 14                     | -16                            | 269           |
| 30 Burnaby                   | 46                         | 3   | 2            | 1             | 6         | 0                         | 0                      | -1                             | 51            |
| 40 North Shore               | 36                         | 1   | 0            | 1             | 2         | 0                         | 4                      | 5                              | 39            |
| 50 Richmond                  | 23                         | 1   | 1            | 1             | 3         | 1                         | 0                      | 0                              | 27            |
| 60 Capital Regional District | 129                        | 1   | 5            | 2             | 8         | 2                         | 7                      | 6                              | 138           |
| <b>TOTAL</b>                 | <b>737</b>                 | <b>30</b>   | <b>27</b>    | <b>19</b>     | <b>76</b> | <b>8</b>                  | <b>38</b>              | <b>0</b>                       | <b>783</b>    |

<sup>1</sup> Psychologists who reported B.C. addresses and were registered in December 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 7 psychologists whose employment address was outside B.C.

<sup>3</sup> Psychologists who reported B.C. addresses and were registered in December 1993 but not in December 1991 and who registered for the first time before December 1991.

<sup>\*</sup> Psychologists who reported B.C. addresses and were registered in December 1991 but not in December 1993.

## SOCIAL WORKERS IN HEALTH CARE

**Definition:** A social worker

...provides services to enhance the social functioning of individuals, families, groups and communities by assessing social problems and facilitating their remediation and prevention. These services include:

- (a) direct counselling within established relationships with clients;
- (b) the development, promotion and delivery of human service programs, in collaboration or consultation with other professionals where required;
- (c) the development and promotion of social policies to improve social conditions and advance social equality; and
- (d) other activities consistent with the objectives outlined or implicit in the above.<sup>1</sup>

**Governing Statute:** Social Workers Act, Revised Statutes of British Columbia, 1979, Chapter 389; administered by the Ministry of Social Services.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. However, social workers in British Columbia may register with the Board of Registration for Social Workers, as indicated by the Social Workers Act. Registered members have exclusive use of the titles: *Registered Social Worker* or *RSW*.

**Date of Record:** October 1993.

**Source of Data:** Health Human Resources Unit (HHRU) survey.

### Preparation and Updating:

In 1993, a list of individuals employed in social work-related positions in health care settings was compiled from the data collected in the 1993 Survey of Social workers in British Columbia.<sup>2</sup> The HHRU has drawn a sub-population from those data which includes social workers, social program officers, counsellors, and therapists employed in the public service, hospitals, health facilities, agencies, private practice and other health care-related institutions in British Columbia. The overall survey response rate for this sub-population was approximately 63 percent.

The tables include only those individuals employed in social work-related positions in British Columbia who returned completed questionnaires and who were included in the final sample because their reported work setting or job description could be defined as *social work in a health care setting*. The definition of social worker in a health care setting included social workers in positions in the public service, hospitals, treatment centres, other agencies, and private practice whose work was deemed to have an impact on the health care system in British Columbia. Comparison with 1991 figures is of

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<sup>1</sup> Adapted from information provided by the Board of Registration for Social Workers of the Province of British Columbia.

<sup>2</sup> See *Social Work Personnel in British Columbia: Defining the population and describing deployment patterns in 1993*; Health Human Resources Unit Report 94:1, The University of British Columbia, Vancouver, January 1994.

limited value and has not been presented. The data in the tables are presented based on employment address when it is available. Employment address was available for 84% of social worker survey respondents. Home address is used for the remainder.

### **Definition of Terms:**

#### **1. Social Workers in Health Care**

Table 1 shows number and number per 10,000 population of social workers who were survey respondents and employed in health care in British Columbia at the date of record.

#### **2. Age and Sex**

Age and sex information for survey respondents is reported in Table 2. Age information in the table is grouped according to standard age categories developed and used by Statistics Canada.

#### **3. Employment Status**

Employment status, as reported by survey respondents is shown in Table 3. The categories used in the table include:

- (a) Full-Time;
- (b) Part-Time;
- (c) Full-Time/Part-Time - Not Specified;
- (d) On Leave.

#### **4. Employing Institution**

Type of employing institution, as reported by survey respondents, is shown in Table 4. The categories used on the table are:

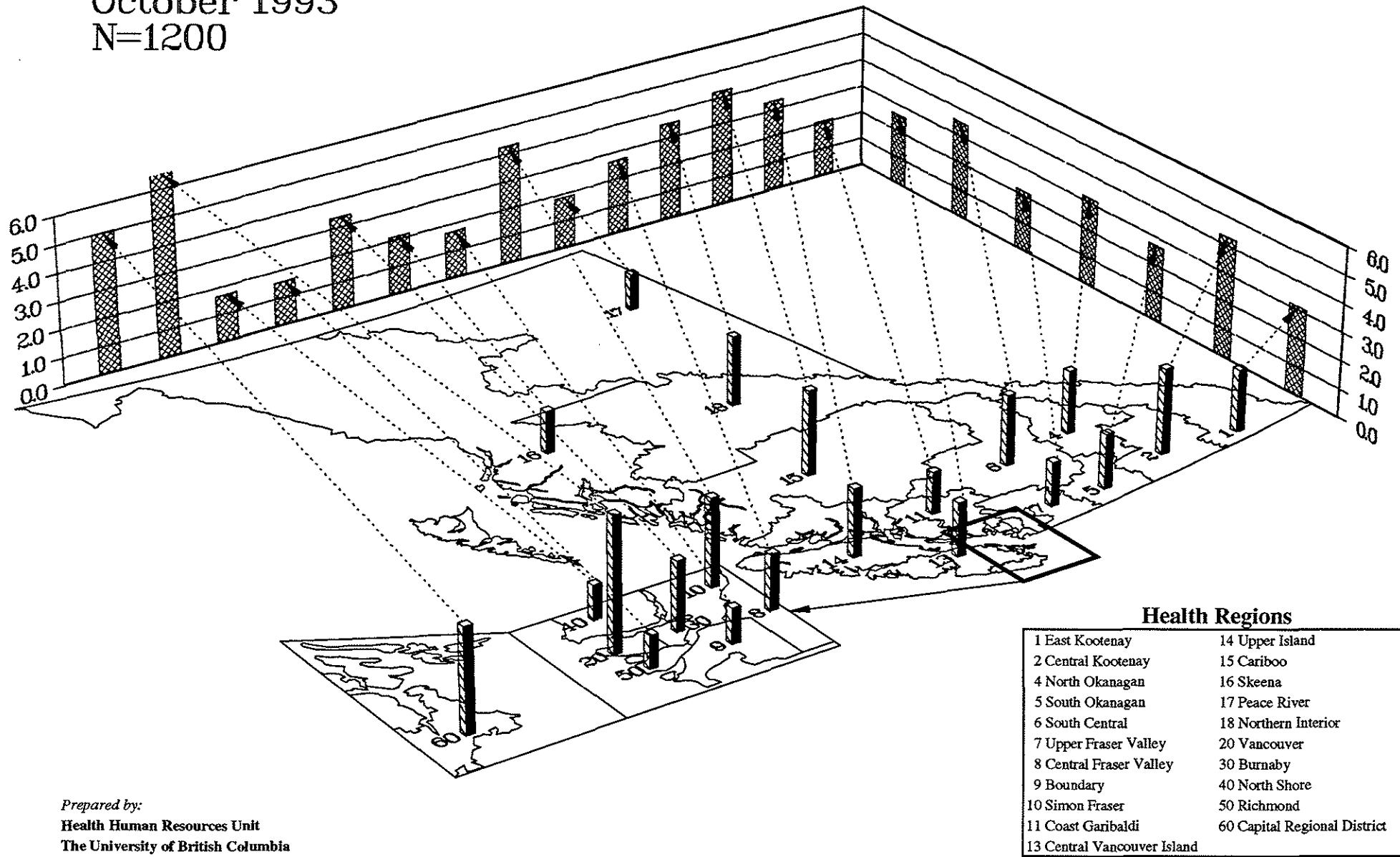
- (a) Acute Care/General Hospital;
- (b) Developmentally/Mentally Handicapped;
- (c) Rehabilitation/Vocational;
- (d) Continuing/Long Term Care;
- (e) Mental Health;
- (f) Public/Community Health;
- (g) Alcohol and Drug;
- (h) Developmentally/Mentally Handicapped/Mental Health;
- (i) Rehabilitation/Mental Health;
- (j) Acute Care/Mental Health;
- (k) Alcohol and Drug/Mental Health;
- (l) Acute Care/Long Term Care;
- (m) Other.

## 5. Job Title

Job title, as reported by survey respondents, is shown in Table 5. The categories used in the table are:

- (a) Manager;
- (b) Social Worker;
- (c) Counsellor;
- (d) Social Program Officer;
- (e) Case Manager;
- (f) Community Developer;
- (g) Instructor;
- (h) Other.

# Social Workers in Health Care (Survey Respondents) per 10,000 Population by Health Region October 1993 N=1200



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1**  
**Social Workers in Health Care (Survey Respondents)<sup>1</sup>**  
**in British Columbia by Health Region**  
**October 1993**

| Health Region                | Number       | Number per<br>10,000 Population |
|------------------------------|--------------|---------------------------------|
| 1 East Kootenay              | 22           | 3.12                            |
| 2 Central Kootenay           | 32           | 4.29                            |
| 4 North Okanagan             | 33           | 3.16                            |
| 5 South Okanagan             | 54           | 2.71                            |
| 6 South Central              | 40           | 3.51                            |
| 7 Upper Fraser Valley        | 37           | 2.17                            |
| 8 Central Fraser Valley      | 51           | 2.69                            |
| 9 Boundary                   | 65           | 1.72                            |
| 10 Simon Fraser              | 85           | 4.29                            |
| 11 Coast Garibaldi           | 13           | 2.06                            |
| 13 Central Vancouver Island  | 54           | 2.61                            |
| 14 Upper Island              | 34           | 3.33                            |
| 15 Cariboo                   | 28           | 4.25                            |
| 16 Skeena                    | 18           | 2.13                            |
| 17 Peace River               | 11           | 1.87                            |
| 18 Northern Interior         | 41           | 3.54                            |
| 20 Vancouver                 | 321          | 6.52                            |
| 30 Burnaby                   | 56           | 3.38                            |
| 40 North Shore               | 28           | 1.70                            |
| 50 Richmond                  | 21           | 1.59                            |
| 60 Capital Regional District | 156          | 5.01                            |
| <b>TOTAL</b>                 | <b>1,200</b> | <b>3.47</b>                     |

<sup>1</sup> Data for this table are derived from the 1993 Survey of Social Workers in British Columbia.

**Table 2**  
**Social Workers in Health Care (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Age and Sex**  
**October 1993**

| Health Region                | < 25     |           | 25-34     |            | 35-44      |            | 45-54      |            | 55-64     |           | 65 +     |          | Subtotal   |            | Unknown   | Total        |
|------------------------------|----------|-----------|-----------|------------|------------|------------|------------|------------|-----------|-----------|----------|----------|------------|------------|-----------|--------------|
|                              | M        | F         | M         | F          | M          | F          | M          | F          | M         | F         | M        | F        | M          | F          |           |              |
| 1 East Kootenay              | 0        | 0         | 0         | 2          | 1          | 3          | 7          | 7          | 1         | 0         | 0        | 0        | 9          | 12         | 1         | 22           |
| 2 Central Kootenay           | 0        | 0         | 0         | 1          | 0          | 11         | 6          | 9          | 1         | 2         | 0        | 0        | 7          | 23         | 2         | 32           |
| 4 North Okanagan             | 0        | 0         | 0         | 2          | 5          | 7          | 10         | 6          | 1         | 0         | 0        | 0        | 16         | 15         | 2         | 33           |
| 5 South Okanagan             | 0        | 0         | 4         | 4          | 5          | 12         | 11         | 12         | 2         | 2         | 0        | 0        | 22         | 30         | 2         | 54           |
| 6 South Central              | 0        | 2         | 2         | 5          | 3          | 18         | 4          | 4          | 1         | 0         | 0        | 1        | 10         | 30         | 0         | 40           |
| 7 Upper Fraser Valley        | 0        | 0         | 3         | 3          | 7          | 8          | 3          | 9          | 1         | 2         | 0        | 1        | 14         | 23         | 0         | 37           |
| 8 Central Fraser Valley      | 0        | 1         | 1         | 8          | 8          | 15         | 6          | 7          | 2         | 0         | 0        | 0        | 17         | 31         | 3         | 51           |
| 9 Boundary                   | 1        | 1         | 5         | 12         | 5          | 16         | 7          | 12         | 2         | 3         | 0        | 0        | 20         | 44         | 1         | 65           |
| 10 Simon Fraser              | 0        | 2         | 3         | 11         | 7          | 22         | 11         | 21         | 1         | 3         | 0        | 0        | 22         | 59         | 4         | 85           |
| 11 Coast Garibaldi           | 1        | 0         | 1         | 1          | 2          | 4          | 2          | 1          | 0         | 1         | 0        | 0        | 6          | 7          | 0         | 13           |
| 13 Central Vancouver Island  | 1        | 0         | 2         | 7          | 8          | 11         | 9          | 10         | 2         | 2         | 0        | 0        | 22         | 30         | 2         | 54           |
| 14 Upper Island              | 0        | 2         | 1         | 1          | 4          | 13         | 4          | 6          | 1         | 1         | 0        | 0        | 10         | 23         | 1         | 34           |
| 15 Cariboo                   | 0        | 0         | 1         | 7          | 3          | 7          | 1          | 7          | 0         | 0         | 0        | 0        | 5          | 21         | 2         | 28           |
| 16 Skeena                    | 0        | 0         | 1         | 3          | 3          | 7          | 1          | 2          | 0         | 1         | 0        | 0        | 5          | 13         | 0         | 18           |
| 17 Peace River               | 0        | 0         | 1         | 4          | 3          | 3          | 0          | 0          | 0         | 0         | 0        | 0        | 4          | 7          | 0         | 11           |
| 18 Northern Interior         | 0        | 1         | 0         | 8          | 8          | 12         | 3          | 7          | 0         | 0         | 0        | 0        | 11         | 28         | 2         | 41           |
| 20 Vancouver                 | 0        | 0         | 13        | 49         | 32         | 80         | 31         | 75         | 7         | 19        | 1        | 1        | 84         | 224        | 13        | 321          |
| 30 Burnaby                   | 0        | 0         | 3         | 12         | 5          | 12         | 7          | 10         | 0         | 3         | 0        | 1        | 15         | 38         | 3         | 56           |
| 40 North Shore               | 0        | 0         | 0         | 6          | 2          | 5          | 4          | 9          | 1         | 1         | 0        | 0        | 7          | 21         | 0         | 28           |
| 50 Richmond                  | 0        | 0         | 3         | 0          | 3          | 8          | 0          | 5          | 1         | 0         | 0        | 1        | 7          | 14         | 0         | 21           |
| 60 Capital Regional District | 0        | 2         | 2         | 14         | 11         | 56         | 13         | 39         | 3         | 12        | 0        | 0        | 29         | 123        | 4         | 156          |
| <b>TOTAL</b>                 | <b>3</b> | <b>11</b> | <b>46</b> | <b>160</b> | <b>125</b> | <b>330</b> | <b>140</b> | <b>258</b> | <b>27</b> | <b>52</b> | <b>1</b> | <b>5</b> | <b>342</b> | <b>816</b> | <b>42</b> | <b>1,200</b> |

<sup>1</sup> Data for this table are derived from the 1993 Survey of Social Workers in British Columbia.



**Table 3**  
**Social Workers in Health Care (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Status**  
**October 1993**

| Health Region                | Full-Time  | Part-Time  | Full-Time/<br>Part-Time | On Leave  | Total        |
|------------------------------|------------|------------|-------------------------|-----------|--------------|
|                              |            |            | Not Specified           |           |              |
| 1 East Kootenay              | 21         | 1          | 0                       | 0         | 22           |
| 2 Central Kootenay           | 24         | 7          | 1                       | 0         | 32           |
| 4 North Okanagan             | 24         | 7          | 2                       | 0         | 33           |
| 5 South Okanagan             | 47         | 6          | 0                       | 1         | 54           |
| 6 South Central              | 32         | 7          | 1                       | 0         | 40           |
| 7 Upper Fraser Valley        | 30         | 6          | 1                       | 0         | 37           |
| 8 Central Fraser Valley      | 38         | 13         | 0                       | 0         | 51           |
| 9 Boundary                   | 54         | 10         | 0                       | 1         | 65           |
| 10 Simon Fraser              | 65         | 16         | 4                       | 0         | 85           |
| 11 Coast Garibaldi           | 9          | 4          | 0                       | 0         | 13           |
| 13 Central Vancouver Island  | 45         | 4          | 2                       | 3         | 54           |
| 14 Upper Island              | 28         | 4          | 2                       | 0         | 34           |
| 15 Cariboo                   | 22         | 6          | 0                       | 0         | 28           |
| 16 Skeena                    | 15         | 2          | 1                       | 0         | 18           |
| 17 Peace River               | 11         | 0          | 0                       | 0         | 11           |
| 18 Northern Interior         | 35         | 6          | 0                       | 0         | 41           |
| 20 Vancouver                 | 234        | 60         | 20                      | 7         | 321          |
| 30 Burnaby                   | 47         | 7          | 1                       | 1         | 56           |
| 40 North Shore               | 19         | 8          | 1                       | 0         | 28           |
| 50 Richmond                  | 11         | 8          | 1                       | 1         | 21           |
| 60 Capital Regional District | 102        | 42         | 8                       | 4         | 156          |
| <b>TOTAL</b>                 | <b>913</b> | <b>224</b> | <b>45</b>               | <b>18</b> | <b>1,200</b> |

<sup>1</sup> Data for this table are derived from the 1993 Survey of Social Workers in British Columbia.

**Table 4**  
**Social Workers in Health Care (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Type of Employing Institution**  
**October 1993**

| Health Region                | Acute Care/<br>General<br>Hospital | Develop-<br>mentally/<br>Mentally<br>Handicapped | Rehabilitation/<br>Vocational | Continuing/<br>Long<br>Term Care | Mental<br>Health | Public/<br>Community<br>Health | Alcohol &<br>Drug |
|------------------------------|------------------------------------|--|-------------------------------|----------------------------------|------------------|--------------------------------|-------------------|
| 1 East Kootenay              | 2                                  | 5  | 0                             | 0                                | 7                | 0                              | 6                 |
| 2 Central Kootenay           | 5                                  | 4  | 0                             | 2                                | 9                | 2                              | 8                 |
| 4 North Okanagan             | 6                                  | 11   | 1                             | 0                                | 7                | 0                              | 5                 |
| 5 South Okanagan             | 11                                 | 13   | 2                             | 5                                | 11               | 2                              | 8                 |
| 6 South Central              | 2                                  | 8  | 2                             | 2                                | 6                | 1                              | 11                |
| 7 Upper Fraser Valley        | 9                                  | 10   | 0                             | 3                                | 9                | 2                              | 4                 |
| 8 Central Fraser Valley      | 10                                 | 14   | 0                             | 1                                | 10               | 1                              | 12                |
| 9 Boundary                   | 9                                  | 12   | 7                             | 3                                | 20               | 0                              | 10                |
| 10 Simon Fraser              | 17                                 | 23   | 1                             | 3                                | 27               | 0                              | 9                 |
| 11 Coast Garibaldi           | 0                                  | 4  | 0                             | 0                                | 6                | 2                              | 1                 |
| 13 Central Vancouver Island  | 8                                  | 12   | 1                             | 3                                | 8                | 1                              | 19                |
| 14 Upper Island              | 0                                  | 12   | 0                             | 2                                | 7                | 0                              | 8                 |
| 15 Cariboo                   | 3                                  | 5  | 0                             | 0                                | 4                | 1                              | 11                |
| 16 Skeena                    | 2                                  | 5  | 0                             | 0                                | 2                | 0                              | 5                 |
| 17 Peace River               | 0                                  | 3  | 2                             | 0                                | 1                | 0                              | 3                 |
| 18 Northern Interior         | 4                                  | 12   | 0                             | 1                                | 6                | 0                              | 14                |
| 20 Vancouver                 | 81                                 | 34   | 37                            | 33                               | 63               | 5                              | 40                |
| 30 Burnaby                   | 9                                  | 18   | 3                             | 10                               | 8                | 2                              | 6                 |
| 40 North Shore               | 14                                 | 4  | 1                             | 0                                | 4                | 1                              | 3                 |
| 50 Richmond                  | 7                                  | 2  | 3                             | 5                                | 1                | 0                              | 2                 |
| 60 Capital Regional District | 23                                 | 37   | 9                             | 30                               | 24               | 4                              | 20                |
| <b>TOTAL</b>                 | <b>222</b>                         | <b>248</b>                                       | <b>69</b>                     | <b>103</b>                       | <b>240</b>       | <b>24</b>                      | <b>205</b>        |

*... continued*

<sup>1</sup> Data for this table are derived from the 1993 Survey of Social Workers in British Columbia.

**Table 4 (continued)**  
**Social Workers in Health Care (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Type of Employing Institution**  
**October 1993**

| Health Region                | Develop-<br>mentally/<br>Mentally<br>Handicapped/<br>Mental Health | Rehabilitation/<br>Mental<br>Health | Acute<br>Care/<br>Mental<br>Health | Alcohol &<br>Drug/<br>Mental<br>Health | Acute Care/<br>Long<br>Term Care | Other    | Total        |
|------------------------------|--|-------------------------------------|------------------------------------|--|----------------------------------|----------|--------------|
| 1 East Kootenay              | 1  | 1                                   | 0                                  | 0                                      | 0                                | 0        | 22           |
| 2 Central Kootenay           | 0  | 0                                   | 0                                  | 1                                      | 1                                | 0        | 32           |
| 4 North Okanagan             | 1  | 0                                   | 0                                  | 0                                      | 2                                | 0        | 33           |
| 5 South Okanagan             | 0  | 0                                   | 1                                  | 1                                      | 0                                | 0        | 54           |
| 6 South Central              | 1  | 0                                   | 1                                  | 6                                      | 0                                | 0        | 40           |
| 7 Upper Fraser Valley        | 0  | 0                                   | 0                                  | 0                                      | 0                                | 0        | 37           |
| 8 Central Fraser Valley      | 0  | 1                                   | 0                                  | 1                                      | 1                                | 0        | 51           |
| 9 Boundary                   | 2  | 0                                   | 1                                  | 1                                      | 0                                | 0        | 65           |
| 10 Simon Fraser              | 0  | 0                                   | 1                                  | 3                                      | 1                                | 0        | 85           |
| 11 Coast Garibaldi           | 0  | 0                                   | 0                                  | 0                                      | 0                                | 0        | 13           |
| 13 Central Vancouver Island  | 1  | 0                                   | 0                                  | 0                                      | 1                                | 0        | 54           |
| 14 Upper Island              | 1  | 0                                   | 3                                  | 0                                      | 1                                | 0        | 34           |
| 15 Cariboo                   | 0  | 0                                   | 0                                  | 2                                      | 0                                | 2        | 28           |
| 16 Skeena                    | 0  | 0                                   | 1                                  | 2                                      | 1                                | 0        | 18           |
| 17 Peace River               | 0  | 0                                   | 0                                  | 2                                      | 0                                | 0        | 11           |
| 18 Northern Interior         | 1  | 0                                   | 0                                  | 3                                      | 0                                | 0        | 41           |
| 20 Vancouver                 | 1  | 4                                   | 10                                 | 5                                      | 7                                | 1        | 321          |
| 30 Burnaby                   | 0  | 0                                   | 0                                  | 0                                      | 0                                | 0        | 56           |
| 40 North Shore               | 0  | 0                                   | 1                                  | 0                                      | 0                                | 0        | 28           |
| 50 Richmond                  | 0  | 0                                   | 0                                  | 0                                      | 1                                | 0        | 21           |
| 60 Capital Regional District | 3  | 0                                   | 1                                  | 3                                      | 2                                | 0        | 156          |
| <b>TOTAL</b>                 | <b>12</b>  | <b>6</b>                            | <b>20</b>                          | <b>30</b>                              | <b>18</b>                        | <b>3</b> | <b>1,200</b> |

<sup>1</sup> Data for this table are derived from the 1993 Survey of Social Workers in British Columbia.

**Table 5**  
**Social Workers in Health Care (Survey Respondents)<sup>1</sup> in British Columbia**  
**by Health Region by Job Title**  
**October 1993**

| Health Region                | Manager    | Social Worker | Counsellor | Social<br>Program<br>Officer | Case<br>Manager | Community<br>Developer | Instructor | Other     | Unknown   | Total        |
|------------------------------|------------|---------------|------------|------------------------------|-----------------|------------------------|------------|-----------|-----------|--------------|
| 1 East Kootenay              | 4          | 5             | 5          | 5                            | 1               | 0                      | 0          | 1         | 1         | 22           |
| 2 Central Kootenay           | 9          | 7             | 7          | 5                            | 3               | 0                      | 0          | 1         | 0         | 32           |
| 4 North Okanagan             | 12         | 7             | 2          | 8                            | 2               | 0                      | 0          | 1         | 1         | 33           |
| 5 South Okanagan             | 15         | 15            | 9          | 9                            | 3               | 0                      | 0          | 0         | 3         | 54           |
| 6 South Central              | 14         | 10            | 5          | 6                            | 3               | 0                      | 1          | 1         | 0         | 40           |
| 7 Upper Fraser Valley        | 13         | 12            | 2          | 5                            | 5               | 0                      | 0          | 0         | 0         | 37           |
| 8 Central Fraser Valley      | 18         | 14            | 3          | 7                            | 3               | 0                      | 0          | 6         | 0         | 51           |
| 9 Boundary                   | 13         | 14            | 11         | 12                           | 10              | 0                      | 3          | 2         | 0         | 65           |
| 10 Simon Fraser              | 21         | 39            | 6          | 16                           | 3               | 0                      | 0          | 0         | 0         | 85           |
| 11 Coast Garibaldi           | 5          | 4             | 0          | 0                            | 1               | 2                      | 0          | 1         | 0         | 13           |
| 13 Central Vancouver Island  | 17         | 10            | 4          | 16                           | 3               | 1                      | 1          | 1         | 1         | 54           |
| 14 Upper Island              | 6          | 6             | 3          | 11                           | 0               | 4                      | 0          | 3         | 1         | 34           |
| 15 Cariboo                   | 7          | 6             | 8          | 1                            | 3               | 1                      | 0          | 1         | 1         | 28           |
| 16 Skeena                    | 8          | 3             | 4          | 1                            | 2               | 0                      | 0          | 0         | 0         | 18           |
| 17 Peace River               | 5          | 1             | 2          | 1                            | 1               | 0                      | 0          | 1         | 0         | 11           |
| 18 Northern Interior         | 15         | 11            | 10         | 3                            | 1               | 0                      | 0          | 0         | 1         | 41           |
| 20 Vancouver                 | 81         | 120           | 39         | 26                           | 48              | 3                      | 1          | 1         | 2         | 321          |
| 30 Burnaby                   | 23         | 18            | 5          | 7                            | 1               | 0                      | 0          | 1         | 1         | 56           |
| 40 North Shore               | 4          | 16            | 3          | 2                            | 2               | 0                      | 0          | 0         | 1         | 28           |
| 50 Richmond                  | 3          | 10            | 4          | 1                            | 3               | 0                      | 0          | 0         | 0         | 21           |
| 60 Capital Regional District | 48         | 60            | 22         | 14                           | 6               | 0                      | 0          | 5         | 1         | 156          |
| <b>TOTAL</b>                 | <b>341</b> | <b>388</b>    | <b>154</b> | <b>156</b>                   | <b>104</b>      | <b>11</b>              | <b>6</b>   | <b>26</b> | <b>14</b> | <b>1,200</b> |

<sup>1</sup> Data for this table are derived from the 1993 Survey of Social Workers in British Columbia.

## **IX. REHABILITATION SERVICES**

## AUDIOLOGISTS AND SPEECH/LANGUAGE PATHOLOGISTS

**Definition:** (I) An audiologist

...diagnoses, evaluates, and treats hearing disorders.

Audiologists perform some or all of the following duties:

- (a) administer audiometric tests to diagnose and evaluate the degree and type of hearing impairment;
- (b) plan and implement rehabilitation programs for patients, including selection and fitting of hearing aids, speech (lip) reading, and counselling;
- (c) consult with physicians, nurses, psychologists, and other health care personnel to help plan treatment programs;
- (d) conduct research related to hearing;
- (e) instruct audiology students and other health care personnel in audiology.

(II) A speech/language pathologist

...diagnoses, evaluates and treats speech, language, and voice disorders.

Speech/language pathologists perform some or all of the following duties:

- (a) administer tests and observe patients to diagnose and evaluate speech, language, and voice disorders;
- (b) plan and implement remedial programs to correct speech, language, and voice disorders;
- (c) consult with physicians, nurses, psychologists, and other health care personnel to help plan treatment programs;
- (d) conduct research on speech and other communication disorders and on the development and design of diagnostic procedures and devices.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the British Columbia Association of Speech/Language Pathologists and Audiologists is voluntary. However, registered members have exclusive use of the titles: *Registered Speech/Language Pathologist, Registered Speech/Language Therapist, Speech Therapist, Voice Therapist, Communication Disorder Specialist, Audiologist*.

**Date of Record:** December 1991 and October 1993.

**Source of Data:** British Columbia Association of Speech/Language Pathologists and Audiologists (BCASLPA).

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3141, Ottawa: Employment and Immigration Canada.

### **Preparation and Updating:**

The tables, derived solely from the membership list supplied by the BCASLPA, include *Full* and *Life* Members with a British Columbia address at the date of record. The data in the table are presented based on employment address where employment address is available. In 1993, 81% of full and life members of the BCASLPA provided an employment address. The corresponding figure for 1991 is 82%. Home address is used for the remainder.

### **Definition of Terms:**

*Full* members are audiologists and speech/language pathologists in good standing whose number of credit hours in designated areas of study correspond to the criteria specified by the BCASLPA bylaws and who may or may not be employed in the field.

*Life* members are full members who have been recognised for long-term employment in audiology and/or speech/language pathology and who may or may not be employed in the field. They must be sixty years of age or older and have held full membership with the BCASLPA for ten years or more.<sup>2</sup>

#### **1. Audiologists and Speech/Language Pathologists**

Table 1 shows number, number per 10,000 population, and average annual rates of change in number of audiologists and speech/language pathologists from 1991 to 1993.

#### **2. Area of Training**

Table 2 separates BCASLPA members by area of training in either audiology or speech/language pathology as reported by the BCASLPA. There are two members who have completed training in both audiology and speech/language pathology.

#### **3. Employment Setting**

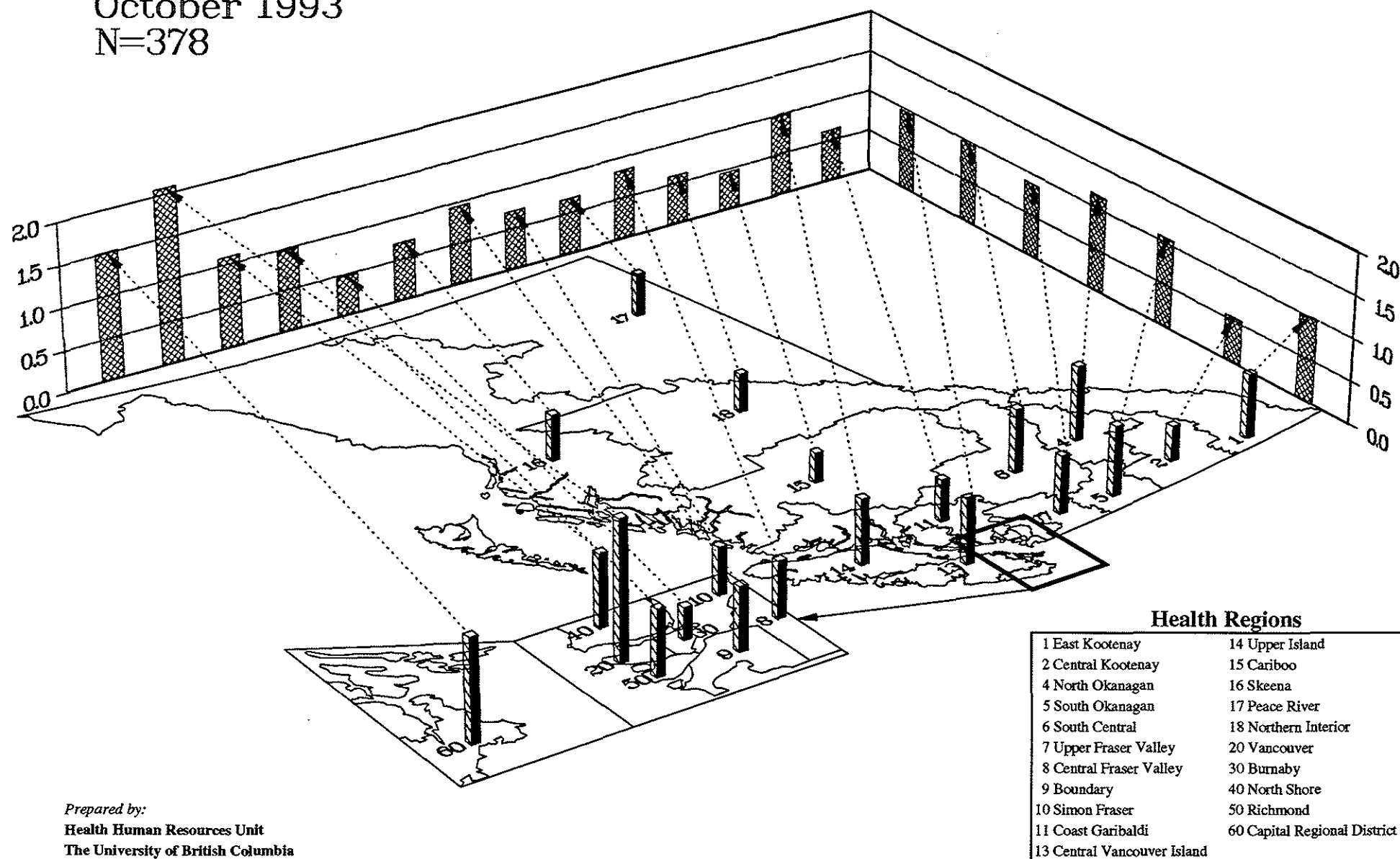
Table 3 displays employment setting as reported on the registration renewal form. The following categories are used:

- (a) School Districts;
- (b) Health Institutions (including Hospitals, Rehabilitation Centres and Health Clinics);
- (c) Private Practice;
- (d) Other.

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<sup>2</sup>Adapted from information provided by the British Columbia Association of Speech/Language Pathologists and Audiologists.

# Audiologists and Speech Language Pathologists (BCASLPA Members) per 10,000 Population by Health Region October 1993 N=378



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Audiologists & Speech/Language Pathologists (BCASLPA Members)<sup>1</sup> in British Columbia**  
**by Health Region**  
**December 1991 and October 1993**

| Health Region                | Number     |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change |                    |
|------------------------------|------------|------------|---------------------------------|-------------|----------------------------------|--------------------|
|                              | 1991       | 1993       | 1991                            | 1993        | Number <sup>2</sup>              | Ratio <sup>3</sup> |
| 1 East Kootenay              | 7          | 7          | 1.01                            | 0.99        | *                                | *                  |
| 2 Central Kootenay           | 3          | 4          | 0.42                            | 0.54        | *                                | *                  |
| 4 North Okanagan             | 12         | 12         | 1.24                            | 1.15        | 0.00                             | -4.19              |
| 5 South Okanagan             | 17         | 21         | 0.95                            | 1.06        | 12.22                            | 5.76               |
| 6 South Central              | 9          | 11         | 0.83                            | 0.97        | *                                | *                  |
| 7 Upper Fraser Valley        | 14         | 15         | 0.90                            | 0.88        | 3.83                             | -1.03              |
| 8 Central Fraser Valley      | 19         | 16         | 1.08                            | 0.84        | -8.95                            | -12.56             |
| 9 Boundary                   | 36         | 36         | 1.02                            | 0.95        | 0.00                             | -3.79              |
| 10 Simon Fraser              | 20         | 14         | 1.09                            | 0.71        | -17.68                           | -21.05             |
| 11 Coast Garibaldi           | 2          | 4          | 0.34                            | 0.63        | *                                | *                  |
| 13 Central Vancouver Island  | 22         | 20         | 1.13                            | 0.97        | -5.07                            | -8.34              |
| 14 Upper Island              | 7          | 10         | 0.72                            | 0.98        | *                                | *                  |
| 15 Cariboo                   | 2          | 3          | 0.31                            | 0.46        | *                                | *                  |
| 16 Skeena                    | 10         | 6          | 1.20                            | 0.71        | -24.32                           | -25.09             |
| 17 Peace River               | 5          | 4          | 0.85                            | 0.68        | *                                | *                  |
| 18 Northern Interior         | 8          | 7          | 0.70                            | 0.60        | *                                | *                  |
| 20 Vancouver                 | 88         | 102        | 1.84                            | 2.07        | 8.39                             | 6.63               |
| 30 Burnaby                   | 5          | 8          | 0.31                            | 0.48        | *                                | *                  |
| 40 North Shore               | 22         | 18         | 1.39                            | 1.09        | -10.37                           | -12.25             |
| 50 Richmond                  | 18         | 13         | 1.42                            | 0.98        | -16.26                           | -18.26             |
| 60 Capital Regional District | 46         | 47         | 1.53                            | 1.51        | 1.18                             | -0.93              |
| <b>TOTAL</b>                 | <b>372</b> | <b>378</b> | <b>1.13</b>                     | <b>1.09</b> | <b>0.88</b>                      | <b>-1.98</b>       |

<sup>1</sup> Membership in the B.C. Association of Speech/Language Pathologists and Audiologists (BCASLPA) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Audiologists & Speech/Language Pathologists (BCASLPA Members)<sup>1</sup> in British Columbia**  
**by Health Region by Area of Training**  
**October 1993**

| Health Region                | Audiology | Speech/Language<br>Pathology <sup>2</sup> | Total      |
|------------------------------|-----------|---|------------|
| 1 East Kootenay              | 1         | 6   | 7          |
| 2 Central Kootenay           | 0         | 4   | 4          |
| 4 North Okanagan             | 1         | 11  | 12         |
| 5 South Okanagan             | 3         | 18  | 21         |
| 6 South Central              | 1         | 10  | 11         |
| 7 Upper Fraser Valley        | 3         | 12  | 15         |
| 8 Central Fraser Valley      | 1         | 15  | 16         |
| 9 Boundary                   | 2         | 34  | 36         |
| 10 Simon Fraser              | 1         | 13  | 14         |
| 11 Coast Garibaldi           | 0         | 4   | 4          |
| 13 Central Vancouver Island  | 1         | 19  | 20         |
| 14 Upper Island              | 1         | 9   | 10         |
| 15 Cariboo                   | 0         | 3   | 3          |
| 16 Skeena                    | 0         | 6   | 6          |
| 17 Peace River               | 0         | 4   | 4          |
| 18 Northern Interior         | 0         | 7   | 7          |
| 20 Vancouver                 | 19        | 83  | 102        |
| 30 Burnaby                   | 1         | 7   | 8          |
| 40 North Shore               | 1         | 17  | 18         |
| 50 Richmond                  | 3         | 10  | 13         |
| 60 Capital Regional District | 4         | 43  | 47         |
| <b>TOTAL</b>                 | <b>43</b> | <b>335</b>                                | <b>378</b> |

<sup>1</sup> Membership in the B.C. Association of Speech/Language Pathologists and Audiologists (BCASLPA) is voluntary.

<sup>2</sup> Includes 2 members who have completed training in both audiology and speech/language pathology.

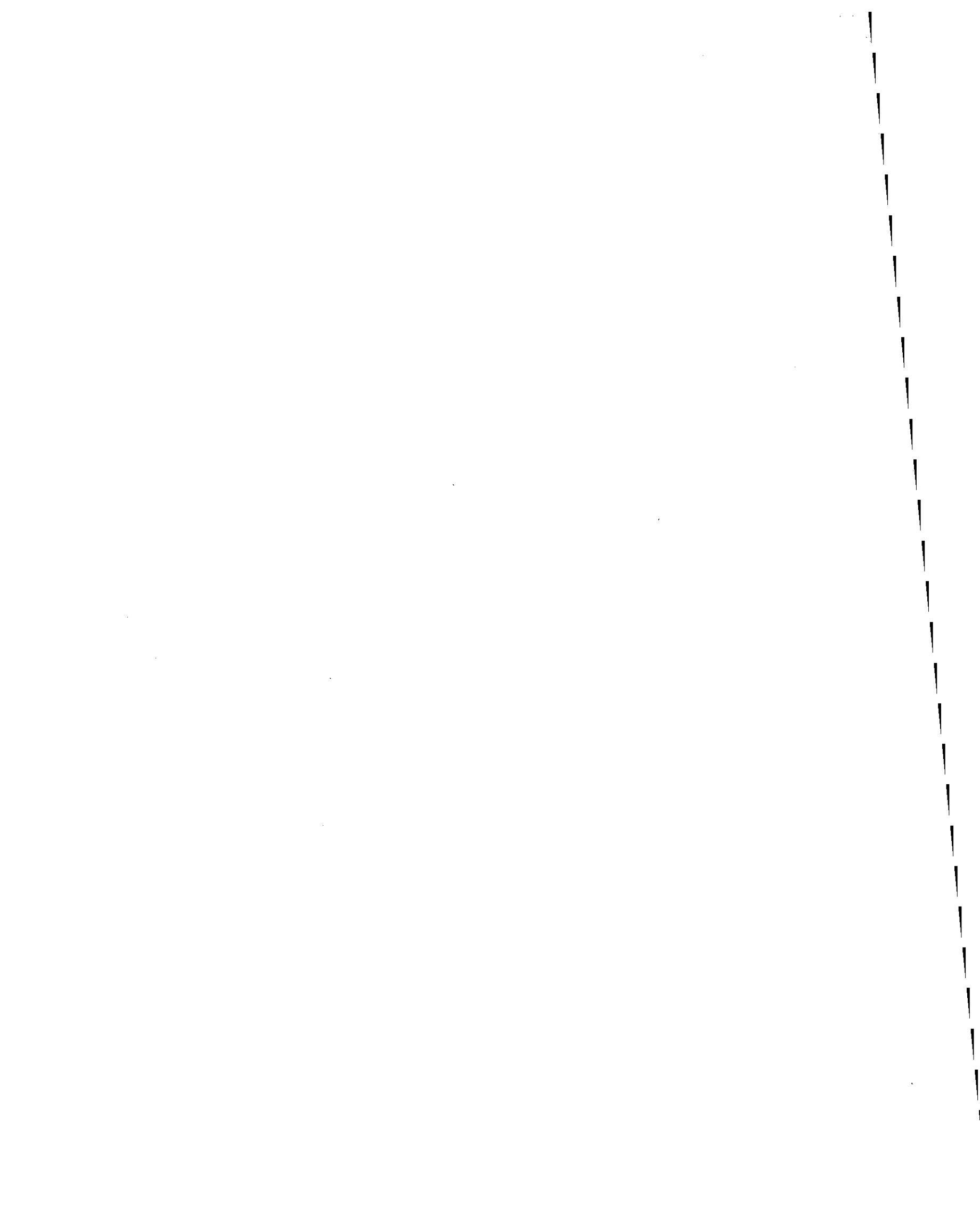
**Table 3**  
**Audiologists & Speech/Language Pathologists (BCASLPA Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Setting**  
**October 1993**

| Health Region                | School Districts | Health Institutions <sup>2</sup> | Private Practice | Other <sup>3</sup> | Unknown   | Total      |
|------------------------------|------------------|----------------------------------|------------------|--------------------|-----------|------------|
| 1 East Kootenay              | 5                | 1                                | 1                | 0                  | 0         | 7          |
| 2 Central Kootenay           | 1                | 2                                | 0                | 0                  | 1         | 4          |
| 4 North Okanagan             | 7                | 0                                | 4                | 1                  | 0         | 12         |
| 5 South Okanagan             | 9                | 7                                | 4                | 0                  | 1         | 21         |
| 6 South Central              | 7                | 2                                | 1                | 0                  | 1         | 11         |
| 7 Upper Fraser Valley        | 6                | 2                                | 3                | 3                  | 1         | 15         |
| 8 Central Fraser Valley      | 7                | 2                                | 4                | 3                  | 0         | 16         |
| 9 Boundary                   | 12               | 9                                | 6                | 8                  | 1         | 36         |
| 10 Simon Fraser              | 8                | 1                                | 1                | 3                  | 1         | 14         |
| 11 Coast Garibaldi           | 3                | 1                                | 0                | 0                  | 0         | 4          |
| 13 Central Vancouver Island  | 13               | 4                                | 1                | 2                  | 0         | 20         |
| 14 Upper Island              | 5                | 2                                | 1                | 0                  | 2         | 10         |
| 15 Cariboo                   | 1                | 0                                | 0                | 1                  | 1         | 3          |
| 16 Skeena                    | 2                | 4                                | 0                | 0                  | 0         | 6          |
| 17 Peace River               | 1                | 2                                | 0                | 1                  | 0         | 4          |
| 18 Northern Interior         | 4                | 2                                | 0                | 0                  | 1         | 7          |
| 20 Vancouver                 | 15               | 38                               | 16               | 21                 | 12        | 102        |
| 30 Burnaby                   | 3                | 4                                | 0                | 0                  | 1         | 8          |
| 40 North Shore               | 6                | 4                                | 4                | 0                  | 4         | 18         |
| 50 Richmond                  | 5                | 4                                | 2                | 2                  | 0         | 13         |
| 60 Capital Regional District | 9                | 17                               | 6                | 8                  | 7         | 47         |
| <b>TOTAL</b>                 | <b>129</b>       | <b>108</b>                       | <b>54</b>        | <b>53</b>          | <b>34</b> | <b>378</b> |

<sup>1</sup> Membership in the B.C. Association of Speech/Language Pathologists and Audiologists (BCASLPA) is voluntary.

<sup>2</sup> Includes hospitals, rehabilitation centres and health clinics.

<sup>3</sup> Includes U.B.C., Ministry of Health, Ministry of Education, and members employed in more than one setting.



## MASSAGE PRACTITIONERS

**Definition:** A massage practitioner

...may register under Part 3 of the Physiotherapists' Act upon completion of an approved course of study comprised of a curriculum of theory and practice, primarily consisting of the subjects of anatomy, physiology, massage and hydrotherapy, and after passing the examination set by the Board of Physiotherapists and Massage Practitioners.<sup>1</sup>

Massage practitioners perform some or all of the following:

- a) administer massage therapy and other treatments such as whirlpool baths, hot compresses or packs to affected areas of patients' bodies;
- b) consult physiotherapists, chiropractors and physicians for advice on patient assessment and the development of a treatment plan;
- c) maintain records of treatment given.<sup>2</sup>

**Governing Statute:** Physiotherapists' Act, Revised Statutes of British Columbia, 1979, Chapter 327; Health Professions Amendment Act, 1989, Chapter 29, Sections 9-16; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 51-54; administered by the Ministry of Health.

**Governing Body:** Association of Physiotherapists and Massage Practitioners of British Columbia (APMPBC). In order to practise as a massage practitioner in British Columbia, it is necessary to be registered by the Association of Physiotherapists and Massage Practitioners of British Columbia.

**Date of Record:** December 1991 and December 1993.

**Source of Data:** Association of Physiotherapists and Massage Practitioners of British Columbia (APMPBC).

### Preparation and Updating:

The tables, prepared from registration data maintained by the APMPBC, include members who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when the membership status is "full registrant", when employment in massage therapy is reported, and when employment address is available. In 1991 and 1993, employment address was available for 89% and 90% of full registrant massage practitioners employed in massage therapy, respectively. Home address is used for the remainder, as well as for massage practitioners with full registrant status who are not employed in massage therapy, and for massage practitioners with inactive registrant status.

<sup>1</sup> Physiotherapists Act, Revised Statutes of British Columbia, 1979, Chapter 327.

<sup>2</sup> Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3235, Ottawa; Employment and Immigration Canada..

## Definition of Terms:

*Full registrants* are massage practitioners who have passed registration examinations and are qualified to practise in massage therapy in British Columbia.

*Inactive registrants* are members of the APMPBC who are not currently practising in massage therapy in British Columbia. This status may be elected for up to five years.<sup>3</sup>

### 1. Registration Category

Tables 1a and 1b report the number and number per 10,000 population of massage practitioners who are full or inactive registrants with the APMPBC. Table 1c reports the average annual rates of change in these figures.

### 2. Age and Sex

Age and sex information on massage practitioners who are full or inactive registrants with the APMPBC is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### 3. Employment Status

Employment status as reported on the APMPBC registration renewal form is reported in Table 3 for full registrants only. The following categories are used:

- (a) Employed in Massage Therapy;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) Casual/Locum
  - (iv) Employed in Massage Therapy - status unknown
- (b) Employed in Other Field;
- (c) Not Employed.

### 4. Principal Employing Institution

Table 4 displays type of principal employing institution as reported by full registrants on the APMPBC registration renewal form. The APMPBC made significant changes to this category on its registration renewal form between 1991 and 1993. The categories that were altered are listed as they appeared in 1991 and 1993.

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<sup>3</sup>Adapted from information provided by the Association of Physiotherapists and Massage Practitioners of British Columbia.

**1991**

Acute Care Hospital  
 Rehabilitation Hospital  
 Continuing Care (Home/Long Term Care)

Children's Hospital  
 Psychiatric Hospital  
 Centre for Mentally Handicapped

**1993**

General Hospital  
 Rehab. Hospital/Facility  
 Long Term Care  
 Homecare Program  
 Paediatric Hospital/Facility  
 Psychiatric Hospital/Facility  
 Facility for Mentally Handicapped

In addition, the categories ""Non-Profit Agency (i.e. CARS)", "Diagnostic & Treatment Centre", and "Extended Care" were dropped from the 1993 form, and the categories "Arthritis Society", "Other Visiting Agencies", "Retail", and "Government/Official Agency" were added to the 1993 form. The full list of categories used in 1993 was:

- (a) General Hospital;
- (b) Rehab. Hospital/Facility;
- (c) Long Term Care;
- (d) Industry;
- (e) Workers' Compensation Board;
- (f) Community Health Centre;
- (g) Homecare program;
- (h) Arthritis Society;
- (i) Other Visiting Agencies;
- (j) Paediatric Hospital/Facility;
- (k) Psychiatric Hospital/Facility;
- (l) Private Practice;
- (m) Facility for Mentally Handicapped;
- (n) Retail;
- (o) Government/Official Agency;
- (p) School Board;
- (q) University/College;
- (r) Other.

Some of these categories are combined in Table 4 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## **5. Principal Employment Activity**

Principal employment activity related and not related to patient care as reported by full registrant massage practitioners on the APMPBC registration renewal form is shown in Table 5. The APMPBC made significant changes to this category on its registration renewal form between 1991 and 1993. The categories that were altered are listed as they appeared in 1991 and 1993.

**1991**

Geriatrics  
 Burns & Plastics  
  
 Cardio-respiratory  
  
 Palliative Chronic Care  
 Psychiatric  
 Mentally Handicapped

**1993**

Gerontology  
 Burns  
 Plastics  
 Cardiology  
 Respiriology  
 Palliative Care  
 Psychiatry/Mentally Handicapped

In addition, the categories "Intensive Care", "Paediatrics", and "Rehabilitation" have been dropped from the 1993 form, and the categories "Amputees" and "Obstetrics and Gynecology" have been added to the 1993 form. The full list of categories used in 1993 was:

- (a) Not Involved in Patient Care;
- (b) Amputees;
- (c) Cardiology;
- (c) Neurology;
- (e) Orthopaedics;
- (f) Plastics;
- (g) Palliative Care;
- (h) Psychiatry/Mentally Handicapped;
- (i) Prevention/Health Promotion;
- (j) Respiriology;
- (k) Rheumatology;
- (l) Burns;
- (m) Sports Medicine;
- (n) Gerontology;
- (o) Obstetrics/Gynaecology;
- (p) General;
- (q) Administration;
- (r) Teaching;
- (s) Sales;
- (t) Consulting;
- (u) Research;
- (v) Other.

Some of these categories are combined in Table 5 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## **6. Type of Position**

Principal type of position as reported on the registration renewal form is reported for full registrants in Table 6. Massage practitioners reported using the following categories from the form:

- (a) Staff Therapist;
- (b) Sole Charge;
- (c) Program Co-ordinator;



- (d) Senior Therapist;
- (e) Clinical Instructor;
- (f) Research Therapist;
- (g) Director;
- (h) Assistant Director;
- (i) Consultant;
- (j) Owner/Partner-Private Practice;
- (k) Associate - Private Practice;.
- (l) Other.

Some of these categories are combined in Table 6 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## 7. Analysis of Change

Table 7 illustrates sources of change which affected the stock of massage practitioners who were full registrants in the APMPBC from 1991 to 1993.

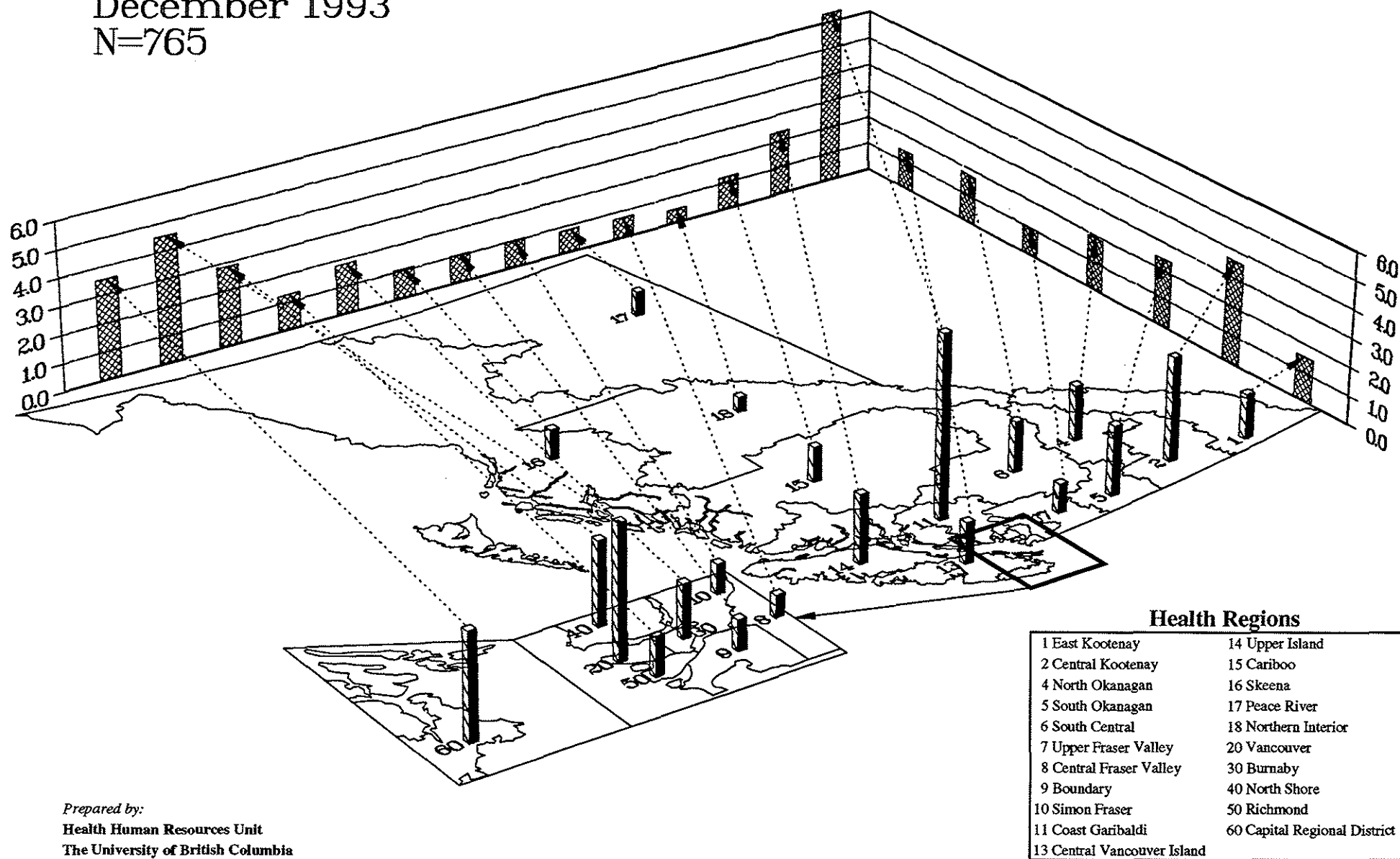
*New registrants* include massage practitioners who were full registrants in the APMPBC as of December 1993 and who registered in the APMPBC *for the first time* subsequent to December 1991. They are reported in the table according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

*Reactivations* represent massage therapists who were not full registrants in the APMPBC in December 1991, but were full registrants in the province in December 1993, and whose date of initial registration was before December 1991. Also included as reactivations are massage practitioners who were full registrants and reported out-of-province addresses in December 1991, but who reported British Columbia addresses in December 1993.

*Attrition* describes massage practitioners who were full registrants in the APMPBC who were included in the 1991 stock of massage practitioners, but who, because of death, retirement, out-of-province relocation, or non-renewal of full registration, were not included in the 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of massage practitioners who were full registrants in the APMPBC among different Health Regions. The net migration total is therefore zero.

Massage Practitioners (Full Registrants)  
per 10,000 Population  
by Health Region  
December 1993  
N=765



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Massage Practitioners in British Columbia**  
**by Health Region by Registration Category**  
**December 1991<sup>1</sup> and December 1993**

| Health Region                | Full Registrants |            | Inactive Registrants |          | Total      |            |
|------------------------------|------------------|------------|----------------------|----------|------------|------------|
|                              | 1991             | 1993       | 1991                 | 1993     | 1991       | 1993       |
| 1 East Kootenay              | 12               | 11         | 0                    | 0        | 12         | 11         |
| 2 Central Kootenay           | 20               | 27         | 0                    | 0        | 20         | 27         |
| 4 North Okanagan             | 14               | 20         | 1                    | 0        | 15         | 20         |
| 5 South Okanagan             | 33               | 48         | 0                    | 0        | 33         | 48         |
| 6 South Central              | 13               | 20         | 0                    | 0        | 13         | 20         |
| 7 Upper Fraser Valley        | 13               | 17         | 0                    | 0        | 13         | 17         |
| 8 Central Fraser Valley      | 13               | 14         | 0                    | 0        | 13         | 14         |
| 9 Boundary                   | 35               | 39         | 1                    | 1        | 36         | 40         |
| 10 Simon Fraser              | 11               | 20         | 0                    | 0        | 11         | 20         |
| 11 Coast Garibaldi           | 31               | 40         | 1                    | 0        | 32         | 40         |
| 13 Central Vancouver Island  | 21               | 29         | 0                    | 0        | 21         | 29         |
| 14 Upper Island              | 18               | 24         | 0                    | 1        | 18         | 25         |
| 15 Cariboo                   | 7                | 8          | 0                    | 0        | 7          | 8          |
| 16 Skeena                    | 4                | 9          | 0                    | 0        | 4          | 9          |
| 17 Peace River               | 3                | 5          | 0                    | 1        | 3          | 6          |
| 18 Northern Interior         | 5                | 6          | 0                    | 0        | 5          | 6          |
| 20 Vancouver                 | 194              | 223        | 1                    | 1        | 195        | 224        |
| 30 Burnaby                   | 22               | 30         | 0                    | 0        | 22         | 30         |
| 40 North Shore               | 41               | 47         | 0                    | 0        | 41         | 47         |
| 50 Richmond                  | 7                | 17         | 0                    | 0        | 7          | 17         |
| 60 Capital Regional District | 95               | 111        | 4                    | 0        | 99         | 111        |
| <b>TOTAL</b>                 | <b>612</b>       | <b>765</b> | <b>8</b>             | <b>4</b> | <b>620</b> | <b>769</b> |

<sup>1</sup> The total figures for 1991 differ from the corresponding figures for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 4 full registrants and 1 inactive registrant whose employment addresses were outside B.C.  
Please note: Inactive registrants were not included in ROLLCALL 91.

**Table 1b**  
**Massage Practitioners in British Columbia**  
**per 10,000 Population by Health Region by Registration Category**  
**December 1991 and December 1993**

| Health Region                | Full Registrants |             | Inactive Registrants |             | Total       |             |
|------------------------------|------------------|-------------|----------------------|-------------|-------------|-------------|
|                              | 1991             | 1993        | 1991                 | 1993        | 1991        | 1993        |
| 1 East Kootenay              | 1.73             | 1.56        | 0.00                 | 0.00        | 1.73        | 1.56        |
| 2 Central Kootenay           | 2.78             | 3.62        | 0.00                 | 0.00        | 2.78        | 3.62        |
| 4 North Okanagan             | 1.45             | 1.91        | 0.10                 | 0.00        | 1.55        | 1.91        |
| 5 South Okanagan             | 1.85             | 2.41        | 0.00                 | 0.00        | 1.85        | 2.41        |
| 6 South Central              | 1.19             | 1.76        | 0.00                 | 0.00        | 1.19        | 1.76        |
| 7 Upper Fraser Valley        | 0.83             | 1.00        | 0.00                 | 0.00        | 0.83        | 1.00        |
| 8 Central Fraser Valley      | 0.74             | 0.74        | 0.00                 | 0.00        | 0.74        | 0.74        |
| 9 Boundary                   | 1.00             | 1.03        | 0.03                 | 0.03        | 1.02        | 1.06        |
| 10 Simon Fraser              | 0.60             | 1.01        | 0.00                 | 0.00        | 0.60        | 1.01        |
| 11 Coast Garibaldi           | 5.20             | 6.33        | 0.17                 | 0.00        | 5.36        | 6.33        |
| 13 Central Vancouver Island  | 1.08             | 1.40        | 0.00                 | 0.00        | 1.08        | 1.40        |
| 14 Upper Island              | 1.86             | 2.35        | 0.00                 | 0.10        | 1.86        | 2.45        |
| 15 Cariboo                   | 1.08             | 1.22        | 0.00                 | 0.00        | 1.08        | 1.22        |
| 16 Skeena                    | 0.48             | 1.06        | 0.00                 | 0.00        | 0.48        | 1.06        |
| 17 Peace River               | 0.51             | 0.85        | 0.00                 | 0.17        | 0.51        | 1.02        |
| 18 Northern Interior         | 0.44             | 0.52        | 0.00                 | 0.00        | 0.44        | 0.52        |
| 20 Vancouver                 | 4.06             | 4.53        | 0.02                 | 0.02        | 4.08        | 4.55        |
| 30 Burnaby                   | 1.38             | 1.81        | 0.00                 | 0.00        | 1.38        | 1.81        |
| 40 North Shore               | 2.59             | 2.85        | 0.00                 | 0.00        | 2.59        | 2.85        |
| 50 Richmond                  | 0.55             | 1.28        | 0.00                 | 0.00        | 0.55        | 1.28        |
| 60 Capital Regional District | 3.17             | 3.56        | 0.13                 | 0.00        | 3.30        | 3.56        |
| <b>TOTAL</b>                 | <b>1.86</b>      | <b>2.21</b> | <b>0.02</b>          | <b>0.01</b> | <b>1.89</b> | <b>2.22</b> |

**Table 1c**  
**Average Annual Rate of Change: Massage Practitioners in British Columbia**  
**by Health Region by Registration Category**  
**December 1991 to December 1993**

| Health Region                | Full Registrants    |                    | Inactive Registrants |                    | Total               |                    |
|------------------------------|---------------------|--------------------|----------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup>  | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | -4.26               | -4.95              | *                    | *                  | -4.26               | -4.95              |
| 2 Central Kootenay           | 16.19               | 14.16              | *                    | *                  | 16.19               | 14.16              |
| 4 North Okanagan             | 19.52               | 14.92              | *                    | *                  | 15.47               | 11.03              |
| 5 South Okanagan             | 20.60               | 14.23              | *                    | *                  | 20.60               | 14.23              |
| 6 South Central              | 24.03               | 21.25              | *                    | *                  | 24.03               | 21.25              |
| 7 Upper Fraser Valley        | 14.35               | 9.43               | *                    | *                  | 14.35               | 9.43               |
| 8 Central Fraser Valley      | 3.77                | -0.01              | *                    | *                  | 3.77                | -0.01              |
| 9 Boundary                   | 5.56                | 1.88               | *                    | *                  | 5.41                | 1.74               |
| 10 Simon Fraser              | 34.84               | 29.77              | *                    | *                  | 34.84               | 29.77              |
| 11 Coast Garibaldi           | 13.59               | 10.38              | *                    | *                  | 11.80               | 8.64               |
| 13 Central Vancouver Island  | 17.51               | 13.80              | *                    | *                  | 17.51               | 13.80              |
| 14 Upper Island              | 15.47               | 12.39              | *                    | *                  | 17.85               | 14.71              |
| 15 Cariboo                   | *                   | *                  | *                    | *                  | *                   | *                  |
| 16 Skeena                    | *                   | *                  | *                    | *                  | *                   | *                  |
| 17 Peace River               | *                   | *                  | *                    | *                  | *                   | *                  |
| 18 Northern Interior         | *                   | *                  | *                    | *                  | *                   | *                  |
| 20 Vancouver                 | 7.21                | 5.62               | *                    | *                  | 7.18                | 5.58               |
| 30 Burnaby                   | 16.77               | 14.33              | *                    | *                  | 16.77               | 14.33              |
| 40 North Shore               | 7.07                | 5.00               | *                    | *                  | 7.07                | 5.00               |
| 50 Richmond                  | *                   | *                  | *                    | *                  | *                   | *                  |
| 60 Capital Regional District | 8.09                | 6.02               | *                    | *                  | 5.89                | 3.86               |
| <b>TOTAL</b>                 | <b>11.80</b>        | <b>8.90</b>        | <b>*</b>             | <b>*</b>           | <b>11.37</b>        | <b>8.48</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Massage Practitioners in British Columbia**  
**by Health Region by Age and Sex**  
**December 1993**

| Health Region                | < 25     |           | 25-34     |            | 35-44     |            | 45-54     |           | 55-64    |           | 65 +     |          | Subtotal   |            | Unknown   | Total      |
|------------------------------|----------|-----------|-----------|------------|-----------|------------|-----------|-----------|----------|-----------|----------|----------|------------|------------|-----------|------------|
|                              | M        | F         | M         | F          | M         | F          | M         | F         | M        | F         | M        | F        | M          | F          |           |            |
| 1 East Kootenay              | 0        | 0         | 0         | 2          | 2         | 5          | 1         | 1         | 0        | 0         | 0        | 0        | 3          | 8          | 0         | 11         |
| 2 Central Kootenay           | 0        | 0         | 4         | 6          | 5         | 8          | 1         | 1         | 2        | 0         | 0        | 0        | 12         | 15         | 0         | 27         |
| 4 North Okanagan             | 0        | 1         | 1         | 3          | 2         | 7          | 3         | 2         | 0        | 0         | 0        | 0        | 6          | 13         | 1         | 20         |
| 5 South Okanagan             | 1        | 1         | 7         | 8          | 9         | 14         | 2         | 4         | 2        | 0         | 0        | 0        | 21         | 27         | 0         | 48         |
| 6 South Central              | 0        | 1         | 2         | 6          | 1         | 3          | 0         | 4         | 0        | 1         | 1        | 0        | 4          | 15         | 1         | 20         |
| 7 Upper Fraser Valley        | 1        | 1         | 0         | 3          | 5         | 4          | 1         | 1         | 0        | 0         | 1        | 0        | 8          | 9          | 0         | 17         |
| 8 Central Fraser Valley      | 0        | 2         | 0         | 4          | 0         | 5          | 0         | 0         | 0        | 1         | 0        | 0        | 0          | 12         | 2         | 14         |
| 9 Boundary                   | 0        | 1         | 1         | 9          | 8         | 13         | 3         | 4         | 0        | 0         | 0        | 0        | 12         | 27         | 1         | 40         |
| 10 Simon Fraser              | 0        | 2         | 2         | 6          | 0         | 5          | 1         | 3         | 0        | 0         | 0        | 0        | 3          | 16         | 1         | 20         |
| 11 Coast Garibaldi           | 0        | 0         | 6         | 12         | 2         | 8          | 1         | 4         | 0        | 0         | 0        | 0        | 9          | 24         | 7         | 40         |
| 13 Central Vancouver Island  | 0        | 0         | 1         | 8          | 2         | 13         | 1         | 2         | 0        | 0         | 0        | 0        | 4          | 23         | 2         | 29         |
| 14 Upper Island              | 0        | 0         | 1         | 4          | 4         | 9          | 0         | 1         | 0        | 2         | 0        | 0        | 5          | 16         | 4         | 25         |
| 15 Cariboo                   | 0        | 0         | 0         | 2          | 0         | 3          | 1         | 0         | 0        | 1         | 0        | 0        | 1          | 6          | 1         | 8          |
| 16 Skeena                    | 0        | 1         | 0         | 2          | 1         | 3          | 0         | 0         | 0        | 1         | 0        | 0        | 1          | 7          | 1         | 9          |
| 17 Peace River               | 0        | 0         | 1         | 2          | 1         | 0          | 1         | 0         | 0        | 1         | 0        | 0        | 3          | 3          | 0         | 6          |
| 18 Northern Interior         | 0        | 0         | 2         | 0          | 0         | 2          | 1         | 1         | 0        | 0         | 0        | 0        | 3          | 3          | 0         | 6          |
| 20 Vancouver                 | 0        | 6         | 25        | 65         | 21        | 71         | 3         | 20        | 2        | 1         | 0        | 1        | 51         | 164        | 9         | 224        |
| 30 Burnaby                   | 1        | 1         | 5         | 9          | 2         | 6          | 2         | 3         | 0        | 0         | 1        | 0        | 11         | 19         | 0         | 30         |
| 40 North Shore               | 1        | 2         | 4         | 17         | 5         | 9          | 3         | 4         | 0        | 1         | 1        | 0        | 14         | 33         | 0         | 47         |
| 50 Richmond                  | 1        | 1         | 2         | 5          | 2         | 2          | 1         | 1         | 0        | 0         | 0        | 0        | 6          | 9          | 2         | 17         |
| 60 Capital Regional District | 1        | 2         | 4         | 20         | 11        | 44         | 9         | 11        | 2        | 1         | 1        | 0        | 28         | 78         | 5         | 111        |
| <b>TOTAL</b>                 | <b>6</b> | <b>22</b> | <b>68</b> | <b>193</b> | <b>83</b> | <b>234</b> | <b>35</b> | <b>67</b> | <b>8</b> | <b>10</b> | <b>5</b> | <b>1</b> | <b>205</b> | <b>527</b> | <b>37</b> | <b>769</b> |

**Table 3**  
**Massage Practitioners (Full Registrants) in British Columbia**  
**by Health Region by Employment Status**  
**December 1993**

| Health Region                | Employed in Massage Therapy |            |                  |           |            | Employed in<br>Other Field | Not<br>Employed | Unknown    | Total      |
|------------------------------|-----------------------------|------------|------------------|-----------|------------|----------------------------|-----------------|------------|------------|
|                              | Full-Time                   | Part-Time  | Casual/<br>Locum | Unknown   | Subtotal   |                            |                 |            |            |
| 1 East Kootenay              | 4                           | 4          | 1                | 0         | 9          | 1                          | 0               | 1          | 11         |
| 2 Central Kootenay           | 9                           | 13         | 0                | 0         | 22         | 1                          | 0               | 4          | 27         |
| 4 North Okanagan             | 10                          | 8          | 1                | 0         | 19         | 0                          | 0               | 1          | 20         |
| 5 South Okanagan             | 27                          | 10         | 1                | 0         | 38         | 1                          | 1               | 8          | 48         |
| 6 South Central              | 5                           | 9          | 1                | 0         | 15         | 0                          | 0               | 5          | 20         |
| 7 Upper Fraser Valley        | 7                           | 5          | 0                | 1         | 13         | 0                          | 0               | 4          | 17         |
| 8 Central Fraser Valley      | 4                           | 4          | 0                | 0         | 8          | 1                          | 0               | 5          | 14         |
| 9 Boundary                   | 10                          | 16         | 4                | 3         | 33         | 0                          | 1               | 5          | 39         |
| 10 Simon Fraser              | 5                           | 11         | 0                | 0         | 16         | 0                          | 0               | 4          | 20         |
| 11 Coast Garibaldi           | 13                          | 15         | 0                | 1         | 29         | 2                          | 0               | 9          | 40         |
| 13 Central Vancouver Island  | 11                          | 8          | 1                | 1         | 21         | 0                          | 0               | 8          | 29         |
| 14 Upper Island              | 9                           | 11         | 0                | 1         | 21         | 0                          | 0               | 3          | 24         |
| 15 Cariboo                   | 3                           | 4          | 0                | 1         | 8          | 0                          | 0               | 0          | 8          |
| 16 Skeena                    | 0                           | 7          | 1                | 0         | 8          | 0                          | 0               | 1          | 9          |
| 17 Peace River               | 3                           | 1          | 0                | 0         | 4          | 0                          | 0               | 1          | 5          |
| 18 Northern Interior         | 3                           | 2          | 0                | 0         | 5          | 0                          | 0               | 1          | 6          |
| 20 Vancouver                 | 52                          | 96         | 6                | 1         | 155        | 5                          | 3               | 60         | 223        |
| 30 Burnaby                   | 10                          | 12         | 2                | 0         | 24         | 0                          | 2               | 4          | 30         |
| 40 North Shore               | 14                          | 20         | 2                | 0         | 36         | 0                          | 3               | 8          | 47         |
| 50 Richmond                  | 6                           | 7          | 1                | 0         | 14         | 0                          | 0               | 3          | 17         |
| 60 Capital Regional District | 35                          | 53         | 3                | 6         | 97         | 0                          | 0               | 14         | 111        |
| <b>TOTAL</b>                 | <b>240</b>                  | <b>316</b> | <b>24</b>        | <b>15</b> | <b>595</b> | <b>11</b>                  | <b>10</b>       | <b>149</b> | <b>765</b> |

**Table 4**  
**Massage Practitioners (Full Registrants) Employed in Massage Therapy<sup>1</sup> in British Columbia**  
**by Health Region by Principal Employing Institution**  
**December 1993**

| Health Region                | Institution/<br>Agency <sup>2</sup> | Private<br>Practice | Other     | Unknown    | Total      |
|------------------------------|-------------------------------------|---------------------|-----------|------------|------------|
| 1 East Kootenay              | 0                                   | 7                   | 0         | 2          | 9          |
| 2 Central Kootenay           | 1                                   | 17                  | 1         | 3          | 22         |
| 4 North Okanagan             | 0                                   | 14                  | 0         | 5          | 19         |
| 5 South Okanagan             | 0                                   | 34                  | 0         | 4          | 38         |
| 6 South Central              | 2                                   | 11                  | 1         | 1          | 15         |
| 7 Upper Fraser Valley        | 0                                   | 9                   | 2         | 2          | 13         |
| 8 Central Fraser Valley      | 0                                   | 5                   | 0         | 3          | 8          |
| 9 Boundary                   | 0                                   | 24                  | 0         | 9          | 33         |
| 10 Simon Fraser              | 0                                   | 11                  | 0         | 5          | 16         |
| 11 Coast Garibaldi           | 0                                   | 22                  | 3         | 4          | 29         |
| 13 Central Vancouver Island  | 0                                   | 15                  | 1         | 5          | 21         |
| 14 Upper Island              | 1                                   | 16                  | 1         | 3          | 21         |
| 15 Cariboo                   | 0                                   | 7                   | 0         | 1          | 8          |
| 16 Skeena                    | 1                                   | 5                   | 0         | 2          | 8          |
| 17 Peace River               | 1                                   | 3                   | 0         | 0          | 4          |
| 18 Northern Interior         | 0                                   | 5                   | 0         | 0          | 5          |
| 20 Vancouver                 | 6                                   | 105                 | 2         | 42         | 155        |
| 30 Burnaby                   | 0                                   | 19                  | 1         | 4          | 24         |
| 40 North Shore               | 0                                   | 28                  | 0         | 8          | 36         |
| 50 Richmond                  | 1                                   | 11                  | 0         | 2          | 14         |
| 60 Capital Regional District | 2                                   | 72                  | 1         | 22         | 97         |
| <b>TOTAL</b>                 | <b>15</b>                           | <b>440</b>          | <b>13</b> | <b>127</b> | <b>595</b> |

<sup>1</sup> Excludes 11 massage practitioners who are employed in other fields, 10 who are not employed and 149 who did not indicate their employment status.

<sup>2</sup> Includes 7 massage practitioners employed at a university/college, 1 at a psychiatric hospital/facility, 1 at a paediatric hospital/facility, 2 at a community health centre, 1 at the Workers' Compensation Board, 1 at a long term care facility, 1 at the Massage Therapy Association of B.C. and 1 at a alcohol and drug program.



**Table 5**  
**Massage Practitioners (Full Registrants) Employed in Massage Therapy<sup>1</sup> in British Columbia**  
**by Health Region by Principal Employment Activity**  
**December 1993**

| Health Region                | General    | Prevention/<br>Health<br>Promotion | Palliative<br>Care | Sports<br>Medicine | Other <sup>2</sup> | Unknown    | Total      |
|------------------------------|------------|------------------------------------|--------------------|--------------------|--------------------|------------|------------|
| 1 East Kootenay              | 4          | 0                                  | 0                  | 1                  | 0                  | 4          | 9          |
| 2 Central Kootenay           | 13         | 4                                  | 0                  | 0                  | 0                  | 5          | 22         |
| 4 North Okanagan             | 11         | 2                                  | 0                  | 0                  | 0                  | 6          | 19         |
| 5 South Okanagan             | 30         | 1                                  | 0                  | 1                  | 0                  | 6          | 38         |
| 6 South Central              | 9          | 1                                  | 1                  | 1                  | 0                  | 3          | 15         |
| 7 Upper Fraser Valley        | 7          | 3                                  | 0                  | 0                  | 0                  | 3          | 13         |
| 8 Central Fraser Valley      | 2          | 2                                  | 0                  | 0                  | 0                  | 4          | 8          |
| 9 Boundary                   | 17         | 1                                  | 0                  | 0                  | 3                  | 12         | 33         |
| 10 Simon Fraser              | 9          | 2                                  | 0                  | 0                  | 0                  | 5          | 16         |
| 11 Coast Garibaldi           | 11         | 3                                  | 0                  | 3                  | 2                  | 10         | 29         |
| 13 Central Vancouver Island  | 9          | 3                                  | 0                  | 0                  | 0                  | 9          | 21         |
| 14 Upper Island              | 13         | 2                                  | 1                  | 0                  | 0                  | 5          | 21         |
| 15 Cariboo                   | 5          | 2                                  | 0                  | 0                  | 0                  | 1          | 8          |
| 16 Skeena                    | 6          | 0                                  | 0                  | 0                  | 0                  | 2          | 8          |
| 17 Peace River               | 4          | 0                                  | 0                  | 0                  | 0                  | 0          | 4          |
| 18 Northern Interior         | 3          | 0                                  | 0                  | 0                  | 1                  | 1          | 5          |
| 20 Vancouver                 | 71         | 15                                 | 3                  | 3                  | 3                  | 60         | 155        |
| 30 Burnaby                   | 7          | 6                                  | 0                  | 0                  | 0                  | 11         | 24         |
| 40 North Shore               | 20         | 4                                  | 0                  | 0                  | 0                  | 12         | 36         |
| 50 Richmond                  | 6          | 3                                  | 0                  | 0                  | 0                  | 5          | 14         |
| 60 Capital Regional District | 52         | 12                                 | 1                  | 0                  | 1                  | 31         | 97         |
| <b>TOTAL</b>                 | <b>309</b> | <b>66</b>                          | <b>6</b>           | <b>9</b>           | <b>10</b>          | <b>195</b> | <b>595</b> |

<sup>1</sup> Excludes 11 massage practitioners who are employed in other fields, 10 who are not employed and 149 who did not indicate their employment status.

<sup>2</sup> Includes 1 massage practitioner who works with amputees, 2 employed in orthopaedics, 1 in rheumatology, 1 in burns, 3 in teaching and 2 in other non-patient care activities.

**Table 6**  
**Massage Practitioners (Full Registrants) Employed in Massage Therapy<sup>1</sup> in British Columbia**  
**by Health Region by Principal Type of Position**  
**December 1993**

| Health Region                | Owner/<br>Partner-<br>Private<br>Practice | Associate-<br>Private<br>Practice | Staff<br>Therapist | Sole<br>Charge | Other <sup>2</sup> | Unknown    | Total      |
|------------------------------|---|-----------------------------------|--------------------|----------------|--------------------|------------|------------|
| 1 East Kootenay              | 7   | 1                                 | 0                  | 0              | 0                  | 1          | 9          |
| 2 Central Kootenay           | 12  | 1                                 | 1                  | 5              | 0                  | 3          | 22         |
| 4 North Okanagan             | 6   | 5                                 | 1                  | 1              | 0                  | 6          | 19         |
| 5 South Okanagan             | 24  | 5                                 | 2                  | 2              | 1                  | 4          | 38         |
| 6 South Central              | 8   | 1                                 | 3                  | 1              | 1                  | 1          | 15         |
| 7 Upper Fraser Valley        | 8   | 0                                 | 0                  | 1              | 1                  | 3          | 13         |
| 8 Central Fraser Valley      | 2   | 2                                 | 1                  | 0              | 0                  | 3          | 8          |
| 9 Boundary                   | 11  | 8                                 | 3                  | 1              | 1                  | 9          | 33         |
| 10 Simon Fraser              | 3   | 3                                 | 3                  | 2              | 0                  | 5          | 16         |
| 11 Coast Garibaldi           | 13  | 7                                 | 3                  | 2              | 1                  | 3          | 29         |
| 13 Central Vancouver Island  | 12  | 2                                 | 0                  | 2              | 0                  | 5          | 21         |
| 14 Upper Island              | 9   | 4                                 | 3                  | 1              | 1                  | 3          | 21         |
| 15 Cariboo                   | 6   | 1                                 | 0                  | 0              | 0                  | 1          | 8          |
| 16 Skeena                    | 3   | 0                                 | 1                  | 1              | 1                  | 2          | 8          |
| 17 Peace River               | 2   | 1                                 | 0                  | 0              | 1                  | 0          | 4          |
| 18 Northern Interior         | 3   | 0                                 | 0                  | 2              | 0                  | 0          | 5          |
| 20 Vancouver                 | 41  | 42                                | 15                 | 5              | 11                 | 41         | 155        |
| 30 Burnaby                   | 8   | 10                                | 0                  | 0              | 1                  | 5          | 24         |
| 40 North Shore               | 12  | 8                                 | 5                  | 2              | 1                  | 8          | 36         |
| 50 Richmond                  | 4   | 4                                 | 3                  | 1              | 0                  | 2          | 14         |
| 60 Capital Regional District | 51  | 13                                | 3                  | 6              | 1                  | 23         | 97         |
| <b>TOTAL</b>                 | <b>245</b>                                | <b>118</b>                        | <b>47</b>          | <b>35</b>      | <b>22</b>          | <b>128</b> | <b>595</b> |

<sup>1</sup>Excludes 11 massage practitioners who are employed in other fields, 10 who are not employed and 149 who did not indicate their employment status.

<sup>2</sup>Includes 2 massage practitioners employed as directors, 3 as clinical instructors, 4 as senior therapists, 1 as a program co-ordinator and 12 others.

**Table 7**  
**Analysis of Change in the Number of Massage Practitioners (Full Registrants)**  
**in British Columbia by Health Region**  
**December 1991 to December 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |          |            | Reactivation <sup>3</sup> | Attrition* | Net Intra-provincial Migration | December 1993 |
|------------------------------|----------------------------|---|--------------|----------|------------|---------------------------|------------|--------------------------------|---------------|
|                              |                            | B.C.  | Other Canada | Unknown  | Subtotal   |                           |            |                                |               |
| 1 East Kootenay              | 12                         | 2   | 0            | 0        | 2          | 1                         | 3          | -1                             | 11            |
| 2 Central Kootenay           | 20                         | 1   | 3            | 0        | 4          | 1                         | 1          | 3                              | 27            |
| 4 North Okanagan             | 14                         | 2   | 2            | 0        | 4          | 0                         | 2          | 4                              | 20            |
| 5 South Okanagan             | 33                         | 9   | 6            | 0        | 15         | 0                         | 2          | 2                              | 48            |
| 6 South Central              | 13                         | 5   | 1            | 1        | 7          | 0                         | 1          | 1                              | 20            |
| 7 Upper Fraser Valley        | 13                         | 3   | 0            | 0        | 3          | 2                         | 2          | 1                              | 17            |
| 8 Central Fraser Valley      | 13                         | 4   | 1            | 0        | 5          | 0                         | 2          | -2                             | 14            |
| 9 Boundary                   | 35                         | 4   | 0            | 1        | 5          | 3                         | 3          | -1                             | 39            |
| 10 Simon Fraser              | 11                         | 6   | 0            | 0        | 6          | 0                         | 1          | 4                              | 20            |
| 11 Coast Garibaldi           | 31                         | 4   | 2            | 1        | 7          | 1                         | 3          | 4                              | 40            |
| 13 Central Vancouver Island  | 21                         | 3   | 2            | 1        | 6          | 3                         | 2          | 1                              | 29            |
| 14 Upper Island              | 18                         | 1   | 0            | 1        | 2          | 2                         | 1          | 3                              | 24            |
| 15 Cariboo                   | 7                          | 0   | 1            | 0        | 1          | 1                         | 1          | 0                              | 8             |
| 16 Skeena                    | 4                          | 2   | 0            | 0        | 2          | 0                         | 0          | 3                              | 9             |
| 17 Peace River               | 3                          | 0   | 0            | 0        | 0          | 0                         | 0          | 2                              | 5             |
| 18 Northern Interior         | 5                          | 2   | 0            | 0        | 2          | 0                         | 0          | -1                             | 6             |
| 20 Vancouver                 | 194                        | 57  | 10           | 2        | 69         | 5                         | 18         | -27                            | 223           |
| 30 Burnaby                   | 22                         | 10  | 0            | 0        | 10         | 1                         | 2          | -1                             | 30            |
| 40 North Shore               | 41                         | 8   | 5            | 0        | 13         | 1                         | 4          | -4                             | 47            |
| 50 Richmond                  | 7                          | 4   | 1            | 0        | 5          | 0                         | 0          | 5                              | 17            |
| 60 Capital Regional District | 95                         | 9   | 6            | 2        | 17         | 5                         | 10         | 4                              | 111           |
| <b>TOTAL</b>                 | <b>612</b>                 | <b>136</b>  | <b>40</b>    | <b>9</b> | <b>185</b> | <b>26</b>                 | <b>58</b>  | <b>0</b>                       | <b>765</b>    |

<sup>1</sup> Massage practitioners who reported B.C. addresses and were full registrants in December 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLL CALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 4 massage practitioners whose employment addresses were outside B.C.

<sup>3</sup> Massage practitioners who reported B.C. addresses and were full registrants in December 1993 but not in December 1991 and who were registered for the first time before December 1991.

\* Massage practitioners who reported B.C. addresses and were full registrants in December 1991 but not in December 1993.



## OCCUPATIONAL THERAPISTS

**Definition:** An occupational therapist

...plans and carries out individually designed programs of activity for patients with physical or mental health problems to enhance their ability to care for themselves and to engage in work and recreational pursuits.

Occupational therapists perform some or all of the following duties:

- (a) observe patients and consult physicians' prognoses to assess patients' emotional and physical capacities;
- (b) develop treatment programs which may include manual and creative arts, industrial and vocational skills and recreational activities;
- (c) implement the treatment programs and evaluate their progress;
- (d) maintain clinical and statistical records;
- (e) advise on health risks in the workplace or participate in other programs, such as pre-retirement programs, to prevent physical or mental health problems;
- (f) conduct research in occupational therapy;
- (g) act as an occupational therapy consultant or educator.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the British Columbia Society of Occupational Therapists (BCSOT) is voluntary. However, registered members of the BCSOT have exclusive use of the titles: *Registered Occupational Therapist, (B.C.)*, *Registered OT, (B.C.)*. Occupational therapists who have graduated from a dual program in occupational therapy and physiotherapy may be registered with the Association of Physiotherapists and Massage Practitioners of British Columbia.

**Date of Record:** December 1991 and December 1993.

**Source of Data:** British Columbia Society of Occupational Therapists (BCSOT).

**Preparation and Updating:**

The tables, prepared from registration data maintained by the BCSOT, include BCSOT members who reported a British Columbia address at the date of record. Occupational therapists who also are registered with the Association of Physiotherapists and Massage Practitioners of British Columbia (APMPBC) are included in both the occupational therapy and physiotherapy sections of *ROLLCALL 93*. The exact number of personnel who are both members of the BCSOT and registered with the APMPBC is not known due to the unavailability of that data from the APMPBC, so the extent of double-counting of personnel in these two groups can not be determined.

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<sup>1</sup> *National Occupational Classification 1992*, Major Group 31, No. 3143, Ottawa: Employment and Immigration Canada.

The data in the tables are presented based on employment address when the membership status is "registered" or "provisional", when employment in occupational therapy is reported, and when employment address is available. In 1991 and 1993, employment address was available for 97% and 98% of registered or provisional OTs employed in occupational therapy, respectively. Home address is used for the remainder, as well as for OTs with registered or provisional status who are not employed in occupational therapy, and for OTs with non-practising membership status.

### **Definition of Terms:**

#### **1. Membership Category**

Occupational therapists who hold practising memberships in the British Columbia Society of Occupational Therapists may be registered as Full-Time, Part-Time, or Provisional members. Occupational therapists who register as Provisional generally have met the educational and competency requirements of Full-Time or Part-Time membership, but have not completed the national certification exam of the Canadian Association of Occupational Therapists. Table 1a reports occupational therapists who were members of the BCSOT in 1993 using the following membership categories:

- (a) Registered - Full-Time;
- (b) Registered - Part-Time;
- (c) Provisional;
- (d) Non-Practising.

Table 1b reports the number of occupational therapists per 10,000 population by their membership category. Average annual rates of change for each membership category are described in Table 1c.

#### **2. Age and Sex**

Age and sex information for occupational therapists who were members of the BCSOT is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

#### **3. Employment Status**

Table 3 displays the employment status of Registered and Provisional members of the BCSOT, as reported on the registration renewal form. The following categories are used:

- (a) Employed in Occupational Therapy;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) Casual/Locum
  - (iv) Employed in Occupational Therapy - status unknown
- (b) Employed in Other Field;
- (c) Not Employed;
- (d) On Leave.

#### 4. Principal Employer

Type of principal employer, as reported by Registered and Provisional members of the BCSOT who were employed in occupational therapy, is presented in Table 4. The following categories are used:

- (a) Acute Care Hospital;
- (b) Paediatric Hospital;
- (c) Rehabilitation Hospital;
- (d) Psychiatric Hospital;
- (e) Extended Care Hospital;
- (f) Intermediate Care Facility;
- (g) Personal/Home Care;
- (h) Adult Day Care;
- (i) Public Community Health Agency;
- (j) Children's Treatment/Outpatient Centre;
- (k) Centre for Mentally Handicapped;
- (l) Workers' Compensation Board;
- (m) Voluntary/Non-Profit Agency;
- (n) School Board;
- (o) University/College;
- (p) Insurance Corporation;
- (q) Retail Business;
- (r) Private Practice;
- (s) Other.

Some of these categories are combined in Table 4 when the numbers are small. When this is done, a footnote is used to define how many occupational therapists reported in each specific area.

#### 5. Principal Area of Service

Principal area of service, as reported by Registered and Provisional members of the BCSOT employed in occupational therapy, is presented in Table 5. The following categories are used:

- (a) Acute Care - Inpatient;
- (b) Extended Care - Inpatient;
- (c) Psychiatry - Inpatient;
- (d) Psychiatry - Outpatient ;
- (e) Rehabilitation - Inpatient;
- (f) Rehabilitation - Outpatient;
- (g) General - Outpatient;
- (h) Administration;
- (i) Research;
- (j) Teaching;
- (k) Home Care;
- (l) Vocational Rehabilitation;
- (m) Other.

Some of these categories are combined in Table 5 when the numbers are small. When this is done, a footnote is used to define how many occupational therapists reported in each specific area.

## 6. Principal Position

Table 6 shows type of principal position, as reported by Registered and Provisional BCSOT members employed in occupational therapy. The following categories are used:

- (a) Staff Therapist;
- (b) Senior Therapist;
- (c) Sole Charge;
- (d) Department Head;
- (e) Assistant Department Head;
- (f) Clinical Co-ordinator;
- (g) Program Co-ordinator/Director;
- (h) Faculty Position;
- (i) Consultant;
- (j) Researcher;
- (k) Clinical Specialist;
- (l) Other.

Some of these categories are combined in Table 6 when the numbers are small. When this is done, a footnote is used to define how many occupational therapists reported in each specific area. The HHRU created the category "Community" for this table based on the number of BCSOT members who wrote it in "Other" on the registration renewal form.

## 7. Analysis of Change

Table 7 illustrates sources of change which affected the stock of occupational therapists who were Registered and Provisional members of the British Columbia Society of Occupational Therapists from 1991 to 1993.

*New registrants* include occupational therapists who were Registered or Provisional members of the BCSOT as of December 1993 and who registered with the BCSOT *for the first time* subsequent to December 1991. They are reported in the table according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

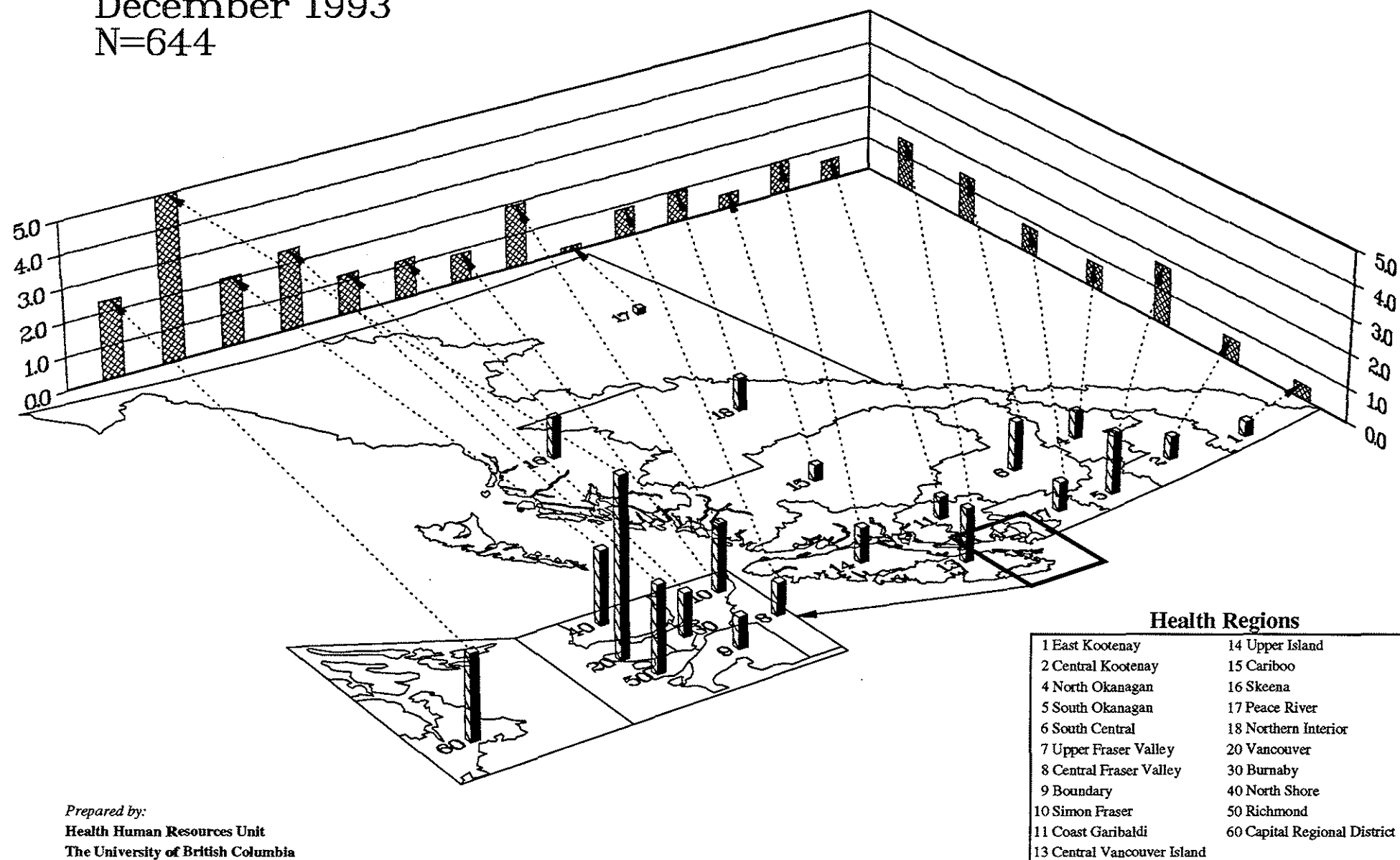
*Reactivations* represent occupational therapists who were neither Registered nor Provisional members of the BCSOT in December 1991, but who were Registered or Provisional members in the province in December 1993, and whose date of initial registration was before December 1991. Also included as reactivations are Registered and Provisional members of the BCSOT who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in December 1993.

*Attrition* describes occupational therapists who were Registered or Provisional members of the BCSOT who were included in the 1991 stock of occupational therapists, but who, because of death, retirement, out-of-province relocation, or non-renewal of Registered or Provisional membership, were not included in the 1993 stock.



*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of occupational therapists who were Registered and Provisional members of the BCSOT among different Health Regions. The net migration total is therefore zero.

# Occupational Therapists (Registered and Provisional BCSOT Members) per 10,000 Population by Health Region December 1993 N=644



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Membership Category**  
**December 1991 and December 1993**

| Health Region                | Registered        |            |            |            | Provisional |          | Subtotal          |            | Non-Practising |           | Total             |            |
|------------------------------|-------------------|------------|------------|------------|-------------|----------|-------------------|------------|----------------|-----------|-------------------|------------|
|                              | Full-Time         |            | Part-Time  |            | 1991        | 1993     | 1991 <sup>2</sup> | 1993       | 1991           | 1993      | 1991 <sup>2</sup> | 1993       |
|                              | 1991 <sup>2</sup> | 1993       | 1991       | 1993       |             |          |                   |            |                |           |                   |            |
| 1 East Kootenay              | 3                 | 3          | 0          | 0          | 0           | 0        | 3                 | 3          | 1              | 1         | 4                 | 4          |
| 2 Central Kootenay           | 5                 | 5          | 0          | 0          | 2           | 0        | 7                 | 5          | 1              | 1         | 8                 | 6          |
| 4 North Okanagan             | 3                 | 7          | 1          | 1          | 0           | 0        | 4                 | 8          | 0              | 2         | 4                 | 10         |
| 5 South Okanagan             | 22                | 27         | 8          | 8          | 0           | 0        | 30                | 35         | 0              | 2         | 30                | 37         |
| 6 South Central              | 8                 | 13         | 5          | 3          | 0           | 0        | 13                | 16         | 0              | 1         | 13                | 17         |
| 7 Upper Fraser Valley        | 4                 | 7          | 5          | 7          | 1           | 0        | 10                | 14         | 1              | 0         | 11                | 14         |
| 8 Central Fraser Valley      | 11                | 15         | 5          | 1          | 0           | 1        | 16                | 17         | 0              | 2         | 16                | 19         |
| 9 Boundary                   | 23                | 23         | 3          | 9          | 0           | 1        | 26                | 33         | 3              | 1         | 29                | 34         |
| 10 Simon Fraser              | 30                | 34         | 3          | 4          | 2           | 0        | 35                | 38         | 3              | 3         | 38                | 41         |
| 11 Coast Garibaldi           | 3                 | 3          | 0          | 1          | 0           | 0        | 3                 | 4          | 2              | 2         | 5                 | 6          |
| 13 Central Vancouver Island  | 18                | 22         | 8          | 8          | 0           | 1        | 26                | 31         | 5              | 8         | 31                | 39         |
| 14 Upper Island              | 4                 | 5          | 2          | 5          | 0           | 0        | 6                 | 10         | 3              | 0         | 9                 | 10         |
| 15 Cariboo                   | 2                 | 2          | 0          | 1          | 0           | 0        | 2                 | 3          | 1              | 0         | 3                 | 3          |
| 16 Skeena                    | 8                 | 10         | 0          | 0          | 0           | 0        | 8                 | 10         | 1              | 5         | 9                 | 15         |
| 17 Peace River               | 0                 | 1          | 0          | 0          | 0           | 0        | 0                 | 1          | 1              | 1         | 1                 | 2          |
| 18 Northern Interior         | 7                 | 9          | 1          | 2          | 0           | 0        | 8                 | 11         | 1              | 0         | 9                 | 11         |
| 20 Vancouver                 | 187               | 202        | 36         | 41         | 3           | 3        | 226               | 246        | 20             | 13        | 246               | 259        |
| 30 Burnaby                   | 17                | 13         | 2          | 7          | 0           | 0        | 19                | 20         | 3              | 2         | 22                | 22         |
| 40 North Shore               | 21                | 23         | 8          | 10         | 0           | 1        | 29                | 34         | 10             | 10        | 39                | 44         |
| 50 Richmond                  | 15                | 25         | 4          | 7          | 1           | 0        | 20                | 32         | 2              | 2         | 22                | 34         |
| 60 Capital Regional District | 57                | 50         | 17         | 23         | 1           | 0        | 75                | 73         | 8              | 8         | 83                | 81         |
| <b>TOTAL</b>                 | <b>448</b>        | <b>499</b> | <b>108</b> | <b>138</b> | <b>10</b>   | <b>7</b> | <b>566</b>        | <b>644</b> | <b>66</b>      | <b>64</b> | <b>632</b>        | <b>708</b> |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 1 registered full-time member whose employment address was outside B.C.

Please note: Provisional and non-practising members were not included in ROLLCALL 91.

**Table 1b**  
**Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Membership Category**  
**December 1991 and December 1993**

| Health Region                | Registered  |             |             |             | Provisional |             | Subtotal    |             | Non-Practising |             | Total       |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|
|                              | Full-Time   |             | Part-Time   |             | 1991        | 1993        | 1991        | 1993        | 1991           | 1993        | 1991        | 1993        |
|                              | 1991        | 1993        | 1991        | 1993        |             |             |             |             |                |             |             |             |
| 1 East Kootenay              | 0.43        | 0.43        | 0.00        | 0.00        | 0.00        | 0.00        | 0.43        | 0.43        | 0.14           | 0.14        | 0.58        | 0.57        |
| 2 Central Kootenay           | 0.70        | 0.67        | 0.00        | 0.00        | 0.28        | 0.00        | 0.97        | 0.67        | 0.14           | 0.13        | 1.11        | 0.81        |
| 4 North Okanagan             | 0.31        | 0.67        | 0.10        | 0.10        | 0.00        | 0.00        | 0.41        | 0.77        | 0.00           | 0.19        | 0.41        | 0.96        |
| 5 South Okanagan             | 1.23        | 1.36        | 0.45        | 0.40        | 0.00        | 0.00        | 1.68        | 1.76        | 0.00           | 0.10        | 1.68        | 1.86        |
| 6 South Central              | 0.74        | 1.14        | 0.46        | 0.26        | 0.00        | 0.00        | 1.19        | 1.40        | 0.00           | 0.09        | 1.19        | 1.49        |
| 7 Upper Fraser Valley        | 0.26        | 0.41        | 0.32        | 0.41        | 0.06        | 0.00        | 0.64        | 0.82        | 0.06           | 0.00        | 0.70        | 0.82        |
| 8 Central Fraser Valley      | 0.62        | 0.79        | 0.28        | 0.05        | 0.00        | 0.05        | 0.91        | 0.90        | 0.00           | 0.11        | 0.91        | 1.00        |
| 9 Boundary                   | 0.65        | 0.61        | 0.09        | 0.24        | 0.00        | 0.03        | 0.74        | 0.88        | 0.09           | 0.03        | 0.83        | 0.90        |
| 10 Simon Fraser              | 1.63        | 1.72        | 0.16        | 0.20        | 0.11        | 0.00        | 1.91        | 1.92        | 0.16           | 0.15        | 2.07        | 2.07        |
| 11 Coast Garibaldi           | 0.50        | 0.47        | 0.00        | 0.16        | 0.00        | 0.00        | 0.50        | 0.63        | 0.34           | 0.32        | 0.84        | 0.95        |
| 13 Central Vancouver Island  | 0.93        | 1.06        | 0.41        | 0.39        | 0.00        | 0.05        | 1.34        | 1.50        | 0.26           | 0.39        | 1.60        | 1.89        |
| 14 Upper Island              | 0.41        | 0.49        | 0.21        | 0.49        | 0.00        | 0.00        | 0.62        | 0.98        | 0.31           | 0.00        | 0.93        | 0.98        |
| 15 Cariboo                   | 0.31        | 0.30        | 0.00        | 0.15        | 0.00        | 0.00        | 0.31        | 0.46        | 0.15           | 0.00        | 0.46        | 0.46        |
| 16 Skeena                    | 0.96        | 1.18        | 0.00        | 0.00        | 0.00        | 0.00        | 0.96        | 1.18        | 0.12           | 0.59        | 1.08        | 1.77        |
| 17 Peace River               | 0.00        | 0.17        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.17        | 0.17           | 0.17        | 0.17        | 0.34        |
| 18 Northern Interior         | 0.61        | 0.78        | 0.09        | 0.17        | 0.00        | 0.00        | 0.70        | 0.95        | 0.09           | 0.00        | 0.79        | 0.95        |
| 20 Vancouver                 | 3.91        | 4.10        | 0.75        | 0.83        | 0.06        | 0.06        | 4.73        | 5.00        | 0.42           | 0.26        | 5.15        | 5.26        |
| 30 Burnaby                   | 1.07        | 0.78        | 0.13        | 0.42        | 0.00        | 0.00        | 1.20        | 1.21        | 0.19           | 0.12        | 1.38        | 1.33        |
| 40 North Shore               | 1.33        | 1.40        | 0.51        | 0.61        | 0.00        | 0.06        | 1.83        | 2.06        | 0.63           | 0.61        | 2.46        | 2.67        |
| 50 Richmond                  | 1.18        | 1.89        | 0.32        | 0.53        | 0.08        | 0.00        | 1.58        | 2.42        | 0.16           | 0.15        | 1.74        | 2.57        |
| 60 Capital Regional District | 1.90        | 1.60        | 0.57        | 0.74        | 0.03        | 0.00        | 2.50        | 2.34        | 0.27           | 0.26        | 2.77        | 2.60        |
| <b>TOTAL</b>                 | <b>1.36</b> | <b>1.44</b> | <b>0.33</b> | <b>0.40</b> | <b>0.03</b> | <b>0.02</b> | <b>1.72</b> | <b>1.86</b> | <b>0.20</b>    | <b>0.18</b> | <b>1.92</b> | <b>2.05</b> |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

**Table 1c**  
**Average Annual Rate of Change: Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Membership Category**  
**December 1991 to December 1993**

| Health Region                | Registered                       |                    |                                  |                    | Provisional         |                    | Subtotal            |                    | Non-Practising      |                    | Total               |                    |
|------------------------------|----------------------------------|--------------------|----------------------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Full-Time<br>Number <sup>2</sup> | Ratio <sup>3</sup> | Part-Time<br>Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> | Number <sup>2</sup> | Ratio <sup>3</sup> |
| 1 East Kootenay              | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 2 Central Kootenay           | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 4 North Okanagan             | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 5 South Okanagan             | 10.78                            | 4.93               | *                                | *                  | *                   | *                  | 8.01                | 2.30               | *                   | *                  | 11.06               | 5.18               |
| 6 South Central              | *                                | *                  | *                                | *                  | *                   | *                  | 10.94               | 8.45               | *                   | *                  | 14.35               | 11.79              |
| 7 Upper Fraser Valley        | *                                | *                  | *                                | *                  | *                   | *                  | 18.32               | 13.23              | *                   | *                  | 12.82               | 7.96               |
| 8 Central Fraser Valley      | 16.77                            | 12.52              | *                                | *                  | *                   | *                  | 3.08                | -0.68              | *                   | *                  | 8.97                | 5.00               |
| 9 Boundary                   | 0.00                             | -3.48              | *                                | *                  | *                   | *                  | 12.66               | 8.74               | *                   | *                  | 8.28                | 4.51               |
| 10 Simon Fraser              | 6.46                             | 2.46               | *                                | *                  | *                   | *                  | 4.20                | 0.28               | *                   | *                  | 3.87                | -0.03              |
| 11 Coast Garibaldi           | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 13 Central Vancouver Island  | 10.55                            | 7.06               | *                                | *                  | *                   | *                  | 9.19                | 5.74               | *                   | *                  | 12.16               | 8.62               |
| 14 Upper Island              | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 15 Cariboo                   | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 16 Skeena                    | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 17 Peace River               | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 18 Northern Interior         | *                                | *                  | *                                | *                  | *                   | *                  | *                   | *                  | *                   | *                  | *                   | *                  |
| 20 Vancouver                 | 3.93                             | 2.38               | 6.72                             | 5.13               | *                   | *                  | 4.33                | 2.78               | -19.38              | -20.58             | 2.61                | 1.08               |
| 30 Burnaby                   | -12.55                           | -14.38             | *                                | *                  | *                   | *                  | 2.60                | 0.45               | *                   | *                  | 0.00                | -2.09              |
| 40 North Shore               | 4.65                             | 2.63               | *                                | *                  | *                   | *                  | 8.28                | 6.19               | 0.00                | -1.93              | 6.22                | 4.17               |
| 50 Richmond                  | 29.10                            | 26.28              | *                                | *                  | *                   | *                  | 26.49               | 23.72              | *                   | *                  | 24.32               | 21.60              |
| 60 Capital Regional District | -6.34                            | -8.14              | 16.32                            | 14.09              | *                   | *                  | -1.34               | -3.23              | *                   | *                  | -1.21               | -3.11              |
| <b>TOTAL</b>                 | <b>5.54</b>                      | <b>2.80</b>        | <b>13.04</b>                     | <b>10.11</b>       | <b>-16.33</b>       | <b>-18.51</b>      | <b>6.67</b>         | <b>3.90</b>        | <b>-1.53</b>        | <b>-4.08</b>       | <b>5.84</b>         | <b>3.10</b>        |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> Rate of change (in percent) in the number.

<sup>3</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Age and Sex**  
**December 1993**

| Health Region                | < 25     |           | 25-34     |            | 35-44     |            | 45-54    |            | 55-64    |           | 65 +     |          | Subtotal  |            | Unknown   | Total      |
|------------------------------|----------|-----------|-----------|------------|-----------|------------|----------|------------|----------|-----------|----------|----------|-----------|------------|-----------|------------|
|                              | M        | F         | M         | F          | M         | F          | M        | F          | M        | F         | M        | F        | M         | F          |           |            |
| 1 East Kootenay              | 0        | 0         | 0         | 1          | 0         | 2          | 0        | 1          | 0        | 0         | 0        | 0        | 0         | 4          | 0         | 4          |
| 2 Central Kootenay           | 0        | 0         | 0         | 1          | 0         | 5          | 0        | 0          | 0        | 0         | 0        | 0        | 0         | 6          | 0         | 6          |
| 4 North Okanagan             | 0        | 0         | 1         | 3          | 0         | 3          | 0        | 1          | 0        | 1         | 0        | 0        | 1         | 8          | 1         | 10         |
| 5 South Okanagan             | 0        | 0         | 1         | 10         | 1         | 18         | 0        | 5          | 0        | 2         | 0        | 0        | 2         | 35         | 0         | 37         |
| 6 South Central              | 0        | 1         | 0         | 5          | 0         | 6          | 0        | 4          | 0        | 1         | 0        | 0        | 0         | 17         | 0         | 17         |
| 7 Upper Fraser Valley        | 0        | 0         | 0         | 4          | 1         | 3          | 0        | 4          | 0        | 1         | 0        | 0        | 1         | 12         | 1         | 14         |
| 8 Central Fraser Valley      | 0        | 1         | 0         | 5          | 0         | 7          | 0        | 5          | 0        | 1         | 0        | 0        | 0         | 19         | 0         | 19         |
| 9 Boundary                   | 0        | 0         | 0         | 11         | 0         | 18         | 0        | 4          | 1        | 0         | 0        | 0        | 1         | 33         | 0         | 34         |
| 10 Simon Fraser              | 0        | 2         | 2         | 17         | 1         | 7          | 1        | 7          | 0        | 4         | 0        | 0        | 4         | 37         | 0         | 41         |
| 11 Coast Garibaldi           | 0        | 0         | 0         | 1          | 0         | 4          | 0        | 1          | 0        | 0         | 0        | 0        | 0         | 6          | 0         | 6          |
| 13 Central Vancouver Island  | 0        | 1         | 0         | 16         | 0         | 18         | 0        | 2          | 0        | 1         | 0        | 0        | 0         | 38         | 1         | 39         |
| 14 Upper Island              | 0        | 0         | 0         | 1          | 0         | 5          | 0        | 4          | 0        | 0         | 0        | 0        | 0         | 10         | 0         | 10         |
| 15 Cariboo                   | 0        | 0         | 0         | 2          | 0         | 1          | 0        | 0          | 0        | 0         | 0        | 0        | 0         | 3          | 0         | 3          |
| 16 Skeena                    | 0        | 0         | 0         | 7          | 0         | 6          | 0        | 1          | 0        | 0         | 0        | 0        | 0         | 14         | 1         | 15         |
| 17 Peace River               | 0        | 1         | 0         | 0          | 0         | 0          | 0        | 1          | 0        | 0         | 0        | 0        | 0         | 2          | 0         | 2          |
| 18 Northern Interior         | 0        | 1         | 0         | 3          | 0         | 4          | 1        | 1          | 0        | 0         | 0        | 0        | 1         | 9          | 1         | 11         |
| 20 Vancouver                 | 0        | 9         | 11        | 77         | 3         | 94         | 0        | 41         | 0        | 15        | 0        | 1        | 14        | 237        | 8         | 259        |
| 30 Burnaby                   | 0        | 1         | 0         | 6          | 0         | 11         | 0        | 3          | 0        | 1         | 0        | 0        | 0         | 22         | 0         | 22         |
| 40 North Shore               | 0        | 0         | 0         | 17         | 0         | 15         | 0        | 8          | 0        | 2         | 0        | 0        | 0         | 42         | 2         | 44         |
| 50 Richmond                  | 0        | 1         | 1         | 13         | 3         | 10         | 0        | 4          | 0        | 2         | 0        | 0        | 4         | 30         | 0         | 34         |
| 60 Capital Regional District | 0        | 2         | 3         | 20         | 3         | 23         | 0        | 22         | 0        | 4         | 0        | 3        | 6         | 74         | 1         | 81         |
| <b>TOTAL</b>                 | <b>0</b> | <b>20</b> | <b>19</b> | <b>220</b> | <b>12</b> | <b>260</b> | <b>2</b> | <b>119</b> | <b>1</b> | <b>35</b> | <b>0</b> | <b>4</b> | <b>34</b> | <b>658</b> | <b>16</b> | <b>708</b> |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

**Table 3**  
**Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia**  
**by Health Region by Employment Status**  
**December 1993**

| Health Region                | Employed in Occupational Therapy <sup>2</sup> |            |                  |          |            | Employed in<br>Other Field | Not<br>Employed | On<br>Leave | Unknown   | Total      |
|------------------------------|---|------------|------------------|----------|------------|----------------------------|-----------------|-------------|-----------|------------|
|                              | Full-Time                                     | Part-Time  | Casual/<br>Locum | Unknown  | Subtotal   |                            |                 |             |           |            |
| 1 East Kootenay              | 3   | 0          | 0                | 0        | 3          | 0                          | 0               | 0           | 0         | 3          |
| 2 Central Kootenay           | 3   | 2          | 0                | 0        | 5          | 0                          | 0               | 0           | 0         | 5          |
| 4 North Okanagan             | 6   | 1          | 0                | 0        | 7          | 0                          | 0               | 0           | 1         | 8          |
| 5 South Okanagan             | 24  | 10         | 0                | 0        | 34         | 0                          | 0               | 0           | 1         | 35         |
| 6 South Central              | 12  | 2          | 1                | 0        | 15         | 0                          | 0               | 0           | 1         | 16         |
| 7 Upper Fraser Valley        | 8   | 4          | 0                | 0        | 12         | 0                          | 0               | 2           | 0         | 14         |
| 8 Central Fraser Valley      | 12  | 5          | 0                | 0        | 17         | 0                          | 0               | 0           | 0         | 17         |
| 9 Boundary                   | 14  | 11         | 3                | 0        | 28         | 0                          | 3               | 2           | 0         | 33         |
| 10 Simon Fraser              | 28  | 5          | 1                | 0        | 34         | 1                          | 0               | 1           | 2         | 38         |
| 11 Coast Garibaldi           | 1   | 1          | 0                | 0        | 2          | 0                          | 1               | 0           | 1         | 4          |
| 13 Central Vancouver Island  | 18  | 8          | 3                | 0        | 29         | 0                          | 0               | 0           | 2         | 31         |
| 14 Upper Island              | 7   | 2          | 1                | 0        | 10         | 0                          | 0               | 0           | 0         | 10         |
| 15 Cariboo                   | 1   | 1          | 0                | 0        | 2          | 0                          | 0               | 0           | 1         | 3          |
| 16 Skeena                    | 3   | 5          | 0                | 0        | 8          | 1                          | 0               | 0           | 1         | 10         |
| 17 Peace River               | 1   | 0          | 0                | 0        | 1          | 0                          | 0               | 0           | 0         | 1          |
| 18 Northern Interior         | 9   | 2          | 0                | 0        | 11         | 0                          | 0               | 0           | 0         | 11         |
| 20 Vancouver                 | 153   | 51         | 16               | 1        | 221        | 1                          | 6               | 7           | 11        | 246        |
| 30 Burnaby                   | 13  | 3          | 3                | 0        | 19         | 0                          | 0               | 1           | 0         | 20         |
| 40 North Shore               | 18  | 6          | 2                | 0        | 26         | 0                          | 0               | 4           | 4         | 34         |
| 50 Richmond                  | 20  | 5          | 5                | 1        | 31         | 0                          | 0               | 0           | 1         | 32         |
| 60 Capital Regional District | 40  | 16         | 2                | 1        | 59         | 0                          | 4               | 2           | 8         | 73         |
| <b>TOTAL</b>                 | <b>394</b>                                    | <b>140</b> | <b>37</b>        | <b>3</b> | <b>574</b> | <b>3</b>                   | <b>14</b>       | <b>19</b>   | <b>34</b> | <b>644</b> |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> Includes 21 occupational therapists employed in combined occupational therapy/physiotherapy.

**Table 4**  
**Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1</sup> Employed in Occupational Therapy<sup>2</sup>**  
**in British Columbia by Health Region by Principal Employer**  
**December 1993**

| Health Region                | Hospital   |            |                     |             | Long<br>Term<br>Care <sup>3</sup> | Public<br>Community<br>Health<br>Agency* | Childrens<br>Treatment/<br>Outpatient<br>Centre | Workers'<br>Comp-<br>ensation<br>Board | Voluntary/<br>Non-Profit<br>Agency | School<br>Board/<br>University/<br>College | Private<br>Practice | Other**   | Total      |
|------------------------------|------------|------------|---------------------|-------------|-----------------------------------|--|---|--|------------------------------------|--|---------------------|-----------|------------|
|                              | Acute      | Paediatric | Rehabil-<br>itation | Psychiatric |                                   |  |   |  |                                    |  |                     |           |            |
| 1 East Kootenay              | 2          | 0          | 0                   | 0           | 0                                 | 0  | 0   | 0                                      | 0                                  | 0  | 0                   | 1         | 3          |
| 2 Central Kootenay           | 3          | 0          | 0                   | 0           | 0                                 | 0  | 1   | 0                                      | 0                                  | 1  | 0                   | 0         | 5          |
| 4 North Okanagan             | 4          | 0          | 0                   | 0           | 1                                 | 1  | 0   | 0                                      | 0                                  | 0  | 1                   | 0         | 7          |
| 5 South Okanagan             | 19         | 0          | 2                   | 0           | 3                                 | 3  | 1   | 0                                      | 2                                  | 1  | 3                   | 0         | 34         |
| 6 South Central              | 7          | 0          | 0                   | 0           | 3                                 | 1  | 1   | 0                                      | 1                                  | 0  | 2                   | 0         | 15         |
| 7 Upper Fraser Valley        | 5          | 0          | 0                   | 0           | 2                                 | 2  | 2   | 0                                      | 0                                  | 0  | 1                   | 0         | 12         |
| 8 Central Fraser Valley      | 11         | 0          | 0                   | 0           | 1                                 | 1  | 1   | 0                                      | 0                                  | 1  | 2                   | 0         | 17         |
| 9 Boundary                   | 11         | 0          | 0                   | 0           | 4                                 | 2  | 6   | 0                                      | 0                                  | 0  | 2                   | 3         | 28         |
| 10 Simon Fraser              | 19         | 0          | 0                   | 8           | 3                                 | 3  | 0   | 0                                      | 0                                  | 0  | 0                   | 1         | 34         |
| 11 Coast Garibaldi           | 1          | 0          | 0                   | 1           | 0                                 | 0  | 0   | 0                                      | 0                                  | 0  | 0                   | 0         | 2          |
| 13 Central Vancouver Island  | 14         | 0          | 1                   | 0           | 2                                 | 4  | 5   | 0                                      | 0                                  | 1  | 2                   | 0         | 29         |
| 14 Upper Island              | 6          | 0          | 0                   | 0           | 1                                 | 2  | 0   | 0                                      | 1                                  | 0  | 0                   | 0         | 10         |
| 15 Cariboo                   | 1          | 0          | 0                   | 0           | 0                                 | 1  | 0   | 0                                      | 0                                  | 0  | 0                   | 0         | 2          |
| 16 Skeena                    | 3          | 0          | 0                   | 0           | 1                                 | 1  | 1   | 0                                      | 0                                  | 1  | 1                   | 0         | 8          |
| 17 Peace River               | 0          | 0          | 0                   | 0           | 0                                 | 0  | 1   | 0                                      | 0                                  | 0  | 0                   | 0         | 1          |
| 18 Northern Interior         | 5          | 0          | 0                   | 0           | 0                                 | 1  | 0   | 0                                      | 0                                  | 4  | 1                   | 0         | 11         |
| 20 Vancouver                 | 68         | 14         | 38                  | 5           | 18                                | 32                                       | 6   | 1                                      | 5                                  | 9  | 20                  | 5         | 221        |
| 30 Burnaby                   | 7          | 0          | 0                   | 0           | 3                                 | 8  | 0   | 0                                      | 0                                  | 0  | 1                   | 0         | 19         |
| 40 North Shore               | 15         | 0          | 0                   | 0           | 3                                 | 5  | 0   | 0                                      | 1                                  | 0  | 2                   | 0         | 26         |
| 50 Richmond                  | 7          | 1          | 1                   | 0           | 1                                 | 5  | 0   | 14                                     | 0                                  | 0  | 2                   | 0         | 31         |
| 60 Capital Regional District | 15         | 1          | 9                   | 1           | 8                                 | 7  | 8   | 0                                      | 1                                  | 0  | 6                   | 3         | 59         |
| <b>TOTAL</b>                 | <b>223</b> | <b>16</b>  | <b>51</b>           | <b>15</b>   | <b>54</b>                         | <b>79</b>                                | <b>33</b>                                       | <b>15</b>                              | <b>11</b>                          | <b>18</b>                                  | <b>46</b>           | <b>13</b> | <b>574</b> |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> Excludes 3 occupational therapists who are employed in other fields, 14 who are not employed, 19 who are on leave of absence and 34 who did not indicate their employment status.

<sup>3</sup> Includes 39 occupational therapists employed at extended care hospitals, 5 employed at intermediate care facilities, 8 employed in personal/home care and 2 employed at a centre for the mentally handicapped.

\* Includes 7 occupational therapists employed in adult day care.

\*\* Includes 2 occupational therapists employed in retail business, 1 in an insurance corporation, 4 in other institutions/agencies and 6 who did not supply this information.



**Table 5**  
**Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1</sup> Employed in Occupational Therapy<sup>2</sup>**  
**in British Columbia by Health Region by Principal Area of Service**  
**December 1993**

| Health Region                | Acute<br>Care | Extended<br>Care | Psychiatry |            | Rehabilitation |            | General    | Community | Admin-<br>istration | Research/<br>Teaching | Home<br>Care | Vocational<br>Rehabil-<br>itation | Other <sup>3</sup> | Total |
|------------------------------|---------------|------------------|------------|------------|----------------|------------|------------|-----------|---------------------|-----------------------|--------------|-----------------------------------|--------------------|-------|
|                              | Inpatient     | Inpatient        | Inpatient  | Outpatient | Inpatient      | Outpatient | Outpatient |           |                     |                       |              |                                   |                    |       |
| 1 East Kootenay              | 1             | 0                | 1          | 0          | 0              | 0          | 0          | 0         | 0                   | 0                     | 1            | 0                                 | 0                  | 3     |
| 2 Central Kootenay           | 2             | 0                | 0          | 0          | 1              | 0          | 2          | 0         | 0                   | 0                     | 0            | 0                                 | 0                  | 5     |
| 4 North Okanagan             | 1             | 1                | 1          | 0          | 0              | 0          | 0          | 0         | 2                   | 0                     | 1            | 0                                 | 1                  | 7     |
| 5 South Okanagan             | 7             | 2                | 3          | 1          | 4              | 2          | 6          | 0         | 3                   | 1                     | 2            | 2                                 | 1                  | 34    |
| 6 South Central              | 2             | 2                | 1          | 2          | 1              | 1          | 2          | 1         | 1                   | 0                     | 1            | 1                                 | 0                  | 15    |
| 7 Upper Fraser Valley        | 0             | 1                | 2          | 0          | 2              | 2          | 1          | 1         | 1                   | 0                     | 2            | 0                                 | 0                  | 12    |
| 8 Central Fraser Valley      | 4             | 1                | 2          | 2          | 0              | 1          | 4          | 1         | 1                   | 0                     | 0            | 1                                 | 0                  | 17    |
| 9 Boundary                   | 6             | 5                | 0          | 2          | 2              | 6          | 2          | 0         | 1                   | 1                     | 0            | 0                                 | 3                  | 28    |
| 10 Simon Fraser              | 7             | 0                | 8          | 4          | 4              | 0          | 6          | 1         | 1                   | 0                     | 0            | 0                                 | 3                  | 34    |
| 11 Coast Garibaldi           | 0             | 1                | 0          | 1          | 0              | 0          | 0          | 0         | 0                   | 0                     | 0            | 0                                 | 0                  | 2     |
| 13 Central Vancouver Island  | 4             | 4                | 1          | 2          | 3              | 4          | 3          | 0         | 2                   | 0                     | 2            | 2                                 | 2                  | 29    |
| 14 Upper Island              | 1             | 1                | 1          | 1          | 0              | 0          | 4          | 1         | 0                   | 0                     | 1            | 0                                 | 0                  | 10    |
| 15 Cariboo                   | 0             | 1                | 0          | 0          | 0              | 0          | 0          | 0         | 0                   | 0                     | 1            | 0                                 | 0                  | 2     |
| 16 Skeena                    | 0             | 1                | 0          | 0          | 0              | 1          | 1          | 1         | 1                   | 0                     | 2            | 0                                 | 1                  | 8     |
| 17 Peace River               | 0             | 0                | 0          | 0          | 0              | 0          | 0          | 0         | 0                   | 0                     | 0            | 0                                 | 1                  | 1     |
| 18 Northern Interior         | 1             | 0                | 1          | 0          | 0              | 0          | 4          | 2         | 1                   | 0                     | 1            | 0                                 | 1                  | 11    |
| 20 Vancouver                 | 46            | 17               | 14         | 15         | 34             | 16         | 5          | 6         | 14                  | 11                    | 20           | 10                                | 13                 | 221   |
| 30 Burnaby                   | 3             | 2                | 0          | 5          | 3              | 0          | 2          | 2         | 1                   | 0                     | 1            | 0                                 | 0                  | 19    |
| 40 North Shore               | 1             | 3                | 2          | 6          | 4              | 3          | 2          | 0         | 0                   | 0                     | 3            | 0                                 | 2                  | 26    |
| 50 Richmond                  | 2             | 3                | 0          | 1          | 0              | 5          | 3          | 1         | 4                   | 0                     | 5            | 5                                 | 2                  | 31    |
| 60 Capital Regional District | 7             | 6                | 6          | 2          | 5              | 11         | 7          | 2         | 3                   | 0                     | 6            | 2                                 | 2                  | 59    |
| TOTAL                        | 95            | 51               | 43         | 44         | 63             | 52         | 54         | 19        | 36                  | 13                    | 49           | 23                                | 32                 | 574   |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> Excludes 3 occupational therapists who are employed in other fields, 14 who are not employed, 19 who are on leave of absence and 34 who did not indicate their employment status.

<sup>3</sup> Includes 17 occupational therapists who did not supply this information.

**Table 6**  
**Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1</sup> Employed in Occupational Therapy<sup>2</sup>**  
**in British Columbia by Health Region by Principal Position**  
**December 1993**

| Health Region                | Staff<br>Therapist | Senior<br>Therapist | Sole<br>Charge | Dept. Head/<br>Assistant<br>Dept. Head <sup>3</sup> | Clinical<br>Coordinator | Program<br>Coordinator/<br>Director | Faculty<br>Position/<br>Researcher* | Consultant | Clinical<br>Specialist | Other**   | Total      |
|------------------------------|--------------------|---------------------|----------------|---|-------------------------|-------------------------------------|-------------------------------------|------------|------------------------|-----------|------------|
| 1 East Kootenay              | 1                  | 0                   | 1              | 1   | 0                       | 0                                   | 0                                   | 0          | 0                      | 0         | 3          |
| 2 Central Kootenay           | 2                  | 1                   | 2              | 0   | 0                       | 0                                   | 0                                   | 0          | 0                      | 0         | 5          |
| 4 North Okanagan             | 3                  | 0                   | 2              | 1   | 0                       | 1                                   | 0                                   | 0          | 0                      | 0         | 7          |
| 5 South Okanagan             | 17                 | 6                   | 3              | 4   | 0                       | 1                                   | 0                                   | 2          | 0                      | 1         | 34         |
| 6 South Central              | 7                  | 1                   | 2              | 3   | 0                       | 0                                   | 0                                   | 2          | 0                      | 0         | 15         |
| 7 Upper Fraser Valley        | 5                  | 1                   | 3              | 2   | 0                       | 0                                   | 0                                   | 0          | 1                      | 0         | 12         |
| 8 Central Fraser Valley      | 7                  | 3                   | 2              | 3   | 0                       | 0                                   | 0                                   | 2          | 0                      | 0         | 17         |
| 9 Boundary                   | 12                 | 2                   | 2              | 4   | 0                       | 2                                   | 0                                   | 4          | 0                      | 2         | 28         |
| 10 Simon Fraser              | 18                 | 9                   | 2              | 3   | 0                       | 0                                   | 0                                   | 2          | 0                      | 0         | 34         |
| 11 Coast Garibaldi           | 0                  | 0                   | 1              | 0   | 0                       | 1                                   | 0                                   | 0          | 0                      | 0         | 2          |
| 13 Central Vancouver Island  | 16                 | 5                   | 1              | 2   | 0                       | 1                                   | 0                                   | 2          | 0                      | 2         | 29         |
| 14 Upper Island              | 0                  | 0                   | 6              | 2   | 0                       | 2                                   | 0                                   | 0          | 0                      | 0         | 10         |
| 15 Cariboo                   | 0                  | 0                   | 2              | 0   | 0                       | 0                                   | 0                                   | 0          | 0                      | 0         | 2          |
| 16 Skeena                    | 2                  | 0                   | 4              | 1   | 0                       | 0                                   | 0                                   | 1          | 0                      | 0         | 8          |
| 17 Peace River               | 1                  | 0                   | 0              | 0   | 0                       | 0                                   | 0                                   | 0          | 0                      | 0         | 1          |
| 18 Northern Interior         | 6                  | 1                   | 0              | 1   | 0                       | 0                                   | 0                                   | 3          | 0                      | 0         | 11         |
| 20 Vancouver                 | 115                | 38                  | 6              | 8   | 4                       | 6                                   | 10                                  | 22         | 8                      | 4         | 221        |
| 30 Burnaby                   | 12                 | 3                   | 1              | 0   | 0                       | 1                                   | 0                                   | 2          | 0                      | 0         | 19         |
| 40 North Shore               | 14                 | 6                   | 0              | 2   | 0                       | 0                                   | 0                                   | 2          | 2                      | 0         | 26         |
| 50 Richmond                  | 24                 | 2                   | 0              | 1   | 1                       | 1                                   | 0                                   | 2          | 0                      | 0         | 31         |
| 60 Capital Regional District | 35                 | 6                   | 1              | 3   | 1                       | 4                                   | 0                                   | 3          | 2                      | 4         | 59         |
| <b>TOTAL</b>                 | <b>297</b>         | <b>84</b>           | <b>41</b>      | <b>41</b>   | <b>6</b>                | <b>20</b>                           | <b>10</b>                           | <b>49</b>  | <b>13</b>              | <b>13</b> | <b>574</b> |

<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> Excludes 3 occupational therapists who are employed in other fields, 14 who are not employed, 19 who are on leave of absence and 34 who did not indicate their employment status.

<sup>3</sup> Includes 39 occupational therapists employed as department head and 2 employed as assistant department head.

\* Includes 8 occupational therapists employed in faculty positions and 2 employed in research positions.

\*\* Includes 2 occupational therapists who did not supply this information.

**Table 7**  
**Analysis of Change in the Number of Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1</sup>**  
**in British Columbia by Health Region**  
**December 1991 to December 1993**

| Health Region                | December 1991 <sup>3</sup> | New Registrants <sup>2</sup> by Place of Graduation |              |               |          |           | Reactivation* | Attrition** | Net Intra-provincial Migration | December 1993 |
|------------------------------|----------------------------|---|--------------|---------------|----------|-----------|---------------|-------------|--------------------------------|---------------|
|                              |                            | B.C.  | Other Canada | Other Country | Unknown  | Subtotal  |               |             |                                |               |
| 1 East Kootenay              | 3                          | 0   | 0            | 0             | 0        | 0         | 0             | 0           | 0                              | 3             |
| 2 Central Kootenay           | 7                          | 0   | 0            | 0             | 0        | 0         | 0             | 2           | 0                              | 5             |
| 4 North Okanagan             | 4                          | 0   | 1            | 0             | 0        | 1         | 3             | 0           | 0                              | 8             |
| 5 South Okanagan             | 30                         | 0   | 2            | 1             | 1        | 4         | 2             | 1           | 0                              | 35            |
| 6 South Central              | 13                         | 0   | 1            | 2             | 0        | 3         | 2             | 3           | 1                              | 16            |
| 7 Upper Fraser Valley        | 10                         | 0   | 1            | 1             | 1        | 3         | 0             | 1           | 2                              | 14            |
| 8 Central Fraser Valley      | 16                         | 0   | 2            | 2             | 0        | 4         | 2             | 2           | -3                             | 17            |
| 9 Boundary                   | 26                         | 0   | 1            | 1             | 0        | 2         | 5             | 3           | 3                              | 33            |
| 10 Simon Fraser              | 35                         | 4   | 2            | 0             | 0        | 6         | 5             | 6           | -2                             | 38            |
| 11 Coast Garibaldi           | 3                          | 0   | 0            | 1             | 0        | 1         | 0             | 1           | 1                              | 4             |
| 13 Central Vancouver Island  | 26                         | 0   | 3            | 0             | 0        | 3         | 5             | 6           | 3                              | 31            |
| 14 Upper Island              | 6                          | 0   | 0            | 0             | 0        | 0         | 3             | 1           | 2                              | 10            |
| 15 Cariboo                   | 2                          | 1   | 1            | 0             | 0        | 2         | 0             | 0           | -1                             | 3             |
| 16 Skeena                    | 8                          | 0   | 1            | 0             | 0        | 1         | 3             | 2           | 0                              | 10            |
| 17 Peace River               | 0                          | 0   | 1            | 0             | 0        | 1         | 0             | 0           | 0                              | 1             |
| 18 Northern Interior         | 8                          | 0   | 1            | 0             | 0        | 1         | 2             | 1           | 1                              | 11            |
| 20 Vancouver                 | 226                        | 12  | 13           | 8             | 5        | 38        | 23            | 33          | -8                             | 246           |
| 30 Burnaby                   | 19                         | 0   | 0            | 0             | 0        | 0         | 1             | 1           | 1                              | 20            |
| 40 North Shore               | 29                         | 0   | 3            | 1             | 2        | 6         | 5             | 6           | 0                              | 34            |
| 50 Richmond                  | 20                         | 5   | 1            | 1             | 0        | 7         | 4             | 0           | 1                              | 32            |
| 60 Capital Regional District | 75                         | 3   | 7            | 5             | 0        | 15        | 3             | 19          | -1                             | 73            |
| <b>TOTAL</b>                 | <b>566</b>                 | <b>25</b>   | <b>41</b>    | <b>23</b>     | <b>9</b> | <b>98</b> | <b>68</b>     | <b>88</b>   | <b>0</b>                       | <b>644</b>    |

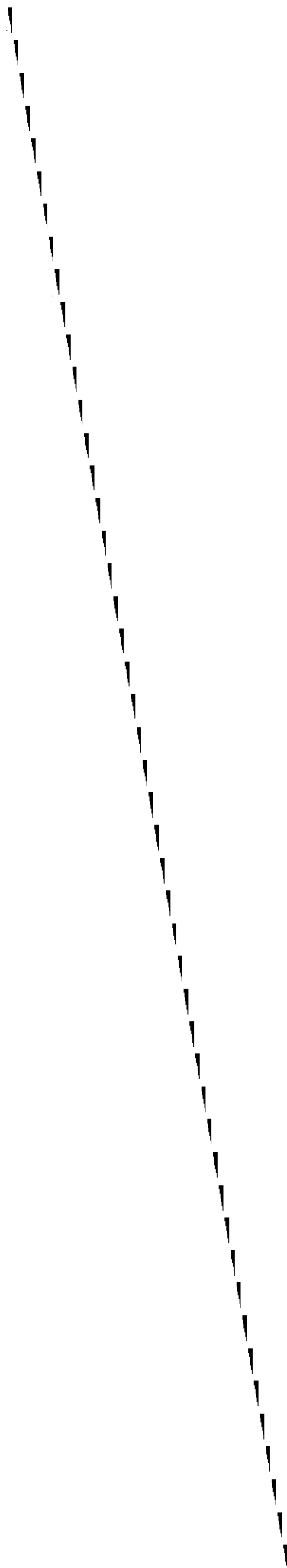
<sup>1</sup> Membership in the B.C. Society of Occupational Therapists (BCSOT) is voluntary.

<sup>2</sup> Occupational therapists who reported B.C. addresses and were registered or provisional members in December 1993 and whose date of initial registration was after December 1991.

<sup>3</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 1 occupational therapist whose employment address was outside B.C.

\* Occupational therapists who reported B.C. addresses and were registered or provisional members in December 1993 but not in December 1991 and who were registered for the first time before December 1991.

\*\* Occupational therapists who reported B.C. addresses and were practising or provisional members in December 1991 but not in December 1993.



## PHYSIOTHERAPISTS

**Definition:** A physiotherapist

...provides physical, diagnostic, and rehabilitative services to patients with physical dysfunctions caused by trauma, congenital abnormality, disease, surgery, obstetrical and gynaecological conditions, and ageing processes, to restore and/or achieve optimal function.

Physiotherapists perform some or all of the following duties:

- (a) administer tests and examine, observe, and take a full history of patients to determine condition and status;
- (b) develop, plan, co-ordinate, monitor, and adjust a rehabilitation treatment program appropriate to a condition to achieve objectives, either on an individual or group basis;
- (c) provide consultation to physicians, dentists, and other health professionals, teachers, or others appropriate to the case;
- (d) instruct, advise, and co-ordinate programs of remedial modalities for continuation of treatment;
- (e) recommend referral to other health centres, clinics, or treatment facilities as appropriate;
- (f) provide consultation and direction to nurses, aides, and activity workers to assist in their methods of handling the patient;
- (g) advise, teach, counsel, and educate the patient, his/her family, and/or care-givers on correct positions, aids, methods, and means of movement for the affected part or the body as a whole;
- (h) conduct screening and other health promotion methods to facilitate physical health and prevent the premature dysfunction of the body;
- (i) conduct research projects relating to any of the above to advance the state of knowledge in this field.<sup>1</sup>

**Governing Statute:** Physiotherapists Act, Revised Statutes of British Columbia, 1979, Chapter 327; Health Professions Amendment Act, 1989, Chapter 29, Sections 9-16; Health Professions Statutes Amendment Act, 1993, Chapter 50, Sections 51-54; administered by the Ministry of Health.

**Governing Body:** Association of Physiotherapists and Massage Practitioners of British Columbia (APMPBC). In order to practise as a physiotherapist in British Columbia, it is necessary to be registered by the APMPBC.

**Date of Record:** December 1991 and December 1993.

**Source of Data:** Association of Physiotherapists and Massage Practitioners of British Columbia (APMPBC).

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<sup>1</sup>Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3142, Ottawa: Employment and Immigration Canada.

## Preparation and Updating:

The tables, prepared from registration data maintained by the APMPBC, include physiotherapists who reported a British Columbia address at the date of record. Physiotherapists who also hold membership in the British Columbia Society of Occupational Therapists (BCSOT) are included in both the physiotherapy and occupational therapy sections of *ROLLCALL 93*. The exact number of personnel who are both registered with the APMPBC and members of the BCSOT is not known due to the unavailability of that data from the APMPBC, so the extent of double-counting of personnel in these two groups can not be determined.

The data in the tables are presented based on employment address when the membership status is "full" or "temporary", when employment in physiotherapy is reported, and when employment address is available. In both 1991 and 1993, employment address was available for 95% of full or temporary registrant physiotherapists employed in physiotherapy. Home address is used for the remainder, as well as for physiotherapists with full or temporary registrant status who are not employed in physiotherapy, and for physiotherapists with inactive registrant status.

## Definition of Terms:

### 1. Registration Category

In the APMPBC, a physiotherapist may be a Full Registrant - Part I (formerly a chartered member), a Full Registrant - Part II (formerly a registered member), a Temporary Registrant, or an Inactive Registrant. Full Registrants - Part II differ from Full Registrants - Part I in that Part I Registrants may not practise except under the supervision of a medical practitioner.<sup>2</sup> A physiotherapist may work under a temporary membership until his or her registration can be completed. Remedial gymnasts may also register as members of the APMPBC, but are not included in the tables. Numbers of physiotherapists in each registration category, numbers per 10,000, and average annual rates of change in these numbers are shown in Tables 1a, 1b, and 1c.

### 2. Age and Sex

Age and sex information for physiotherapists, derived from the registration database of the APMPBC, is shown in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### 3. Employment Status

Employment status as reported on the APMPBC registration renewal form for full and temporary registrants is reported in Table 3. The following categories are used:

- (a) Employed in Physiotherapy;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) Casual/Locum
  - (iv) Employed in Physiotherapy - status unknown

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<sup>2</sup> Physiotherapists Act, 1979, RSBC Chap. 327, Part I, S.8.

- (b) Employed in Other Field;
- (c) Not Employed.

#### 4. Principal Employing Institution

Table 4 displays principal employing institution for full and temporary registrants employed in physiotherapy as reported on the APMPBC registration renewal form. The APMPBC made significant changes to this category on its registration renewal form between 1991 and 1993. The categories that were altered are listed below as they appeared in 1991 and 1993.

##### 1991

Acute Care Hospital  
Rehabilitation Hospital  
Continuing Care (Home/Long Term Care)

Children's Hospital  
Psychiatric Hospital  
Centre for Mentally Handicapped

##### 1993

General Hospital  
Rehab. Hospital/Facility  
Long Term Care  
Homecare Program  
Paediatric Hospital/Facility  
Psychiatric Hospital/Facility  
Facility for Mentally Handicapped

In addition, the categories "'Non-Profit Agency (ie. CARS)", "Diagnostic & Treatment Centre", and "Extended Care" were dropped from the 1991 form, and the categories "Arthritis Society", "Other Visiting Agencies", "Retail", and "Government/Official Agency" were added to the 1993 form. The full list of categories used in 1993 was:

- (a) General Hospital;
- (b) Rehabilitation Hospital/Facility;
- (c) Long Term Care;
- (d) Industry;
- (e) Workers' Compensation Board;
- (f) Community Health Centre;
- (g) Homecare Program;
- (h) Arthritis Society;
- (i) Other Visiting Agencies;
- (j) Paediatric Hospital/Facility;
- (k) Psychiatric Hospital/Facility;
- (l) Private Practice;
- (m) Facility for Mentally Handicapped;
- (n) Retail;
- (o) Government/Official Agency;
- (p) School Board;
- (q) University/College;
- (r) Other.

Some of these categories are combined in Table 4 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## 5. Principal Employment Activity

Principal employment activity related and not related to patient care as reported on the APMPBC registration renewal form for full and temporary registrants employed in physiotherapy is shown in Table 5. The APMPBC made significant changes to this category on its registration renewal form between 1991 and 1993. The altered categories, as they appeared in 1991 and 1993, are as follows:

### 1991

Geriatrics  
Burns & Plastics  
  
Cardio-respiratory  
  
Palliative Chronic Care  
Psychiatric  
Mentally Handicapped

### 1993

Gerontology  
Burns  
Plastics  
Cardiology  
Respirology  
Palliative Care  
Psychiatry/Mentally Handicapped

In addition, the categories "Intensive Care", "Paediatrics", and "Rehabilitation" have been dropped from the 1993 form, and the categories "Amputees" and "Obstetrics and Gynecology" have been added to the 1993 form. The full list of categories used in 1993 was:

- (a) Not Involved in Patient Care;
- (b) Amputees;
- (c) Cardiology;
- (c) Neurology;
- (e) Orthopaedics;
- (f) Plastics;
- (g) Palliative Care;
- (h) Psychiatry/Mentally Handicapped;
- (i) Prevention/Health Promotion;
- (j) Respirology;
- (k) Rheumatology;
- (l) Burns;
- (m) Sports Medicine;
- (n) Gerontology;
- (o) Obstetrics/Gynaecology;
- (p) General;
- (q) Administration;
- (r) Teaching;
- (s) Sales;
- (t) Consulting;
- (u) Research;
- (v) Other.

Some of these categories are combined in Table 5 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.



## 6. Principal Type of Position

Principal type of position as reported on the APMPBC registration renewal form by full and temporary registrants employed in physiotherapy is reported in Table 6. The APMPBC categories used by physiotherapists were:

- (a) Staff Therapist;
- (b) Sole Charge;
- (c) Program Co-ordinator;
- (d) Senior Therapist;
- (e) Clinical Instructor;
- (f) Research Therapist;
- (g) Director;
- (h) Assistant Director;
- (i) Consultant;
- (j) Owner/Partner - Private Practice;
- (k) Associate - Private Practice;
- (l) Other.

Some of these categories are combined in Table 6 when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

## 7. Analysis of Change

Table 7 illustrates sources of change which affected the stock of physiotherapists who were full or temporary registrants from 1991 to 1993.

*New registrants* include physiotherapists who were Full or Temporary Registrants as of December 1993 and who registered with the APMPBC *for the first time* subsequent to December 1991. New registrants are recorded according to their place of graduation, i.e., from British Columbia, Other Canada, or Other Country. Excluded from the table are new registrants who reported out-of-province addresses.

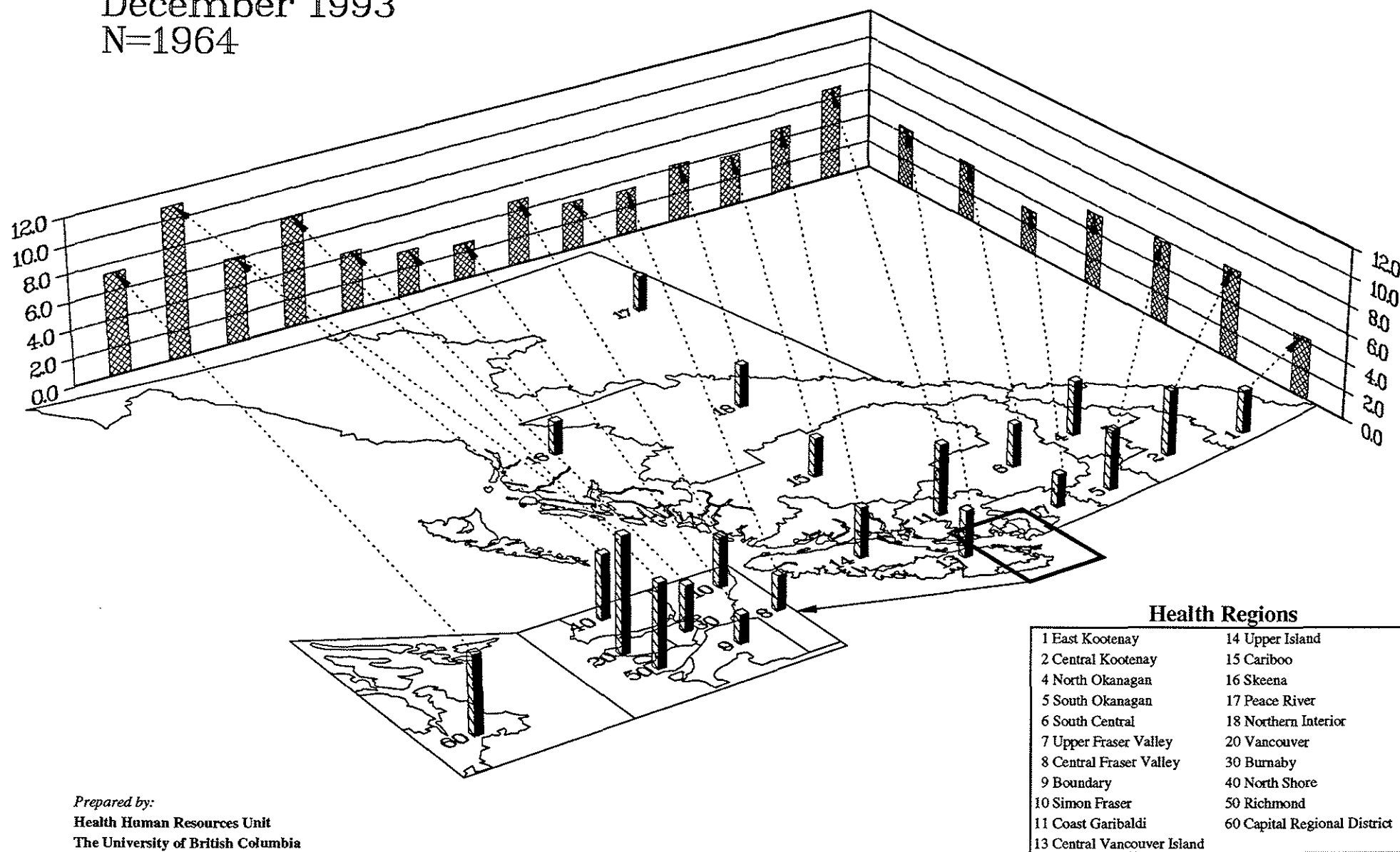
*Reactivations* represent physiotherapists who were neither full nor temporary registrants with the APMPBC in December 1991, but were full or temporary registrants in the province in December 1993, and whose date of initial registration was before December 1991. Also included as reactivations are full and temporary registrants of the APMPBC who reported out-of-province addresses in December 1991, but who reported British Columbia addresses in December 1993.

*Attrition* describes physiotherapists who were full or temporary registrants in the APMPBC and were included in the 1991 physiotherapist stock, but who, because of death, retirement, out-of-province relocation, or non-renewal of active registration, were not included in the 1993 stock.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of physiotherapists among different Health Regions. The net migration total is therefore zero.

# Physiotherapists (Full and Temporary Registrants) per 10,000 Population by Health Region December 1993 N=1964

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Prepared by:  
 Health Human Resources Unit  
 The University of British Columbia

**Table 1a**  
**Physiotherapists in British Columbia**  
**by Health Region by Registration Category**  
**December 1991<sup>1</sup> and December 1993**

| Health Region                | Full Registrants |              |            |            | Temporary Registrants |           | Subtotal     |              | Inactive Registrants |           | Total        |              |
|------------------------------|------------------|--------------|------------|------------|-----------------------|-----------|--------------|--------------|----------------------|-----------|--------------|--------------|
|                              | Part I           |              | Part II    |            | 1991                  | 1993      | 1991         | 1993         | 1991 <sup>2</sup>    | 1993      | 1991         | 1993         |
|                              | 1991             | 1993         | 1991       | 1993       |                       |           |              |              |                      |           |              |              |
| 1 East Kootenay              | 22               | 23           | 4          | 6          | 2                     | 1         | 28           | 30           | 0                    | 1         | 28           | 31           |
| 2 Central Kootenay           | 30               | 28           | 10         | 20         | 3                     | 0         | 43           | 48           | 0                    | 0         | 43           | 48           |
| 4 North Okanagan             | 31               | 30           | 15         | 25         | 2                     | 1         | 48           | 56           | 1                    | 2         | 49           | 58           |
| 5 South Okanagan             | 59               | 56           | 34         | 60         | 5                     | 0         | 98           | 116          | 1                    | 0         | 99           | 116          |
| 6 South Central              | 33               | 24           | 9          | 22         | 3                     | 2         | 45           | 48           | 0                    | 1         | 45           | 49           |
| 7 Upper Fraser Valley        | 30               | 31           | 8          | 21         | 4                     | 2         | 42           | 54           | 0                    | 1         | 42           | 55           |
| 8 Central Fraser Valley      | 44               | 39           | 10         | 23         | 4                     | 1         | 58           | 63           | 2                    | 1         | 60           | 64           |
| 9 Boundary                   | 76               | 59           | 28         | 42         | 2                     | 1         | 106          | 102          | 0                    | 0         | 106          | 102          |
| 10 Simon Fraser              | 65               | 54           | 27         | 40         | 4                     | 1         | 96           | 95           | 3                    | 0         | 99           | 95           |
| 11 Coast Garibaldi           | 21               | 12           | 15         | 30         | 3                     | 1         | 39           | 43           | 1                    | 0         | 40           | 43           |
| 13 Central Vancouver Island  | 48               | 41           | 33         | 50         | 6                     | 1         | 87           | 92           | 1                    | 1         | 88           | 93           |
| 14 Upper Island              | 22               | 24           | 15         | 25         | 1                     | 0         | 38           | 49           | 1                    | 1         | 39           | 50           |
| 15 Cariboo                   | 14               | 16           | 4          | 9          | 4                     | 0         | 22           | 25           | 0                    | 1         | 22           | 26           |
| 16 Skeena                    | 16               | 15           | 3          | 13         | 1                     | 0         | 20           | 28           | 1                    | 2         | 21           | 30           |
| 17 Peace River               | 11               | 11           | 2          | 8          | 7                     | 2         | 20           | 21           | 1                    | 1         | 21           | 22           |
| 18 Northern Interior         | 22               | 24           | 8          | 23         | 3                     | 2         | 33           | 49           | 1                    | 0         | 34           | 49           |
| 20 Vancouver                 | 358              | 317          | 130        | 214        | 28                    | 8         | 516          | 539          | 18                   | 7         | 534          | 546          |
| 30 Burnaby                   | 34               | 28           | 24         | 42         | 2                     | 2         | 60           | 72           | 2                    | 0         | 62           | 72           |
| 40 North Shore               | 53               | 44           | 41         | 56         | 5                     | 1         | 99           | 101          | 2                    | 1         | 101          | 102          |
| 50 Richmond                  | 61               | 60           | 29         | 42         | 4                     | 3         | 94           | 105          | 1                    | 0         | 95           | 105          |
| 60 Capital Regional District | 136              | 126          | 70         | 98         | 3                     | 4         | 209          | 228          | 3                    | 3         | 212          | 231          |
| <b>TOTAL</b>                 | <b>1,186</b>     | <b>1,062</b> | <b>519</b> | <b>869</b> | <b>96</b>             | <b>33</b> | <b>1,801</b> | <b>1,964</b> | <b>39</b>            | <b>23</b> | <b>1,840</b> | <b>1,987</b> |

<sup>1</sup> The total figures for 1991 differ from the corresponding figures for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 8 full registrants and 1 temporary registrant whose employment addresses were outside B.C.

Please note: Temporary registrants and inactive registrants were not included in ROLLCALL 91.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL UPDATE 92 because of an error in the method of calculation used for ROLLCALL UPDATE 92.

**Table 1b**  
**Physiotherapists in British Columbia**  
**per 10,000 Population by Health Region by Registration Category**  
**December 1991 and December 1993**

| Health Region                | Full Registrants |             |             |             | Temporary Registrants |             | Subtotal    |             | Inactive Registrants |             | Total       |             |
|------------------------------|------------------|-------------|-------------|-------------|-----------------------|-------------|-------------|-------------|----------------------|-------------|-------------|-------------|
|                              | Part I           |             | Part II     |             | 1991                  | 1993        | 1991        | 1993        | 1991                 | 1993        | 1991        | 1993        |
|                              | 1991             | 1993        | 1991        | 1993        |                       |             |             |             |                      |             |             |             |
| 1 East Kootenay              | 3.16             | 3.26        | 0.58        | 0.85        | 0.29                  | 0.14        | 4.03        | 4.25        | 0.00                 | 0.14        | 4.03        | 4.39        |
| 2 Central Kootenay           | 4.17             | 3.76        | 1.39        | 2.68        | 0.42                  | 0.00        | 5.98        | 6.44        | 0.00                 | 0.00        | 5.98        | 6.44        |
| 4 North Okanagan             | 3.21             | 2.87        | 1.55        | 2.39        | 0.21                  | 0.10        | 4.97        | 5.36        | 0.10                 | 0.19        | 5.07        | 5.55        |
| 5 South Okanagan             | 3.30             | 2.81        | 1.90        | 3.01        | 0.28                  | 0.00        | 5.49        | 5.83        | 0.06                 | 0.00        | 5.54        | 5.83        |
| 6 South Central              | 3.03             | 2.11        | 0.83        | 1.93        | 0.28                  | 0.18        | 4.13        | 4.21        | 0.00                 | 0.09        | 4.13        | 4.30        |
| 7 Upper Fraser Valley        | 1.92             | 1.82        | 0.51        | 1.23        | 0.26                  | 0.12        | 2.69        | 3.17        | 0.00                 | 0.06        | 2.69        | 3.23        |
| 8 Central Fraser Valley      | 2.50             | 2.05        | 0.57        | 1.21        | 0.23                  | 0.05        | 3.29        | 3.32        | 0.11                 | 0.05        | 3.40        | 3.37        |
| 9 Boundary                   | 2.16             | 1.56        | 0.80        | 1.11        | 0.06                  | 0.03        | 3.02        | 2.70        | 0.00                 | 0.00        | 3.02        | 2.70        |
| 10 Simon Fraser              | 3.54             | 2.73        | 1.47        | 2.02        | 0.22                  | 0.05        | 5.23        | 4.79        | 0.16                 | 0.00        | 5.39        | 4.79        |
| 11 Coast Garibaldi           | 3.52             | 1.90        | 2.51        | 4.75        | 0.50                  | 0.16        | 6.54        | 6.81        | 0.17                 | 0.00        | 6.70        | 6.81        |
| 13 Central Vancouver Island  | 2.47             | 1.98        | 1.70        | 2.42        | 0.31                  | 0.05        | 4.49        | 4.45        | 0.05                 | 0.05        | 4.54        | 4.50        |
| 14 Upper Island              | 2.27             | 2.35        | 1.55        | 2.45        | 0.10                  | 0.00        | 3.93        | 4.80        | 0.10                 | 0.10        | 4.03        | 4.89        |
| 15 Cariboo                   | 2.16             | 2.43        | 0.62        | 1.37        | 0.62                  | 0.00        | 3.40        | 3.80        | 0.00                 | 0.15        | 3.40        | 3.95        |
| 16 Skeena                    | 1.93             | 1.77        | 0.36        | 1.54        | 0.12                  | 0.00        | 2.41        | 3.31        | 0.12                 | 0.24        | 2.53        | 3.55        |
| 17 Peace River               | 1.88             | 1.87        | 0.34        | 1.36        | 1.20                  | 0.34        | 3.42        | 3.56        | 0.17                 | 0.17        | 3.59        | 3.73        |
| 18 Northern Interior         | 1.93             | 2.07        | 0.70        | 1.99        | 0.26                  | 0.17        | 2.90        | 4.23        | 0.09                 | 0.00        | 2.99        | 4.23        |
| 20 Vancouver                 | 7.49             | 6.44        | 2.72        | 4.35        | 0.59                  | 0.16        | 10.80       | 10.95       | 0.38                 | 0.14        | 11.18       | 11.09       |
| 30 Burnaby                   | 2.14             | 1.69        | 1.51        | 2.53        | 0.13                  | 0.12        | 3.78        | 4.34        | 0.13                 | 0.00        | 3.90        | 4.34        |
| 40 North Shore               | 3.35             | 2.67        | 2.59        | 3.40        | 0.32                  | 0.06        | 6.25        | 6.13        | 0.13                 | 0.06        | 6.38        | 6.19        |
| 50 Richmond                  | 4.82             | 4.53        | 2.29        | 3.17        | 0.32                  | 0.23        | 7.42        | 7.93        | 0.08                 | 0.00        | 7.50        | 7.93        |
| 60 Capital Regional District | 4.54             | 4.04        | 2.34        | 3.15        | 0.10                  | 0.13        | 6.97        | 7.32        | 0.10                 | 0.10        | 7.07        | 7.41        |
| <b>TOTAL</b>                 | <b>3.61</b>      | <b>3.07</b> | <b>1.58</b> | <b>2.51</b> | <b>0.29</b>           | <b>0.10</b> | <b>5.48</b> | <b>5.67</b> | <b>0.12</b>          | <b>0.07</b> | <b>5.60</b> | <b>5.74</b> |

**Table 1c**  
**Average Annual Rate of Change: Physiotherapists in British Columbia**  
**by Health Region by Registration Category**  
**December 1991 to December 1993**

| Health Region                | Full Registrants              |                    |                                |                    | Temporary Registrants |                    | Subtotal            |                    | Inactive Registrants |                    | Total               |                    |
|------------------------------|-------------------------------|--------------------|--------------------------------|--------------------|-----------------------|--------------------|---------------------|--------------------|----------------------|--------------------|---------------------|--------------------|
|                              | Part I<br>Number <sup>1</sup> | Ratio <sup>2</sup> | Part II<br>Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup>   | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup>  | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | 2.25                          | 1.51               | *                              | *                  | *                     | *                  | 3.51                | 2.76               | *                    | *                  | 5.22                | 4.46               |
| 2 Central Kootenay           | -3.39                         | -5.08              | 41.42                          | 38.95              | *                     | *                  | 5.65                | 3.80               | *                    | *                  | 5.65                | 3.80               |
| 4 North Okanagan             | -1.63                         | -5.41              | 29.10                          | 24.13              | *                     | *                  | 8.01                | 3.86               | *                    | *                  | 8.80                | 4.61               |
| 5 South Okanagan             | -2.58                         | -7.73              | 32.84                          | 25.82              | *                     | *                  | 8.80                | 3.05               | *                    | *                  | 8.25                | 2.52               |
| 6 South Central              | -14.72                        | -16.63             | *                              | *                  | *                     | *                  | 3.28                | 0.96               | *                    | *                  | 4.35                | 2.01               |
| 7 Upper Fraser Valley        | 1.65                          | -2.72              | *                              | *                  | *                     | *                  | 13.39               | 8.51               | *                    | *                  | 14.43               | 9.51               |
| 8 Central Fraser Valley      | -5.85                         | -9.29              | 51.66                          | 46.13              | *                     | *                  | 4.22                | 0.42               | *                    | *                  | 3.28                | -0.49              |
| 9 Boundary                   | -11.89                        | -14.96             | 22.47                          | 18.21              | *                     | *                  | -1.90               | -5.32              | *                    | *                  | -1.90               | -5.32              |
| 10 Simon Fraser              | -8.85                         | -12.28             | 21.72                          | 17.14              | *                     | *                  | -0.52               | -4.26              | *                    | *                  | -2.04               | -5.72              |
| 11 Coast Garibaldi           | -24.41                        | -26.54             | 41.42                          | 37.42              | *                     | *                  | 5.00                | 2.03               | *                    | *                  | 3.68                | 0.75               |
| 13 Central Vancouver Island  | -7.58                         | -10.50             | 23.09                          | 19.20              | *                     | *                  | 2.83                | -0.42              | *                    | *                  | 2.80                | -0.45              |
| 14 Upper Island              | 4.45                          | 1.66               | 29.10                          | 25.66              | *                     | *                  | 13.55               | 10.53              | *                    | *                  | 13.23               | 10.21              |
| 15 Cariboo                   | 6.90                          | 6.06               | *                              | *                  | *                     | *                  | 6.60                | 5.76               | *                    | *                  | 8.71                | 7.86               |
| 16 Skeena                    | -3.18                         | -4.09              | *                              | *                  | *                     | *                  | 18.32               | 17.21              | *                    | *                  | 19.52               | 18.40              |
| 17 Peace River               | 0.00                          | -0.39              | *                              | *                  | *                     | *                  | 2.47                | 2.07               | *                    | *                  | 2.35                | 1.95               |
| 18 Northern Interior         | 4.45                          | 3.61               | *                              | *                  | *                     | *                  | 21.85               | 20.87              | *                    | *                  | 20.05               | 19.08              |
| 20 Vancouver                 | -5.90                         | -7.30              | 28.30                          | 26.39              | -46.55                | -47.34             | 2.20                | 0.68               | -37.64               | -38.57             | 1.12                | -0.39              |
| 30 Burnaby                   | -9.25                         | -11.15             | 32.29                          | 29.52              | *                     | *                  | 9.54                | 7.25               | *                    | *                  | 7.76                | 5.51               |
| 40 North Shore               | -8.89                         | -10.65             | 16.87                          | 14.61              | *                     | *                  | 1.01                | -0.95              | *                    | *                  | 0.49                | -1.45              |
| 50 Richmond                  | -0.82                         | -2.99              | 20.34                          | 17.71              | *                     | *                  | 5.69                | 3.38               | *                    | *                  | 5.13                | 2.83               |
| 60 Capital Regional District | -3.75                         | -5.59              | 18.32                          | 16.05              | *                     | *                  | 4.45                | 2.44               | *                    | *                  | 4.38                | 2.38               |
| <b>TOTAL</b>                 | <b>-5.37</b>                  | <b>-7.83</b>       | <b>29.40</b>                   | <b>26.04</b>       | <b>-41.37</b>         | <b>-42.89</b>      | <b>4.43</b>         | <b>1.72</b>        | <b>-23.21</b>        | <b>-25.20</b>      | <b>3.92</b>         | <b>1.22</b>        |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.

**Table 2**  
**Physiotherapists in British Columbia**  
**by Health Region by Age and Sex**  
**December 1993**

| Health Region                | < 25     |           | 25-34      |            | 35-44     |            | 45-54     |            | 55-64     |           | 65 +     |           | Subtotal   |              | Unknown   | Total        |
|------------------------------|----------|-----------|------------|------------|-----------|------------|-----------|------------|-----------|-----------|----------|-----------|------------|--------------|-----------|--------------|
|                              | M        | F         | M          | F          | M         | F          | M         | F          | M         | F         | M        | F         | M          | F            |           |              |
| 1 East Kootenay              | 1        | 1         | 2          | 6          | 2         | 8          | 0         | 9          | 1         | 0         | 0        | 1         | 6          | 25           | 0         | 31           |
| 2 Central Kootenay           | 0        | 0         | 0          | 10         | 5         | 21         | 1         | 6          | 0         | 2         | 0        | 0         | 6          | 39           | 3         | 48           |
| 4 North Okanagan             | 0        | 2         | 2          | 9          | 5         | 19         | 2         | 14         | 1         | 2         | 0        | 1         | 10         | 47           | 1         | 58           |
| 5 South Okanagan             | 2        | 3         | 8          | 26         | 6         | 42         | 4         | 15         | 3         | 5         | 0        | 0         | 23         | 91           | 2         | 116          |
| 6 South Central              | 0        | 2         | 0          | 11         | 8         | 11         | 3         | 13         | 0         | 1         | 0        | 0         | 11         | 38           | 0         | 49           |
| 7 Upper Fraser Valley        | 1        | 2         | 5          | 10         | 1         | 20         | 2         | 8          | 2         | 2         | 0        | 0         | 11         | 42           | 2         | 55           |
| 8 Central Fraser Valley      | 0        | 0         | 4          | 13         | 2         | 23         | 4         | 14         | 0         | 2         | 0        | 2         | 10         | 54           | 0         | 64           |
| 9 Boundary                   | 0        | 0         | 4          | 19         | 9         | 33         | 3         | 20         | 2         | 5         | 0        | 1         | 18         | 78           | 6         | 102          |
| 10 Simon Fraser              | 0        | 2         | 1          | 26         | 3         | 27         | 3         | 20         | 1         | 7         | 0        | 1         | 8          | 83           | 4         | 95           |
| 11 Coast Garibaldi           | 0        | 1         | 2          | 10         | 2         | 10         | 0         | 12         | 0         | 2         | 0        | 2         | 4          | 37           | 2         | 43           |
| 13 Central Vancouver Island  | 0        | 3         | 0          | 16         | 4         | 34         | 4         | 25         | 1         | 2         | 1        | 0         | 10         | 80           | 3         | 93           |
| 14 Upper Island              | 0        | 0         | 1          | 12         | 4         | 17         | 1         | 7          | 2         | 4         | 0        | 0         | 8          | 40           | 2         | 50           |
| 15 Cariboo                   | 0        | 1         | 1          | 7          | 2         | 11         | 0         | 2          | 0         | 1         | 0        | 0         | 3          | 22           | 1         | 26           |
| 16 Skeena                    | 0        | 3         | 4          | 6          | 0         | 9          | 0         | 7          | 0         | 0         | 0        | 0         | 4          | 25           | 1         | 30           |
| 17 Peace River               | 0        | 1         | 3          | 7          | 0         | 7          | 0         | 2          | 0         | 1         | 0        | 0         | 3          | 18           | 1         | 22           |
| 18 Northern Interior         | 1        | 3         | 5          | 10         | 0         | 16         | 0         | 10         | 0         | 1         | 0        | 0         | 6          | 40           | 3         | 49           |
| 20 Vancouver                 | 3        | 15        | 39         | 173        | 15        | 145        | 7         | 92         | 3         | 21        | 2        | 5         | 69         | 451          | 26        | 546          |
| 30 Burnaby                   | 0        | 2         | 7          | 16         | 9         | 21         | 0         | 9          | 0         | 5         | 0        | 0         | 16         | 53           | 3         | 72           |
| 40 North Shore               | 0        | 1         | 2          | 25         | 6         | 29         | 1         | 22         | 1         | 12        | 0        | 1         | 10         | 90           | 2         | 102          |
| 50 Richmond                  | 1        | 3         | 8          | 28         | 7         | 31         | 5         | 18         | 1         | 1         | 0        | 1         | 22         | 82           | 1         | 105          |
| 60 Capital Regional District | 0        | 2         | 7          | 45         | 8         | 74         | 8         | 51         | 5         | 22        | 0        | 3         | 28         | 197          | 6         | 231          |
| <b>TOTAL</b>                 | <b>9</b> | <b>47</b> | <b>105</b> | <b>485</b> | <b>98</b> | <b>608</b> | <b>48</b> | <b>376</b> | <b>23</b> | <b>98</b> | <b>3</b> | <b>18</b> | <b>286</b> | <b>1,632</b> | <b>69</b> | <b>1,987</b> |

**Table 3**  
**Physiotherapists (Full and Temporary Registrants) in British Columbia**  
**by Health Region by Employment Status**  
**December 1993**

| Health Region                | Employed in Physiotherapy <sup>1</sup> |            |                  |          |              | Employed in<br>Other Field | Not<br>Employed | Unknown    | Total        |
|------------------------------|--|------------|------------------|----------|--------------|----------------------------|-----------------|------------|--------------|
|                              | Full-Time                              | Part-Time  | Casual/<br>Locum | Unknown  | Subtotal     |                            |                 |            |              |
| 1 East Kootenay              | 13                                     | 9          | 3                | 0        | 25           | 2                          | 2               | 1          | 30           |
| 2 Central Kootenay           | 17                                     | 19         | 5                | 0        | 41           | 1                          | 1               | 5          | 48           |
| 4 North Okanagan             | 27                                     | 18         | 5                | 0        | 50           | 1                          | 1               | 4          | 56           |
| 5 South Okanagan             | 61                                     | 30         | 9                | 0        | 100          | 1                          | 3               | 12         | 116          |
| 6 South Central              | 26                                     | 17         | 2                | 0        | 45           | 0                          | 0               | 3          | 48           |
| 7 Upper Fraser Valley        | 33                                     | 11         | 2                | 0        | 46           | 1                          | 1               | 6          | 54           |
| 8 Central Fraser Valley      | 33                                     | 16         | 5                | 0        | 54           | 1                          | 3               | 5          | 63           |
| 9 Boundary                   | 58                                     | 31         | 6                | 1        | 96           | 0                          | 3               | 3          | 102          |
| 10 Simon Fraser              | 44                                     | 30         | 9                | 1        | 84           | 2                          | 2               | 7          | 95           |
| 11 Coast Garibaldi           | 19                                     | 21         | 0                | 0        | 40           | 0                          | 1               | 2          | 43           |
| 13 Central Vancouver Island  | 52                                     | 27         | 3                | 0        | 82           | 0                          | 3               | 7          | 92           |
| 14 Upper Island              | 24                                     | 15         | 5                | 1        | 45           | 0                          | 1               | 3          | 49           |
| 15 Cariboo                   | 10                                     | 7          | 1                | 0        | 18           | 0                          | 2               | 5          | 25           |
| 16 Skeena                    | 10                                     | 15         | 1                | 0        | 26           | 0                          | 0               | 2          | 28           |
| 17 Peace River               | 11                                     | 6          | 1                | 0        | 18           | 1                          | 1               | 1          | 21           |
| 18 Northern Interior         | 18                                     | 21         | 2                | 1        | 42           | 0                          | 0               | 7          | 49           |
| 20 Vancouver                 | 262                                    | 109        | 47               | 3        | 421          | 17                         | 17              | 84         | 539          |
| 30 Burnaby                   | 33                                     | 21         | 4                | 0        | 58           | 0                          | 2               | 12         | 72           |
| 40 North Shore               | 35                                     | 39         | 7                | 0        | 81           | 3                          | 4               | 13         | 101          |
| 50 Richmond                  | 67                                     | 18         | 7                | 1        | 93           | 1                          | 4               | 7          | 105          |
| 60 Capital Regional District | 102                                    | 75         | 16               | 1        | 194          | 9                          | 5               | 20         | 228          |
| <b>TOTAL</b>                 | <b>955</b>                             | <b>555</b> | <b>140</b>       | <b>9</b> | <b>1,659</b> | <b>40</b>                  | <b>56</b>       | <b>209</b> | <b>1,964</b> |

<sup>1</sup> Includes 64 physiotherapists who are employed in combined physio/occupational therapy.

**Table 4**  
**Physiotherapists (Full and Temporary Registrants) Employed in Physiotherapy<sup>1</sup>**  
**in British Columbia by Health Region by Principal Employing Institution**  
**December 1993**

| Health Region                | General<br>Hospital | Rehab.<br>Hospital/<br>Facility | Long<br>Term<br>Care | Workers'<br>Compensation<br>Board | Community<br>Health<br>Centre | Homecare<br>Program | Arthritis<br>Society |
|------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|-------------------------------|---------------------|----------------------|
| 1 East Kootenay              | 20                  | 0                               | 0                    | 0                                 | 0                             | 1                   | 1                    |
| 2 Central Kootenay           | 19                  | 0                               | 1                    | 0                                 | 0                             | 0                   | 0                    |
| 4 North Okanagan             | 17                  | 0                               | 3                    | 0                                 | 1                             | 0                   | 0                    |
| 5 South Okanagan             | 27                  | 1                               | 6                    | 0                                 | 0                             | 2                   | 1                    |
| 6 South Central              | 16                  | 0                               | 2                    | 1                                 | 1                             | 3                   | 0                    |
| 7 Upper Fraser Valley        | 9                   | 0                               | 0                    | 0                                 | 0                             | 2                   | 0                    |
| 8 Central Fraser Valley      | 13                  | 0                               | 0                    | 0                                 | 0                             | 1                   | 0                    |
| 9 Boundary                   | 20                  | 0                               | 3                    | 0                                 | 0                             | 0                   | 0                    |
| 10 Simon Fraser              | 35                  | 0                               | 1                    | 0                                 | 3                             | 1                   | 0                    |
| 11 Coast Garibaldi           | 6                   | 0                               | 0                    | 0                                 | 2                             | 0                   | 0                    |
| 13 Central Vancouver Island  | 23                  | 2                               | 4                    | 0                                 | 4                             | 2                   | 0                    |
| 14 Upper Island              | 15                  | 0                               | 0                    | 0                                 | 2                             | 1                   | 0                    |
| 15 Cariboo                   | 4                   | 0                               | 0                    | 0                                 | 0                             | 0                   | 0                    |
| 16 Skeena                    | 8                   | 0                               | 0                    | 0                                 | 1                             | 0                   | 0                    |
| 17 Peace River               | 4                   | 0                               | 0                    | 0                                 | 2                             | 1                   | 0                    |
| 18 Northern Interior         | 13                  | 0                               | 1                    | 0                                 | 1                             | 1                   | 0                    |
| 20 Vancouver                 | 101                 | 43                              | 9                    | 4                                 | 7                             | 8                   | 13                   |
| 30 Burnaby                   | 11                  | 0                               | 2                    | 0                                 | 1                             | 4                   | 0                    |
| 40 North Shore               | 16                  | 0                               | 4                    | 0                                 | 0                             | 3                   | 0                    |
| 50 Richmond                  | 9                   | 1                               | 0                    | 29                                | 0                             | 6                   | 0                    |
| 60 Capital Regional District | 39                  | 7                               | 8                    | 0                                 | 9                             | 4                   | 4                    |
| <b>TOTAL</b>                 | <b>425</b>          | <b>54</b>                       | <b>44</b>            | <b>34</b>                         | <b>34</b>                     | <b>40</b>           | <b>19</b>            |

*...continued*

<sup>1</sup> Excludes 40 physiotherapists who are employed in other fields, 56 who are not employed and 209 who did not indicate their employment status.



**Table 4 (continued)**  
**Physiotherapists (Full and Temporary Registrants) Employed in Physiotherapy<sup>1</sup>**  
**in British Columbia by Health Region by Principal Employing Institution**  
**December 1993**

| Health Region                | Paediatric<br>Hospital/<br>Facility | Private<br>Practice | School<br>Board | University/<br>College | Other <sup>2</sup> | Unknown    | Total        |
|------------------------------|-------------------------------------|---------------------|-----------------|------------------------|--------------------|------------|--------------|
| 1 East Kootenay              | 0                                   | 3                   | 0               | 0                      | 0                  | 0          | 25           |
| 2 Central Kootenay           | 1                                   | 10                  | 0               | 0                      | 2                  | 8          | 41           |
| 4 North Okanagan             | 3                                   | 18                  | 1               | 0                      | 0                  | 7          | 50           |
| 5 South Okanagan             | 4                                   | 34                  | 2               | 1                      | 1                  | 21         | 100          |
| 6 South Central              | 2                                   | 12                  | 0               | 0                      | 0                  | 8          | 45           |
| 7 Upper Fraser Valley        | 3                                   | 21                  | 1               | 0                      | 1                  | 9          | 46           |
| 8 Central Fraser Valley      | 3                                   | 26                  | 0               | 0                      | 0                  | 11         | 54           |
| 9 Boundary                   | 5                                   | 44                  | 1               | 1                      | 1                  | 21         | 96           |
| 10 Simon Fraser              | 0                                   | 34                  | 0               | 0                      | 1                  | 9          | 84           |
| 11 Coast Garibaldi           | 1                                   | 21                  | 2               | 0                      | 2                  | 6          | 40           |
| 13 Central Vancouver Island  | 5                                   | 30                  | 2               | 0                      | 0                  | 10         | 82           |
| 14 Upper Island              | 0                                   | 14                  | 1               | 0                      | 1                  | 11         | 45           |
| 15 Cariboo                   | 1                                   | 6                   | 0               | 0                      | 0                  | 7          | 18           |
| 16 Skeena                    | 1                                   | 7                   | 0               | 0                      | 0                  | 9          | 26           |
| 17 Peace River               | 1                                   | 0                   | 1               | 0                      | 0                  | 9          | 18           |
| 18 Northern Interior         | 2                                   | 13                  | 0               | 0                      | 0                  | 11         | 42           |
| 20 Vancouver                 | 29                                  | 90                  | 0               | 7                      | 8                  | 102        | 421          |
| 30 Burnaby                   | 0                                   | 26                  | 0               | 2                      | 1                  | 11         | 58           |
| 40 North Shore               | 0                                   | 40                  | 0               | 0                      | 0                  | 18         | 81           |
| 50 Richmond                  | 0                                   | 24                  | 0               | 0                      | 0                  | 24         | 93           |
| 60 Capital Regional District | 13                                  | 58                  | 1               | 2                      | 4                  | 45         | 194          |
| <b>TOTAL</b>                 | <b>74</b>                           | <b>531</b>          | <b>12</b>       | <b>13</b>              | <b>22</b>          | <b>357</b> | <b>1,659</b> |

<sup>1</sup> Excludes 40 physiotherapists who are employed in other fields, 56 who are not employed and 209 who did not indicate their employment status.

<sup>2</sup> Includes 1 physiotherapist employed in industry, 6 in other visiting agencies, 2 in psychiatric hospitals/facilities, 2 in a facility for the mentally handicapped, 1 in retail, 6 in a government/official agency and 4 in other institutions.

**Table 5**  
**Physiotherapists (Full and Temporary Registrants) Employed in Physiotherapy<sup>1</sup>**  
**in British Columbia by Health Region by Principal Employment Activity**  
**December 1993**

| Health Region                | Cardiology | Neurology  | Orthopaedics | Respirology | Rheumatology | Sports Medicine | Gerontology |
|------------------------------|------------|------------|--------------|-------------|--------------|-----------------|-------------|
| 1 East Kootenay              | 0          | 0          | 13           | 0           | 1            | 0               | 1           |
| 2 Central Kootenay           | 0          | 2          | 17           | 0           | 0            | 0               | 2           |
| 4 North Okanagan             | 0          | 6          | 22           | 0           | 0            | 1               | 1           |
| 5 South Okanagan             | 0          | 7          | 28           | 1           | 2            | 0               | 8           |
| 6 South Central              | 0          | 5          | 15           | 1           | 0            | 0               | 2           |
| 7 Upper Fraser Valley        | 0          | 7          | 19           | 0           | 0            | 0               | 2           |
| 8 Central Fraser Valley      | 0          | 4          | 24           | 0           | 1            | 0               | 3           |
| 9 Boundary                   | 0          | 6          | 42           | 1           | 1            | 4               | 7           |
| 10 Simon Fraser              | 3          | 5          | 34           | 3           | 0            | 1               | 6           |
| 11 Coast Garibaldi           | 0          | 1          | 10           | 0           | 0            | 4               | 0           |
| 13 Central Vancouver Island  | 0          | 7          | 30           | 0           | 1            | 0               | 3           |
| 14 Upper Island              | 0          | 1          | 12           | 0           | 0            | 0               | 0           |
| 15 Cariboo                   | 0          | 1          | 5            | 0           | 0            | 1               | 0           |
| 16 Skeena                    | 0          | 1          | 7            | 0           | 0            | 0               | 0           |
| 17 Peace River               | 0          | 0          | 3            | 0           | 0            | 0               | 1           |
| 18 Northern Interior         | 0          | 2          | 13           | 1           | 0            | 1               | 1           |
| 20 Vancouver                 | 5          | 48         | 98           | 17          | 18           | 12              | 16          |
| 30 Burnaby                   | 0          | 4          | 23           | 2           | 0            | 4               | 4           |
| 40 North Shore               | 0          | 4          | 39           | 2           | 0            | 3               | 2           |
| 50 Richmond                  | 0          | 1          | 47           | 1           | 1            | 3               | 0           |
| 60 Capital Regional District | 2          | 20         | 52           | 5           | 4            | 1               | 17          |
| <b>TOTAL</b>                 | <b>10</b>  | <b>132</b> | <b>553</b>   | <b>34</b>   | <b>29</b>    | <b>35</b>       | <b>76</b>   |

*...continued*

<sup>1</sup> Excludes 40 physiotherapists who are employed in other fields, 56 who are not employed and 209 who did not indicate their employment status.

**Table 5 (continued)**  
**Physiotherapists (Full and Temporary Registrants) Employed in Physiotherapy<sup>1</sup>**  
**in British Columbia by Health Region by Principal Employment Activity**  
**December 1993**

| Health Region                | General    | Admin-<br>istration | Teaching  | Consulting | Other <sup>2</sup> | Unknown    | Total        |
|------------------------------|------------|---------------------|-----------|------------|--------------------|------------|--------------|
| 1 East Kootenay              | 10         | 0                   | 0         | 0          | 0                  | 0          | 25           |
| 2 Central Kootenay           | 10         | 1                   | 0         | 1          | 0                  | 8          | 41           |
| 4 North Okanagan             | 11         | 1                   | 0         | 1          | 1                  | 6          | 50           |
| 5 South Okanagan             | 29         | 2                   | 1         | 2          | 0                  | 20         | 100          |
| 6 South Central              | 11         | 2                   | 0         | 1          | 0                  | 8          | 45           |
| 7 Upper Fraser Valley        | 7          | 1                   | 0         | 0          | 1                  | 9          | 46           |
| 8 Central Fraser Valley      | 7          | 1                   | 0         | 0          | 1                  | 13         | 54           |
| 9 Boundary                   | 12         | 1                   | 1         | 1          | 0                  | 20         | 96           |
| 10 Simon Fraser              | 18         | 2                   | 0         | 0          | 2                  | 10         | 84           |
| 11 Coast Garibaldi           | 15         | 1                   | 0         | 2          | 0                  | 7          | 40           |
| 13 Central Vancouver Island  | 25         | 4                   | 1         | 1          | 0                  | 10         | 82           |
| 14 Upper Island              | 20         | 0                   | 0         | 0          | 1                  | 11         | 45           |
| 15 Cariboo                   | 4          | 0                   | 0         | 0          | 0                  | 7          | 18           |
| 16 Skeena                    | 8          | 0                   | 0         | 1          | 0                  | 9          | 26           |
| 17 Peace River               | 4          | 0                   | 0         | 1          | 0                  | 9          | 18           |
| 18 Northern Interior         | 11         | 1                   | 0         | 0          | 1                  | 11         | 42           |
| 20 Vancouver                 | 58         | 16                  | 4         | 5          | 15                 | 109        | 421          |
| 30 Burnaby                   | 9          | 0                   | 0         | 0          | 0                  | 12         | 58           |
| 40 North Shore               | 11         | 0                   | 1         | 1          | 0                  | 18         | 81           |
| 50 Richmond                  | 12         | 1                   | 0         | 1          | 1                  | 25         | 93           |
| 60 Capital Regional District | 35         | 7                   | 2         | 0          | 3                  | 46         | 194          |
| <b>TOTAL</b>                 | <b>327</b> | <b>41</b>           | <b>10</b> | <b>18</b>  | <b>26</b>          | <b>368</b> | <b>1,659</b> |

<sup>1</sup> Excludes 40 physiotherapists who are employed in other fields, 56 who are not employed and 209 who did not indicate their employment status.

<sup>2</sup> Includes 1 physiotherapist who works with amputees, 1 employed in plastics, 3 employed in palliative care, 6 in psychiatry/mentally handicapped, 4 in prevention/health promotion, 1 in burns, 6 in obstetrics/gynaecology, 3 in research and 1 in other non-patient care activities.

**Table 6**  
**Physiotherapists (Full and Temporary Registrants) Employed in Physiotherapy<sup>1</sup>**  
**in British Columbia by Health Region by Principal Type of Position**  
**December 1993**

| Health Region                | Staff<br>Therapist | Sole<br>Charge | Program<br>Co-ordinator | Senior<br>Therapist | Director  | Assistant<br>Director | Consultant | Owner/<br>Partner<br>Private<br>Practice | Associate-<br>Private<br>Practice | Other <sup>2</sup> | Unknown    | Total        |
|------------------------------|--------------------|----------------|-------------------------|---------------------|-----------|-----------------------|------------|--|-----------------------------------|--------------------|------------|--------------|
| 1 East Kootenay              | 11                 | 6              | 0                       | 1                   | 4         | 0                     | 0          | 2  | 1                                 | 0                  | 0          | 25           |
| 2 Central Kootenay           | 17                 | 3              | 0                       | 1                   | 2         | 0                     | 1          | 7  | 2                                 | 0                  | 8          | 41           |
| 4 North Okanagan             | 19                 | 3              | 0                       | 3                   | 3         | 0                     | 1          | 10                                       | 5                                 | 0                  | 6          | 50           |
| 5 South Okanagan             | 32                 | 2              | 0                       | 7                   | 5         | 1                     | 2          | 16                                       | 13                                | 2                  | 20         | 100          |
| 6 South Central              | 20                 | 2              | 0                       | 3                   | 3         | 1                     | 1          | 5  | 2                                 | 0                  | 8          | 45           |
| 7 Upper Fraser Valley        | 14                 | 1              | 0                       | 0                   | 2         | 0                     | 2          | 13                                       | 6                                 | 0                  | 8          | 46           |
| 8 Central Fraser Valley      | 13                 | 3              | 1                       | 0                   | 1         | 1                     | 2          | 15                                       | 7                                 | 0                  | 11         | 54           |
| 9 Boundary                   | 24                 | 1              | 1                       | 4                   | 2         | 0                     | 2          | 20                                       | 21                                | 1                  | 20         | 96           |
| 10 Simon Fraser              | 39                 | 4              | 0                       | 3                   | 3         | 1                     | 1          | 15                                       | 9                                 | 0                  | 9          | 84           |
| 11 Coast Garibaldi           | 11                 | 4              | 0                       | 0                   | 1         | 0                     | 3          | 10                                       | 5                                 | 0                  | 6          | 40           |
| 13 Central Vancouver Island  | 25                 | 6              | 1                       | 5                   | 4         | 0                     | 2          | 22                                       | 6                                 | 0                  | 11         | 82           |
| 14 Upper Island              | 10                 | 7              | 0                       | 0                   | 2         | 0                     | 0          | 10                                       | 5                                 | 0                  | 11         | 45           |
| 15 Cariboo                   | 2                  | 2              | 0                       | 0                   | 1         | 0                     | 0          | 4  | 2                                 | 0                  | 7          | 18           |
| 16 Skeena                    | 4                  | 5              | 0                       | 1                   | 1         | 0                     | 1          | 4  | 1                                 | 0                  | 9          | 26           |
| 17 Peace River               | 5                  | 3              | 0                       | 0                   | 1         | 0                     | 1          | 0  | 0                                 | 0                  | 8          | 18           |
| 18 Northern Interior         | 15                 | 2              | 0                       | 0                   | 2         | 0                     | 0          | 6  | 5                                 | 1                  | 11         | 42           |
| 20 Vancouver                 | 167                | 4              | 3                       | 39                  | 10        | 3                     | 11         | 40                                       | 26                                | 17                 | 101        | 421          |
| 30 Burnaby                   | 16                 | 1              | 0                       | 6                   | 0         | 0                     | 1          | 14                                       | 9                                 | 0                  | 11         | 58           |
| 40 North Shore               | 20                 | 1              | 0                       | 5                   | 0         | 0                     | 1          | 21                                       | 15                                | 0                  | 18         | 81           |
| 50 Richmond                  | 38                 | 0              | 1                       | 3                   | 1         | 0                     | 1          | 14                                       | 10                                | 1                  | 24         | 93           |
| 60 Capital Regional District | 74                 | 6              | 1                       | 7                   | 4         | 2                     | 2          | 34                                       | 15                                | 5                  | 44         | 194          |
| <b>TOTAL</b>                 | <b>576</b>         | <b>66</b>      | <b>8</b>                | <b>88</b>           | <b>52</b> | <b>9</b>              | <b>35</b>  | <b>282</b>                               | <b>165</b>                        | <b>27</b>          | <b>351</b> | <b>1,659</b> |

<sup>1</sup> Excludes 40 physiotherapists who are employed in other fields, 56 who are not employed and 209 who did not indicate their employment status.

<sup>2</sup> Includes 6 physiotherapists employed as clinical instructors, 3 as research therapists, 6 as clinical specialists and 12 in other positions.

**Table 7**  
**Analysis of Change in the Number of Physiotherapists (Full and Temporary Registrants)**  
**in British Columbia by Health Region**  
**December 1991 to December 1993**

| Health Region                | December 1991 <sup>2</sup> | New Registrants <sup>1</sup> by Place of Graduation |              |               |           |            | Reactivation <sup>3</sup> | Attrition <sup>*</sup> | Net Intra-provincial Migration | December 1993 |
|------------------------------|----------------------------|---|--------------|---------------|-----------|------------|---------------------------|------------------------|--------------------------------|---------------|
|                              |                            | B.C.  | Other Canada | Other Country | Unknown   | Subtotal   |                           |                        |                                |               |
| 1 East Kootenay              | 28                         | 0   | 2            | 1             | 1         | 4          | 0                         | 1                      | -1                             | 30            |
| 2 Central Kootenay           | 43                         | 2   | 1            | 1             | 1         | 5          | 2                         | 5                      | 3                              | 48            |
| 4 North Okanagan             | 48                         | 1   | 2            | 0             | 0         | 3          | 2                         | 2                      | 5                              | 56            |
| 5 South Okanagan             | 98                         | 4   | 9            | 0             | 1         | 14         | 5                         | 8                      | 7                              | 116           |
| 6 South Central              | 45                         | 1   | 1            | 3             | 1         | 6          | 0                         | 4                      | 1                              | 48            |
| 7 Upper Fraser Valley        | 42                         | 5   | 1            | 2             | 1         | 9          | 0                         | 3                      | 6                              | 54            |
| 8 Central Fraser Valley      | 58                         | 1   | 1            | 3             | 1         | 6          | 1                         | 6                      | 4                              | 63            |
| 9 Boundary                   | 106                        | 0   | 3            | 3             | 0         | 6          | 1                         | 10                     | -1                             | 102           |
| 10 Simon Fraser              | 96                         | 4   | 4            | 5             | 2         | 15         | 2                         | 8                      | -10                            | 95            |
| 11 Coast Garibaldi           | 39                         | 1   | 2            | 3             | 0         | 6          | 1                         | 2                      | -1                             | 43            |
| 13 Central Vancouver Island  | 87                         | 3   | 6            | 2             | 0         | 11         | 3                         | 6                      | -3                             | 92            |
| 14 Upper Island              | 38                         | 0   | 1            | 2             | 0         | 3          | 2                         | 1                      | 7                              | 49            |
| 15 Cariboo                   | 22                         | 2   | 0            | 3             | 0         | 5          | 0                         | 4                      | 2                              | 25            |
| 16 Skeena                    | 20                         | 3   | 2            | 0             | 0         | 5          | 3                         | 1                      | 1                              | 28            |
| 17 Peace River               | 20                         | 0   | 2            | 1             | 0         | 3          | 3                         | 4                      | -1                             | 21            |
| 18 Northern Interior         | 33                         | 7   | 5            | 3             | 0         | 15         | 2                         | 3                      | 2                              | 49            |
| 20 Vancouver                 | 516                        | 23  | 21           | 46            | 8         | 98         | 20                        | 73                     | -22                            | 539           |
| 30 Burnaby                   | 60                         | 5   | 3            | 4             | 2         | 14         | 3                         | 2                      | -3                             | 72            |
| 40 North Shore               | 99                         | 2   | 6            | 5             | 2         | 15         | 2                         | 10                     | -5                             | 101           |
| 50 Richmond                  | 94                         | 5   | 2            | 5             | 0         | 12         | 2                         | 9                      | 6                              | 105           |
| 60 Capital Regional District | 209                        | 4   | 16           | 6             | 1         | 27         | 6                         | 17                     | 3                              | 228           |
| <b>TOTAL</b>                 | <b>1,801</b>               | <b>73</b>   | <b>90</b>    | <b>98</b>     | <b>21</b> | <b>282</b> | <b>60</b>                 | <b>179</b>             | <b>0</b>                       | <b>1,964</b>  |

<sup>1</sup> Physiotherapists who reported B.C. addresses and were full or temporary registrants in December 1993 and whose date of initial registration was after December 1991.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of the switch to employment address which resulted in a net decrease of 8 full registrants and 1 temporary registrant whose employment addresses were outside B.C.

Please note: Temporary registrants were not included in ROLLCALL 91.

<sup>3</sup> Physiotherapists who reported B.C. addresses and were full or temporary registrants in December 1993 but not in December 1991 and who were registered for the first time before December 1991.

<sup>\*</sup> Physiotherapists who reported B.C. addresses and were full or temporary registrants in December 1991 but not in December 1993.

## PROSTHETISTS AND ORTHOTISTS

**Definition:** (I) A prosthetist

...is a professional worker who can design, fabricate and fit appropriate appliances and devices designed to replace part of the human locomotor system.

(II) An orthotist

...is a professional worker who can design, fabricate and fit appropriate supports, braces, shoes, remedial appliances and devices designed to correct, develop, strengthen or support, and increase the physiological performance of the human locomotor system.<sup>1</sup>

**Governing Statute:** None.

**Governing Body:** None. Compulsory registration and/or licensure do not exist. Membership in the Canadian Association of Prosthetists and Orthotists (CAPO) and the Prosthetist and Orthotist Association of British Columbia (POABC) is voluntary. However, only those who have passed qualifying exams are entitled to the use of the titles: C.P. (Certified Prosthetist), C.O. (Certified Orthotist), C.P.O. (Certified Prosthetist and Orthotist), R.T.P. (Registered Technician Prosthetist), R.T.O. (Registered Technician Orthotist), and R.T.P.O. (Registered Technician Prosthetist and Orthotist).

**Date of Record:** September 1991 and October 1994.

**Sources of Data:** The Canadian Board for Certification of Prosthetists and Orthotists and the Canadian Association of Prosthetists and Orthotists (CAPO).

### Preparation and Updating:

The tables, derived from membership lists provided by the Canadian Board for Certification of Prosthetists and Orthotists and CAPO, include prosthetists and orthotists who were certified or registered and reported a British Columbia address at the date of record. Certification and registration are voluntary and the source of data is different than with *ROLLCALL 91*, so no comparison data are presented. Data presented in the tables are based on employment address for the majority of prosthetists and orthotists. Precise percentages of home vs. employment or other address are not known.

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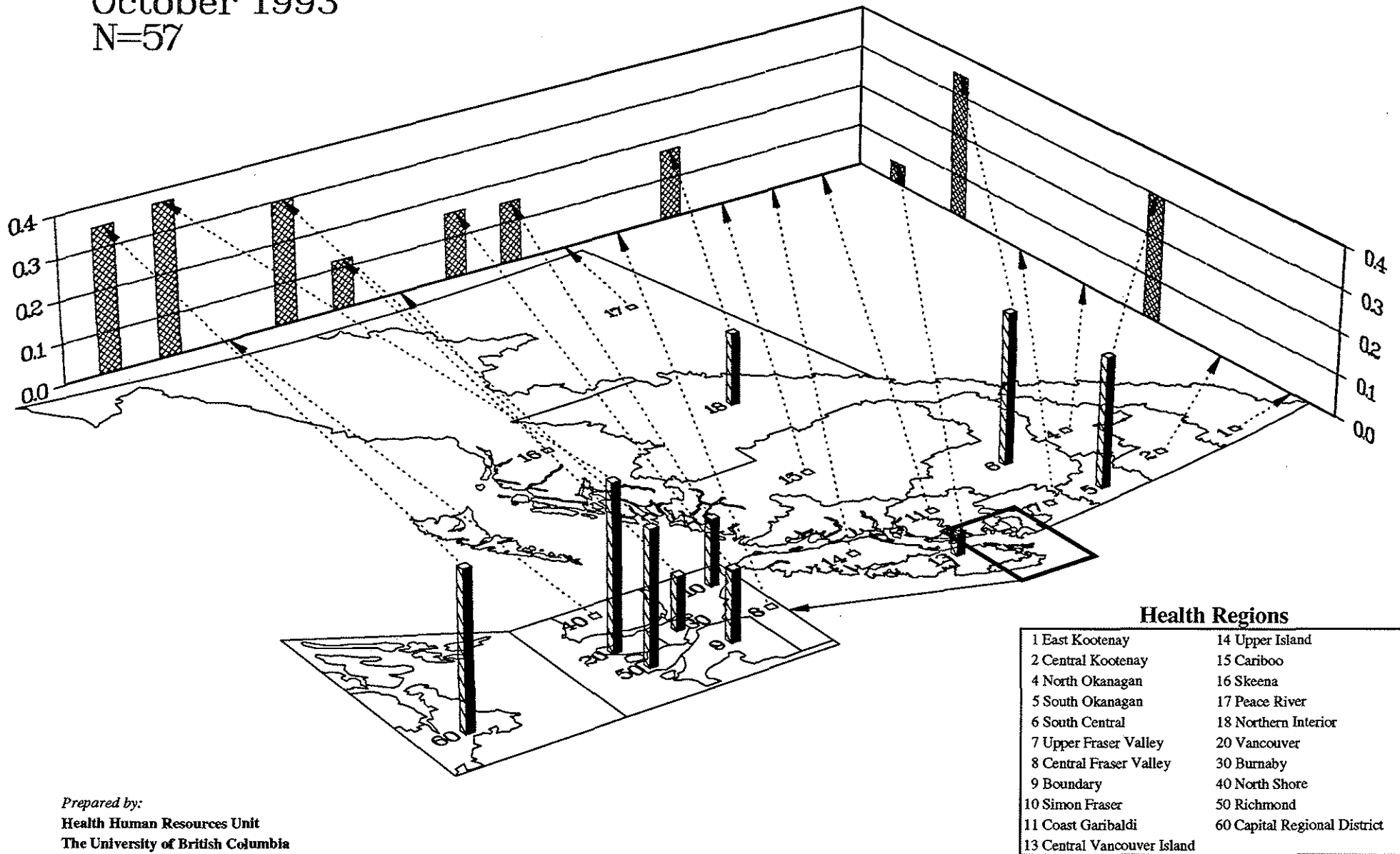
<sup>1</sup> Adapted from information received from the Canadian Board for Certification of Prosthetists and Orthotists. See also *National Occupational Classification 1992*, Major Group 32, No. 3219, Ottawa: Employment and Immigration Canada.

**Definition of Terms:**

*Certifees* are prosthetists and orthotists who have completed a two-year course of study at an approved institution, completed a two-year internship, and passed the national certification exam administered by the Canadian Board for Certification of Prosthetists and Orthotists. Certifees focus on patient assessment and equipment design, though many certifees also serve as their own technicians.

*Registered technicians* are trained in the production of prosthetic and orthotic equipment. The registered designation is given after passing exams standardised by the Canadian Association of Prosthetists and Orthotists (CAPO). The exams can be taken following completion of a two year training program and two years of work in the field, or after four years of work in the field. Registered technicians generally do not have client contact. Both certifees and registered technicians may be certified/registered as prosthetists, orthotists, or prosthetists and orthotists.

Prosthetists and Orthotists (CBCPO Certified and  
CAPO Registered) per 10,000 Population  
by Health Region  
October 1993  
N=57



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1a**  
**Prosthetists and Orthotists (CBCPO Certified and CAPO Registered)<sup>1</sup> in British Columbia**  
**by Health Region by Area of Certification**  
**October 1993**

| Health Region                | Certified   |           |                           |           | Registered  |           |                           |           | Total     |
|------------------------------|-------------|-----------|---------------------------|-----------|-------------|-----------|---------------------------|-----------|-----------|
|                              | Prosthetist | Orthotist | Prosthetist/<br>Orthotist | Subtotal  | Prosthetist | Orthotist | Prosthetist/<br>Orthotist | Subtotal  |           |
| 1 East Kootenay              | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 2 Central Kootenay           | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 4 North Okanagan             | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 5 South Okanagan             | 1           | 1         | 2                         | 4         | 1           | 1         | 0                         | 2         | 6         |
| 6 South Central              | 0           | 1         | 1                         | 2         | 0           | 1         | 1                         | 2         | 4         |
| 7 Upper Fraser Valley        | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 8 Central Fraser Valley      | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 9 Boundary                   | 0           | 4         | 0                         | 4         | 1           | 1         | 0                         | 2         | 6         |
| 10 Simon Fraser              | 2           | 1         | 0                         | 3         | 0           | 0         | 0                         | 0         | 3         |
| 11 Coast Garibaldi           | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 13 Central Vancouver Island  | 1           | 0         | 0                         | 1         | 0           | 0         | 0                         | 0         | 1         |
| 14 Upper Island              | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 15 Cariboo                   | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 16 Skeena                    | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 17 Peace River               | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 18 Northern Interior         | 1           | 1         | 0                         | 2         | 0           | 0         | 0                         | 0         | 2         |
| 20 Vancouver                 | 6           | 3         | 2                         | 11        | 4           | 0         | 3                         | 7         | 18        |
| 30 Burnaby                   | 0           | 1         | 1                         | 2         | 0           | 0         | 0                         | 0         | 2         |
| 40 North Shore               | 0           | 0         | 0                         | 0         | 0           | 0         | 0                         | 0         | 0         |
| 50 Richmond                  | 1           | 2         | 0                         | 3         | 0           | 1         | 0                         | 1         | 4         |
| 60 Capital Regional District | 3           | 4         | 1                         | 8         | 2           | 0         | 1                         | 3         | 11        |
| <b>TOTAL</b>                 | <b>15</b>   | <b>18</b> | <b>7</b>                  | <b>40</b> | <b>8</b>    | <b>4</b>  | <b>5</b>                  | <b>17</b> | <b>57</b> |

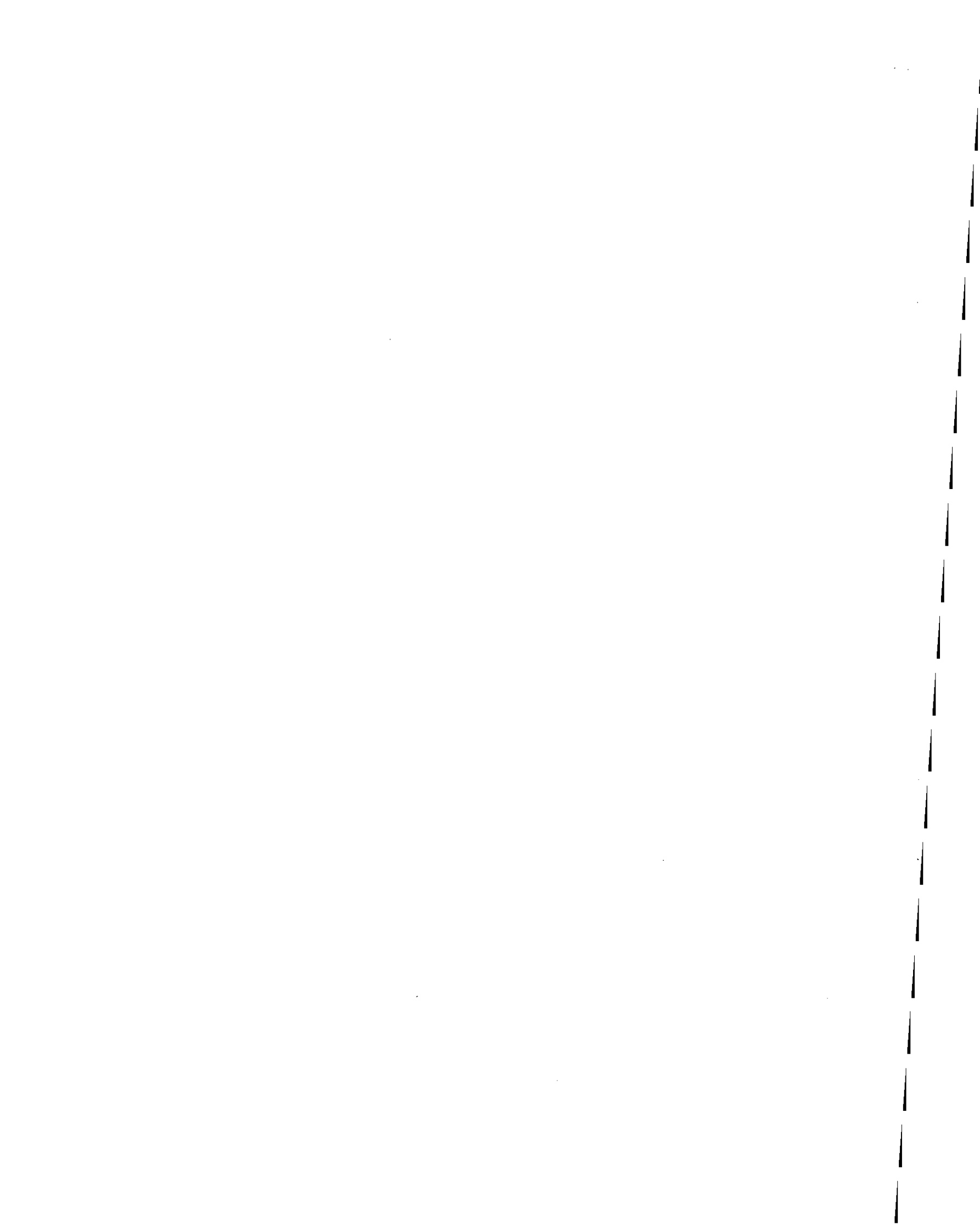
<sup>1</sup> Certification by the Canadian Board for Certification of Prosthetists and Orthotists (CBCPO) and registration by the Canadian Association of Prosthetists and Orthotists (CAPO) is voluntary, but requires passing standardized national exams.

**Table 1b**  
**Prosthetists and Orthotists (CBCPO Certified and CAPO Registered)<sup>1</sup> in British Columbia**  
**per 10,000 Population by Health Region by Area of Certification**  
**October 1993**

| Health Region                | Certified   |             |                           |             | Registered  |             |                           |             | Total       |
|------------------------------|-------------|-------------|---------------------------|-------------|-------------|-------------|---------------------------|-------------|-------------|
|                              | Prosthetist | Orthotist   | Prosthetist/<br>Orthotist | Subtotal    | Prosthetist | Orthotist   | Prosthetist/<br>Orthotist | Subtotal    |             |
| 1 East Kootenay              | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 2 Central Kootenay           | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 4 North Okanagan             | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 5 South Okanagan             | 0.05        | 0.05        | 0.10                      | 0.20        | 0.05        | 0.05        | 0.00                      | 0.10        | 0.30        |
| 6 South Central              | 0.00        | 0.09        | 0.09                      | 0.18        | 0.00        | 0.09        | 0.09                      | 0.18        | 0.35        |
| 7 Upper Fraser Valley        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 8 Central Fraser Valley      | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 9 Boundary                   | 0.00        | 0.11        | 0.00                      | 0.11        | 0.03        | 0.03        | 0.00                      | 0.05        | 0.16        |
| 10 Simon Fraser              | 0.10        | 0.05        | 0.00                      | 0.15        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.15        |
| 11 Coast Garibaldi           | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 13 Central Vancouver Island  | 0.05        | 0.00        | 0.00                      | 0.05        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.05        |
| 14 Upper Island              | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 15 Cariboo                   | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 16 Skeena                    | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 17 Peace River               | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 18 Northern Interior         | 0.09        | 0.09        | 0.00                      | 0.17        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.17        |
| 20 Vancouver                 | 0.12        | 0.06        | 0.04                      | 0.22        | 0.08        | 0.00        | 0.06                      | 0.14        | 0.37        |
| 30 Burnaby                   | 0.00        | 0.06        | 0.06                      | 0.12        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.12        |
| 40 North Shore               | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        | 0.00        | 0.00                      | 0.00        | 0.00        |
| 50 Richmond                  | 0.08        | 0.15        | 0.00                      | 0.23        | 0.00        | 0.08        | 0.00                      | 0.08        | 0.30        |
| 60 Capital Regional District | 0.10        | 0.13        | 0.03                      | 0.26        | 0.06        | 0.00        | 0.03                      | 0.10        | 0.35        |
| <b>TOTAL</b>                 | <b>0.04</b> | <b>0.05</b> | <b>0.02</b>               | <b>0.12</b> | <b>0.02</b> | <b>0.01</b> | <b>0.01</b>               | <b>0.05</b> | <b>0.16</b> |

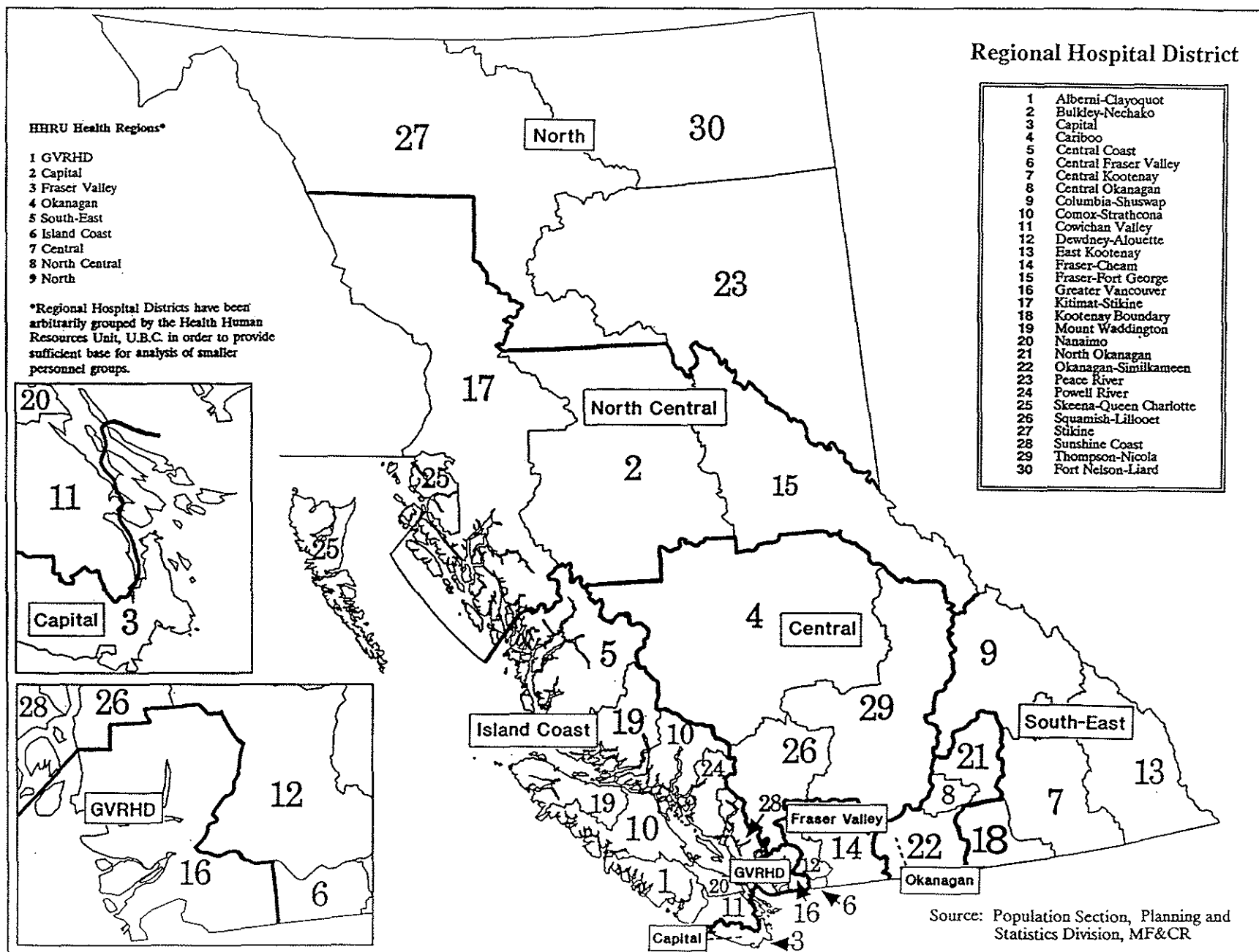
<sup>1</sup> Certification by the Canadian Board for Certification of Prosthetists and Orthotists (CBCPO) and registration by the Canadian Association of Prosthetists and Orthotists (CAPO) is voluntary, but requires passing standardized national exams.

## **APPENDICES**

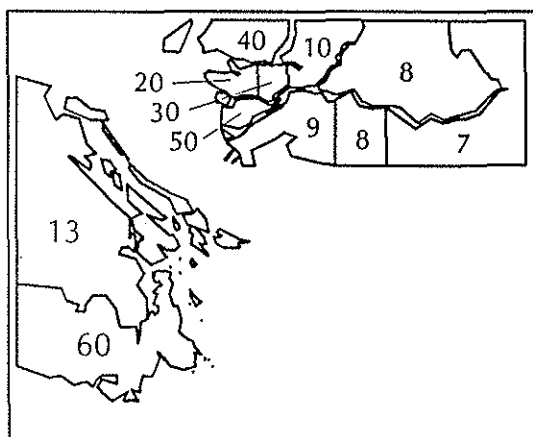
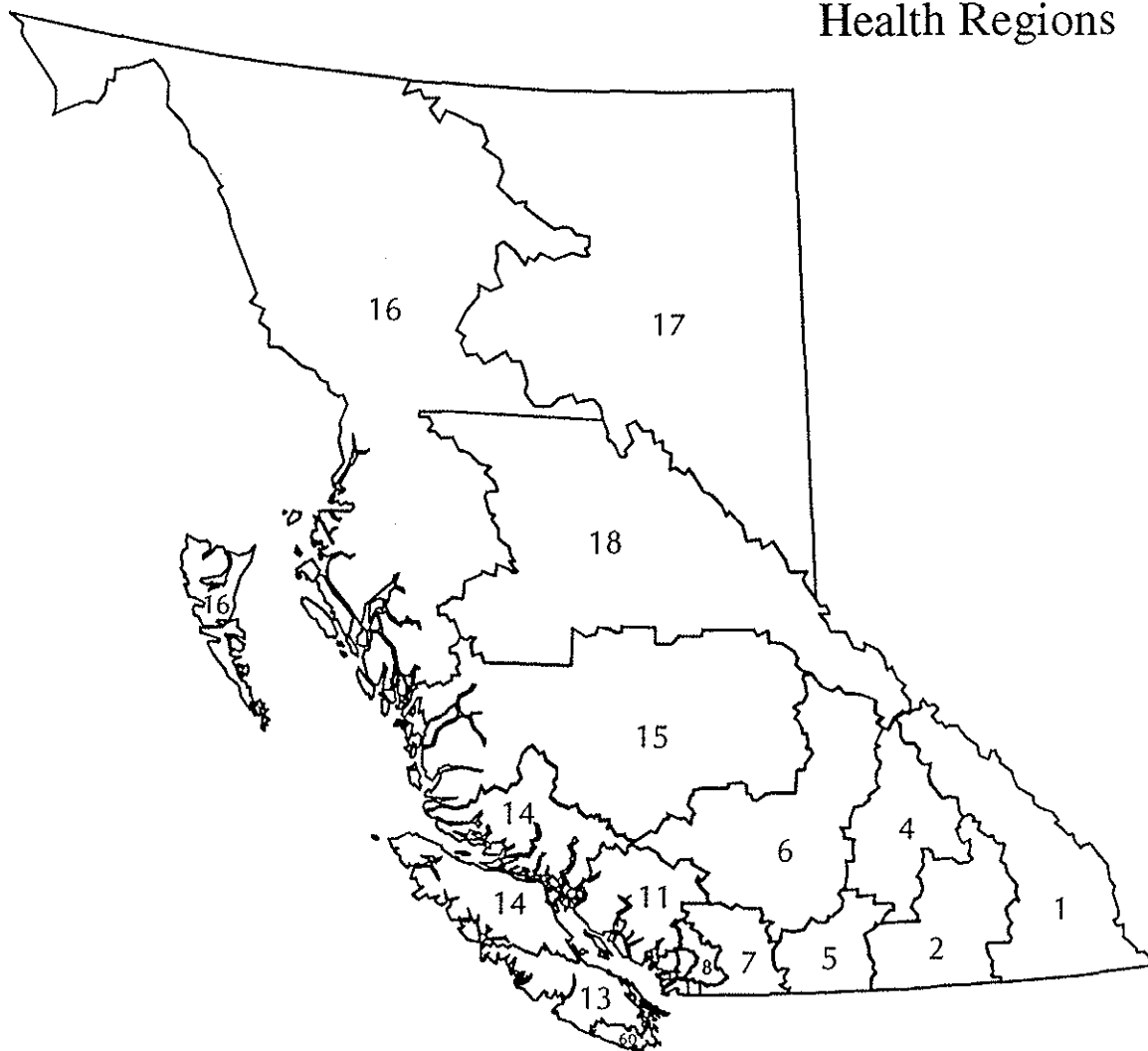


APPENDIX A

MAPS  
BY HEALTH REGIONS AND  
REGIONAL HOSPITAL DISTRICTS



## British Columbia Health Regions



### HEALTH REGIONS

- |                              |                               |
|------------------------------|-------------------------------|
| 1. East Kootenay             | 14. Upper Island              |
| 2. Central Kootenay          | 15. Cariboo                   |
| 4. North Okanagan            | 16. Skeena                    |
| 5. South Okanagan            | 17. Peace River               |
| 6. South Central             | 18. Northern Interior         |
| 7. Upper Fraser Valley       | 20. Vancouver                 |
| 8. Central Fraser Valley     | 30. Burnaby                   |
| 9. Boundary                  | 40. North Shore               |
| 10. Simon Fraser             | 50. Richmond                  |
| 11. Coast Garibaldi          | 60. Capital Regional District |
| 13. Central Vancouver Island |                               |

Prepared by: Health Economics and Planning Branch, Ministry of Health & Ministry Responsible for Seniors  
 Adapted by: Health Human Resources Unit, The University of British Columbia  
 Map Source: PSD, Ministry of Finance & Corporate Relations

JAN 93

**Table 1**  
**Conversion Summary:**  
**Health Regions, Regional Hospital Districts and Local Health Areas**

| <b>Health Region</b>               | <b>Regional Hospital District</b>                            | <b>Local Health Area</b>   |
|------------------------------------|--|--|
| <b>1 East Kootenay</b>             | 7 Central Kootenay<br>9 Columbia-Shuswap<br>13 East Kootenay | 5 Creston<br>18 Golden<br>1 Fernie<br>2 Cranbrook<br>3 Kimberley<br>4 Windermere                               |
| <b>2 Central Kootenay</b>          | 7 Central Kootenay<br><br>18 Kootenay Boundary               | 6 Kootenay Lake<br>7 Nelson<br>9 Castlegar<br>10 Arrow Lakes<br>11 Trail<br>12 Grand Forks<br>13 Kettle Valley |
| <b>4 North Okanagan</b>            | 9 Columbia-Shuswap<br><br>21 North Okanagan                  | 19 Revelstoke<br>20 Salmon Arm<br>21 Armstrong-Spallumcheen<br>22 Vernon<br>78 Enderby                         |
| <b>5 South Okanagan</b>            | 8 Central Okanagan<br>22 Okanagan-Similkameen                | 23 Central Okanagan<br>14 Southern Okanagan<br>15 Penticton<br>16 Keremeos<br>17 Princeton<br>77 Summerland    |
| <b>6 South Central</b>             | 26 Squamish-Lillooet<br>29 Thompson-Nicola                   | 29 Lillooet<br>24 Kamloops<br>26 North Thompson<br>30 South Cariboo<br>31 Merritt                              |
| <b>7 Upper Fraser Valley</b>       | 6 Central Fraser Valley<br>14 Fraser-Cheam                   | 34 Abbotsford<br>32 Hope<br>33 Chilliwack<br>76 Agassiz - Harrison   |
| <b>8 Central Fraser Valley</b>     | 12 Dewdney-Alouette<br><br>16 Greater Vancouver              | 42 Maple Ridge<br>75 Mission<br>35 Langley   |
| <b>9 Boundary</b>                  | 16 Greater Vancouver   | 36 Surrey<br>37 Delta  |
| <b>10 Simon Fraser</b>             | 16 Greater Vancouver   | 40 New Westminster<br>43 Coquitlam   |
| <b>11 Coast Garibaldi</b>          | 24 Powell River<br>26 Squamish-Lillooet<br>28 Sunshine Coast | 47 Powell River<br>48 Howe Sound<br>46 Sunshine Coast  |
| <b>13 Central Vancouver Island</b> | 1 Alberni-Clayoquot<br>11 Cowichan Valley<br><br>20 Nanaimo  | 70 Alberni<br>65 Cowichan<br>66 Lake Cowichan<br>67 Ladysmith<br>68 Nanaimo<br>69 Qualicum                     |

... continued



**Table 1 (continued)**  
**Conversion Summary:**  
**Health Regions, Regional Hospital Districts and Local Health Areas**

| <b>Health Region</b>                | <b>Regional Hospital District</b> | <b>Local Health Area</b>   |
|-------------------------------------|-----------------------------------|--|
| <b>14 Upper Vancouver Island</b>    | 10 Comox-Strathcona               | 71 Courtenay<br>72 Campbell River<br>84 Vancouver Island West<br>85 Vancouver Island North |
|                                     | 19 Mount Waddington               |  |
| <b>15 Cariboo</b>                   | 4 Cariboo                         | 27 Cariboo - Chilcotin<br>28 Quesnel   |
|                                     | 5 Central Coast                   | 49 Central Coast   |
| <b>16 Skeena</b>                    | 2 Bulkley-Nechako                 | 54 Smithers  |
|                                     | 17 Kitimat-Stikine                | 80 Kitimat<br>88 Terrace<br>92 Nishga<br>94 Telegraph Creek                                |
|                                     | 25 Skeena-Queen Charlotte         | 50 Queen Charlotte<br>52 Prince Rupert   |
|                                     | 27 Stikine                        | 87 Stikine   |
| <b>17 Peace River</b>               | 23 Peace River                    | 59 Peace River South<br>60 Peace River North   |
|                                     | 30 Fort Nelson/Liard              | 81 Fort Nelson   |
| <b>18 Northern Interior</b>         | 2 Bulkley-Nechako                 | 55 Burns Lake/Eutsuk Lake<br>56 Nechako  |
|                                     | 15 Fraser-Fort George             | 57 Prince George   |
| <b>20 Vancouver</b>                 | 16 Greater Vancouver              | 39 Vancouver   |
| <b>30 Burnaby</b>                   | 16 Greater Vancouver              | 41 Burnaby   |
| <b>40 North Shore</b>               | 16 Greater Vancouver              | 44 North Vancouver   |
|                                     |                                   | 45 West Vancouver  |
| <b>50 Richmond</b>                  | 16 Greater Vancouver              | 38 Richmond  |
| <b>60 Capital Regional District</b> | 3 Capital                         | 61 Greater Victoria<br>62 Sooke<br>63 Saanich<br>64 Gulf Islands                           |
|                                     |                                   |  |
|                                     |                                   |  |
|                                     |                                   |  |

Source: Health Economics and Planning Branch, British Columbia Ministry of Health



## APPENDIX B

### POPULATION ESTIMATES FOR BRITISH COLUMBIA BY HEALTH REGION

**Table 1**  
**Population Estimates<sup>1</sup> for British Columbia**  
**by Health Region**  
**1991 and 1993**

| <u>Health Region</u>         | <u>1991</u>      | <u>1993</u>      | <u>Percent<br/>Change</u> |
|------------------------------|------------------|------------------|---------------------------|
| 1 East Kootenay              | 69,545           | 70,564           | 1.47                      |
| 2 Central Kootenay           | 71,940           | 74,526           | 3.59                      |
| 4 North Okanagan             | 96,565           | 104,450          | 8.17                      |
| 5 South Okanagan             | 178,545          | 199,031          | 11.47                     |
| 6 South Central              | 108,843          | 113,897          | 4.64                      |
| 7 Upper Fraser Valley        | 156,040          | 170,387          | 9.19                      |
| 8 Central Fraser Valley      | 176,305          | 189,901          | 7.71                      |
| 9 Boundary                   | 351,300          | 377,102          | 7.34                      |
| 10 Simon Fraser              | 183,515          | 198,125          | 7.96                      |
| 11 Coast Garibaldi           | 59,664           | 63,186           | 5.90                      |
| 13 Central Vancouver Island  | 193,968          | 206,839          | 6.64                      |
| 14 Upper Island              | 96,777           | 102,155          | 5.56                      |
| 15 Cariboo                   | 64,788           | 65,818           | 1.59                      |
| 16 Skeena                    | 83,035           | 84,620           | 1.91                      |
| 17 Peace River               | 58,485           | 58,945           | 0.79                      |
| 18 Northern Interior         | 113,895          | 115,752          | 1.63                      |
| 20 Vancouver                 | 477,745          | 492,306          | 3.05                      |
| 30 Burnaby                   | 158,860          | 165,717          | 4.32                      |
| 40 North Shore               | 158,360          | 164,659          | 3.98                      |
| 50 Richmond                  | 126,620          | 132,345          | 4.52                      |
| 60 Capital Regional District | 299,733          | 311,562          | 3.95                      |
| <b>TOTAL</b>                 | <b>3,284,528</b> | <b>3,461,887</b> | <b>5.40</b>               |

<sup>1</sup> Population estimates supplied by the Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.

**Table 2**  
**Population Estimates<sup>1</sup> in British Columbia**  
**by Health Region by Age and Sex**  
**1993**

| Health Region                | < 25           |                | 25-34          |                | 35-44          |                | 45-54          |                | 55-64          |                | 65 +           |                | Subtotal         |                  | Total            |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|
|                              | M              | F              | M              | F              | M              | F              | M              | F              | M              | F              | M              | F              | M                | F                |                  |
| 1 East Kootenay              | 13,110         | 12,143         | 4,723          | 4,882          | 6,114          | 5,970          | 4,397          | 4,186          | 3,425          | 3,049          | 3,990          | 4,575          | 35,759           | 34,805           | 70,564           |
| 2 Central Kootenay           | 12,952         | 12,230         | 4,495          | 4,719          | 6,443          | 6,349          | 4,628          | 4,323          | 3,680          | 3,516          | 5,127          | 6,064          | 37,325           | 37,201           | 74,526           |
| 4 North Okanagan             | 17,852         | 16,560         | 6,638          | 6,704          | 7,963          | 8,329          | 6,157          | 6,330          | 5,487          | 5,600          | 7,787          | 9,043          | 51,884           | 52,566           | 104,450          |
| 5 South Okanagan             | 30,749         | 29,608         | 12,985         | 13,688         | 14,538         | 15,456         | 10,781         | 11,515         | 10,251         | 11,022         | 17,398         | 21,040         | 96,702           | 102,329          | 199,031          |
| 6 South Central              | 21,552         | 20,329         | 7,797          | 8,413          | 9,399          | 9,488          | 7,332          | 6,994          | 5,563          | 5,025          | 5,646          | 6,359          | 57,289           | 56,608           | 113,897          |
| 7 Upper Fraser Valley        | 31,427         | 29,354         | 13,000         | 12,692         | 12,674         | 12,527         | 8,930          | 8,712          | 7,641          | 7,868          | 11,420         | 14,142         | 85,092           | 85,295           | 170,387          |
| 8 Central Fraser Valley      | 36,112         | 34,223         | 14,369         | 15,163         | 16,629         | 16,697         | 11,594         | 10,659         | 7,294          | 6,989          | 8,958          | 11,214         | 94,956           | 94,945           | 189,901          |
| 9 Boundary                   | 69,359         | 66,263         | 29,129         | 29,884         | 31,335         | 32,097         | 23,576         | 22,441         | 15,386         | 15,232         | 18,334         | 24,066         | 187,119          | 189,983          | 377,102          |
| 10 Simon Fraser              | 33,826         | 32,472         | 18,579         | 18,752         | 17,980         | 17,906         | 12,129         | 11,934         | 7,651          | 7,513          | 7,760          | 11,623         | 97,925           | 100,200          | 198,125          |
| 11 Coast Garibaldi           | 10,730         | 10,276         | 4,916          | 4,944          | 5,646          | 5,285          | 4,062          | 3,498          | 3,122          | 2,781          | 3,703          | 4,223          | 32,179           | 31,007           | 63,186           |
| 13 Central Vancouver Island  | 34,498         | 33,391         | 13,445         | 13,927         | 16,515         | 16,877         | 12,670         | 12,345         | 10,503         | 10,602         | 14,785         | 17,281         | 102,416          | 104,423          | 206,839          |
| 14 Upper Island              | 18,899         | 17,768         | 7,683          | 7,705          | 8,927          | 8,801          | 6,701          | 6,081          | 4,853          | 4,307          | 4,815          | 5,615          | 51,878           | 50,277           | 102,155          |
| 15 Cariboo                   | 13,193         | 12,618         | 4,695          | 4,797          | 5,547          | 5,650          | 4,310          | 3,813          | 3,150          | 2,609          | 2,748          | 2,688          | 33,643           | 32,175           | 65,818           |
| 16 Skeena                    | 18,389         | 17,108         | 7,304          | 7,187          | 7,591          | 6,949          | 5,234          | 4,431          | 3,334          | 2,531          | 2,193          | 2,369          | 44,045           | 40,575           | 84,620           |
| 17 Peace River               | 12,713         | 11,977         | 5,464          | 5,232          | 5,056          | 4,528          | 3,210          | 2,889          | 2,269          | 1,890          | 1,834          | 1,883          | 30,546           | 28,399           | 58,945           |
| 18 Northern Interior         | 24,517         | 23,298         | 9,585          | 9,700          | 10,318         | 9,827          | 7,108          | 6,401          | 4,657          | 3,752          | 3,274          | 3,315          | 59,459           | 56,293           | 115,752          |
| 20 Vancouver                 | 67,491         | 66,733         | 54,791         | 52,792         | 42,899         | 41,680         | 28,325         | 27,813         | 21,879         | 21,215         | 27,152         | 39,536         | 242,537          | 249,769          | 492,306          |
| 30 Burnaby                   | 25,003         | 24,892         | 16,779         | 15,916         | 12,550         | 12,805         | 9,511          | 9,864          | 7,660          | 7,610          | 9,461          | 13,666         | 80,964           | 84,753           | 165,717          |
| 40 North Shore               | 25,035         | 24,339         | 11,643         | 12,626         | 13,717         | 14,881         | 11,744         | 12,129         | 7,887          | 8,269          | 9,080          | 13,309         | 79,106           | 85,553           | 164,659          |
| 50 Richmond                  | 22,867         | 21,659         | 10,349         | 11,019         | 11,158         | 12,447         | 8,786          | 8,927          | 5,502          | 5,574          | 5,796          | 8,261          | 64,458           | 67,887           | 132,345          |
| 60 Capital Regional District | 46,249         | 44,837         | 23,892         | 24,033         | 24,133         | 25,645         | 17,944         | 18,606         | 13,513         | 14,712         | 23,792         | 34,206         | 149,523          | 162,039          | 311,562          |
| <b>TOTAL</b>                 | <b>586,523</b> | <b>562,078</b> | <b>282,261</b> | <b>284,775</b> | <b>287,132</b> | <b>290,194</b> | <b>209,129</b> | <b>203,891</b> | <b>154,707</b> | <b>151,666</b> | <b>195,053</b> | <b>254,478</b> | <b>1,714,805</b> | <b>1,747,082</b> | <b>3,461,887</b> |

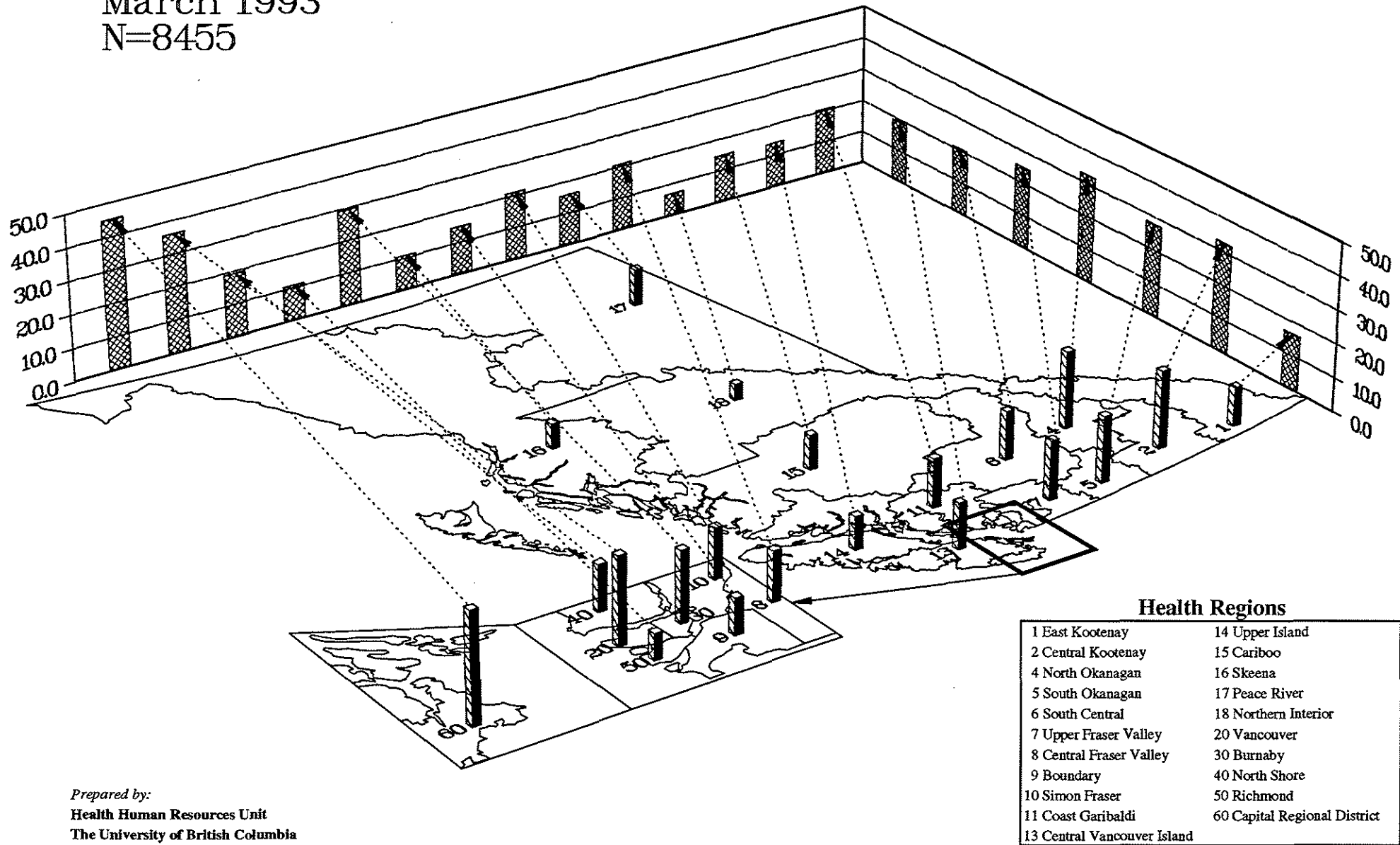
<sup>1</sup> Population estimates supplied by the Central Statistics Branch, Ministry of Government Services are from the P.E.O.P.L.E. Projection Model - Projection #18.



## APPENDIX C

### HOSPITAL BED CAPACITY IN BRITISH COLUMBIA BY HEALTH REGION

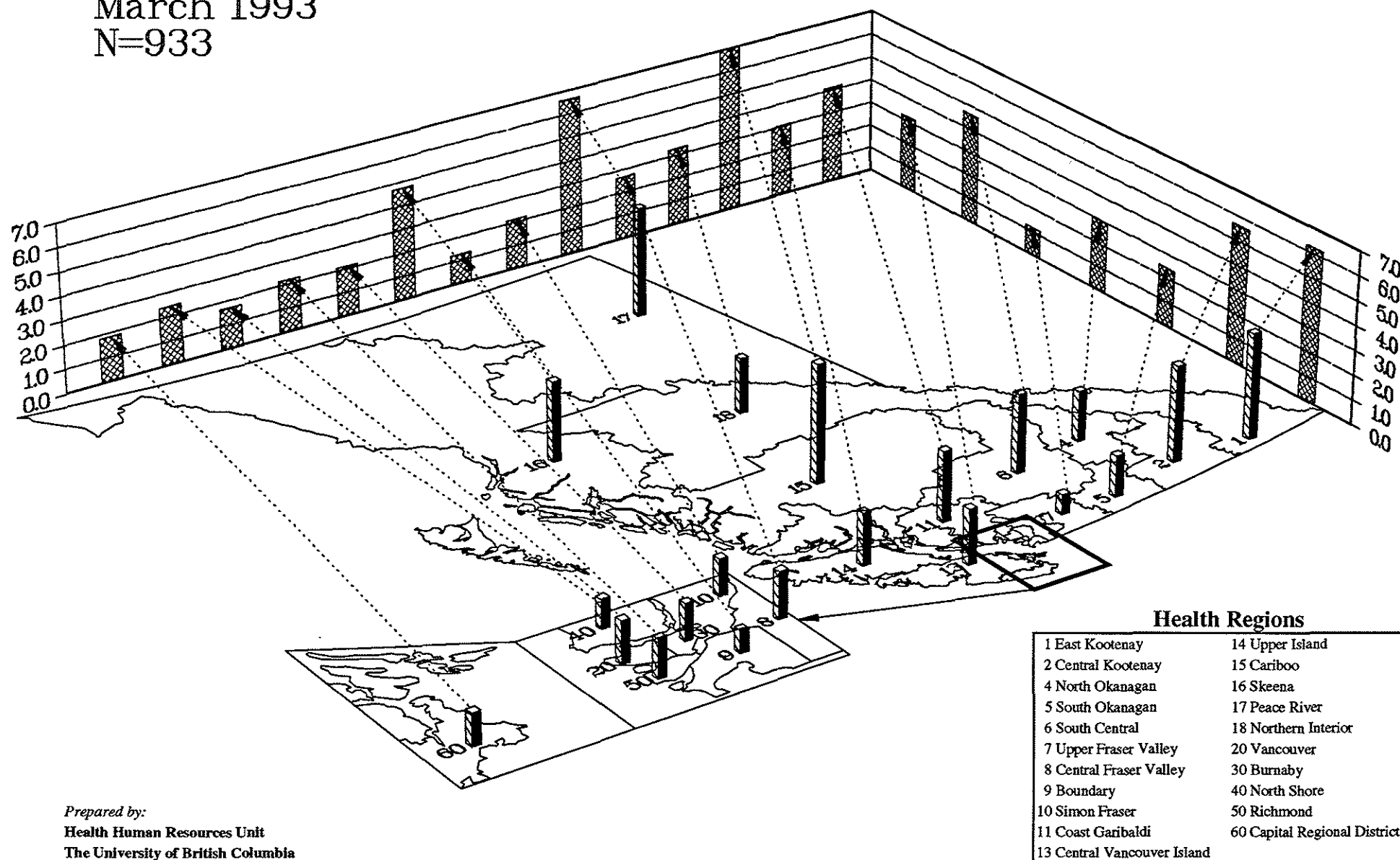
Extended Care Beds  
per 10,000 Population  
by Health Region  
March 1993  
N=8455



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

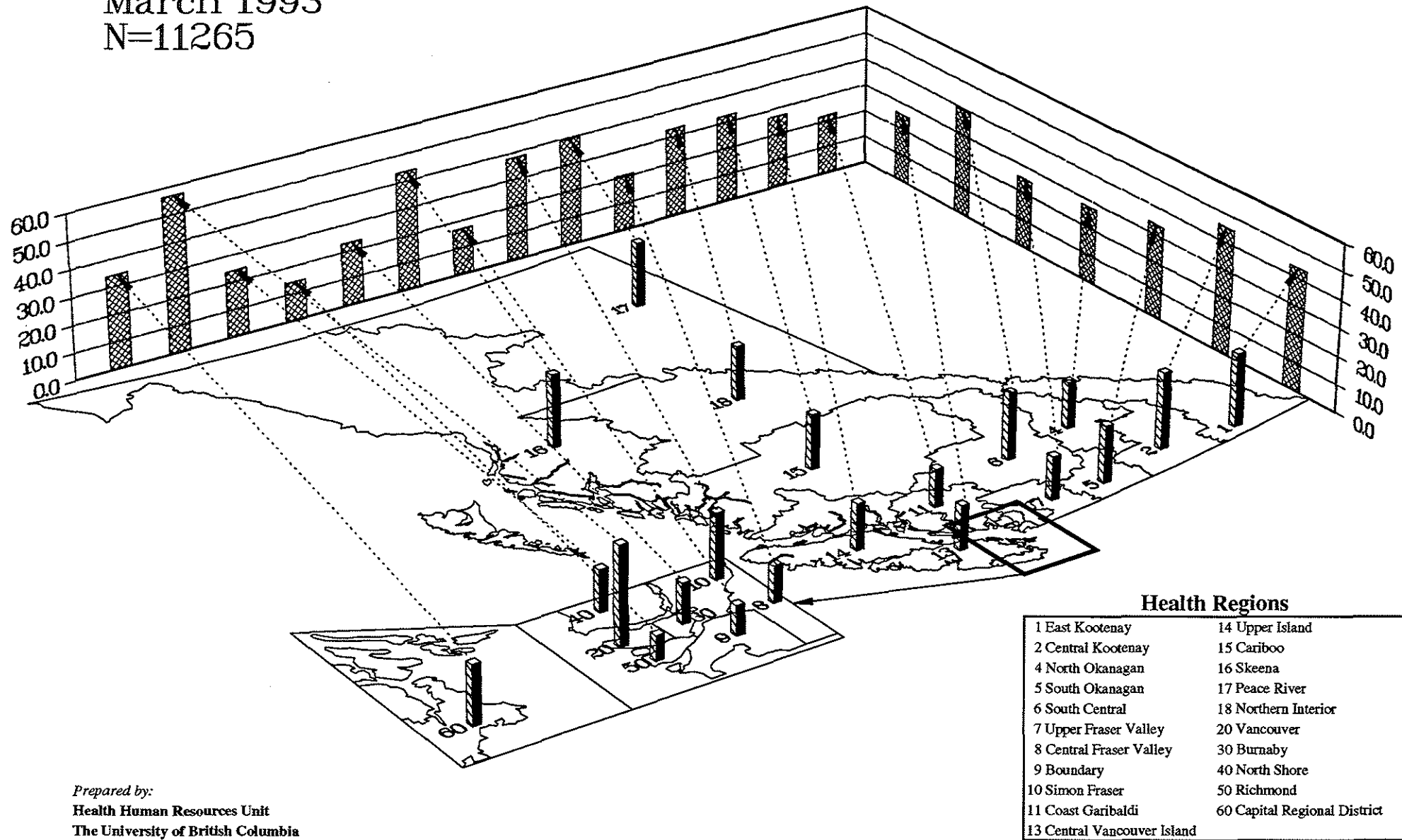


Bassinets  
per 10,000 Population  
by Health Region  
March 1993  
N=933



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

Acute Care Beds  
per 10,000 Population  
by Health Region  
March 1993  
N=11265



Prepared by:  
Health Human Resources Unit  
The University of British Columbia

**Table 1a**  
**Approved Hospital Bed Capacity<sup>1</sup> in British Columbia**  
**by Health Region**  
**March 1991 and March 1993**

| Health Region                | Acute Care Beds |               | Extended Care Beds |              | Bassinets <sup>2</sup> |            | Rehabilitation Beds |            | Total         |               |
|------------------------------|-----------------|---------------|--------------------|--------------|------------------------|------------|---------------------|------------|---------------|---------------|
|                              | 1991            | 1993          | 1991               | 1993         | 1991                   | 1993       | 1991                | 1993       | 1991          | 1993          |
| 1 East Kootenay              | 330             | 308           | 107                | 116          | 67                     | 44         | 0                   | 0          | 504           | 468           |
| 2 Central Kootenay           | 400             | 339           | 211                | 244          | 42                     | 42         | 0                   | 0          | 653           | 625           |
| 4 North Okanagan             | 301             | 289           | 258                | 340          | 40                     | 31         | 0                   | 0          | 599           | 660           |
| 5 South Okanagan             | 623             | 672           | 518                | 555          | 48                     | 48         | 0                   | 0          | 1,189         | 1,275         |
| 6 South Central              | 526             | 453           | 216                | 234          | 65                     | 53         | 0                   | 0          | 807           | 740           |
| 7 Upper Fraser Valley        | 434             | 434           | 320                | 425          | 47                     | 20         | 0                   | 0          | 801           | 879           |
| 8 Central Fraser Valley      | 394             | 394           | 394                | 394          | 50                     | 51         | 0                   | 0          | 838           | 839           |
| 9 Boundary                   | 602             | 648           | 556                | 566          | 36                     | 48         | 0                   | 0          | 1,194         | 1,262         |
| 10 Simon Fraser              | 727             | 755           | 417                | 417          | 68                     | 42         | 0                   | 0          | 1,212         | 1,214         |
| 11 Coast Garibaldi           | 157             | 140           | 130                | 130          | 28                     | 26         | 0                   | 0          | 315           | 296           |
| 13 Central Vancouver Island  | 566             | 528           | 396                | 396          | 69                     | 66         | 0                   | 0          | 1,031         | 990           |
| 14 Upper Island              | 305             | 275           | 141                | 143          | 41                     | 31         | 0                   | 0          | 487           | 449           |
| 15 Cariboo                   | 215             | 215           | 97                 | 97           | 53                     | 46         | 0                   | 0          | 365           | 358           |
| 16 Skeena                    | 376             | 370           | 91                 | 91           | 62                     | 40         | 0                   | 0          | 529           | 501           |
| 17 Peace River               | 233             | 233           | 94                 | 94           | 39                     | 39         | 0                   | 0          | 366           | 366           |
| 18 Northern Interior         | 430             | 381           | 80                 | 80           | 80                     | 38         | 0                   | 0          | 590           | 499           |
| 20 Vancouver                 | 2,725           | 2,794         | 1,520              | 1,778        | 203                    | 119        | 275                 | 271        | 4,723         | 4,962         |
| 30 Burnaby                   | 386             | 386           | 365                | 488          | 35                     | 35         | 0                   | 0          | 786           | 909           |
| 40 North Shore               | 401             | 401           | 319                | 319          | 36                     | 28         | 0                   | 0          | 756           | 748           |
| 50 Richmond                  | 189             | 189           | 143                | 143          | 29                     | 29         | 0                   | 0          | 361           | 361           |
| 60 Capital Regional District | 1,045           | 1,061         | 1,428              | 1,405        | 79                     | 57         | 153                 | 145        | 2,705         | 2,668         |
| <b>TOTAL</b>                 | <b>11,365</b>   | <b>11,265</b> | <b>7,801</b>       | <b>8,455</b> | <b>1,217</b>           | <b>933</b> | <b>428</b>          | <b>416</b> | <b>20,811</b> | <b>21,069</b> |

<sup>1</sup> Source: Hospital Care Division, Care Services, Ministry of Health

<sup>2</sup> Figures refer to Set Up Bassinets.

**Table 1b**  
**Approved Hospital Bed Capacity in British Columbia**  
**per 10,000 Population by Health Region**  
**March 1991 and March 1993**

| Health Region                | Acute Care Beds |              | Extended Care Beds |              | Bassinets   |             | Rehabilitation Beds |             | Total        |              |
|------------------------------|-----------------|--------------|--------------------|--------------|-------------|-------------|---------------------|-------------|--------------|--------------|
|                              | 1991            | 1993         | 1991               | 1993         | 1991        | 1993        | 1991                | 1993        | 1991         | 1993         |
| 1 East Kootenay              | 47.45           | 43.65        | 15.39              | 16.44        | 9.63        | 6.24        | 0.00                | 0.00        | 72.47        | 66.32        |
| 2 Central Kootenay           | 55.60           | 45.49        | 29.33              | 32.74        | 5.84        | 5.64        | 0.00                | 0.00        | 90.77        | 83.86        |
| 4 North Okanagan             | 31.17           | 27.67        | 26.72              | 32.55        | 4.14        | 2.97        | 0.00                | 0.00        | 62.03        | 63.19        |
| 5 South Okanagan             | 34.89           | 33.76        | 29.01              | 27.89        | 2.69        | 2.41        | 0.00                | 0.00        | 66.59        | 64.06        |
| 6 South Central              | 48.33           | 39.77        | 19.85              | 20.54        | 5.97        | 4.65        | 0.00                | 0.00        | 74.14        | 64.97        |
| 7 Upper Fraser Valley        | 27.81           | 25.47        | 20.51              | 24.94        | 3.01        | 1.17        | 0.00                | 0.00        | 51.33        | 51.59        |
| 8 Central Fraser Valley      | 22.35           | 20.75        | 22.35              | 20.75        | 2.84        | 2.69        | 0.00                | 0.00        | 47.53        | 44.18        |
| 9 Boundary                   | 17.14           | 17.18        | 15.83              | 15.01        | 1.02        | 1.27        | 0.00                | 0.00        | 33.99        | 33.47        |
| 10 Simon Fraser              | 39.62           | 38.11        | 22.72              | 21.05        | 3.71        | 2.12        | 0.00                | 0.00        | 66.04        | 61.27        |
| 11 Coast Garibaldi           | 26.31           | 22.16        | 21.79              | 20.57        | 4.69        | 4.11        | 0.00                | 0.00        | 52.80        | 46.85        |
| 13 Central Vancouver Island  | 29.18           | 25.53        | 20.42              | 19.15        | 3.56        | 3.19        | 0.00                | 0.00        | 53.15        | 47.86        |
| 14 Upper Island              | 31.52           | 26.92        | 14.57              | 14.00        | 4.24        | 3.03        | 0.00                | 0.00        | 50.32        | 43.95        |
| 15 Cariboo                   | 33.19           | 32.67        | 14.97              | 14.74        | 8.18        | 6.99        | 0.00                | 0.00        | 56.34        | 54.39        |
| 16 Skeena                    | 45.28           | 43.72        | 10.96              | 10.75        | 7.47        | 4.73        | 0.00                | 0.00        | 63.71        | 59.21        |
| 17 Peace River               | 39.84           | 39.53        | 16.07              | 15.95        | 6.67        | 6.62        | 0.00                | 0.00        | 62.58        | 62.09        |
| 18 Northern Interior         | 37.75           | 32.92        | 7.02               | 6.91         | 7.02        | 3.28        | 0.00                | 0.00        | 51.80        | 43.11        |
| 20 Vancouver                 | 57.04           | 56.75        | 31.82              | 36.12        | 4.25        | 2.42        | 5.76                | 5.50        | 98.86        | 100.79       |
| 30 Burnaby                   | 24.30           | 23.29        | 22.98              | 29.45        | 2.20        | 2.11        | 0.00                | 0.00        | 49.48        | 54.85        |
| 40 North Shore               | 25.32           | 24.35        | 20.14              | 19.37        | 2.27        | 1.70        | 0.00                | 0.00        | 47.74        | 45.43        |
| 50 Richmond                  | 14.93           | 14.28        | 11.29              | 10.81        | 2.29        | 2.19        | 0.00                | 0.00        | 28.51        | 27.28        |
| 60 Capital Regional District | 34.86           | 34.05        | 47.64              | 45.10        | 2.64        | 1.83        | 5.10                | 4.65        | 90.25        | 85.63        |
| <b>TOTAL</b>                 | <b>34.60</b>    | <b>32.54</b> | <b>23.75</b>       | <b>24.42</b> | <b>3.71</b> | <b>2.70</b> | <b>1.30</b>         | <b>1.20</b> | <b>63.36</b> | <b>60.86</b> |

**Table 1c**  
**Average Annual Rate of Change: Approved Hospital Bed Capacity in British Columbia**  
**by Health Region**  
**March 1991 to March 1993**

| Health Region                | Acute Care Beds     |                    | Extended Care Beds  |                    | Bassinets           |                    | Rehabilitation Beds |                    | Total               |                    |
|------------------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
|                              | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> | Number <sup>1</sup> | Ratio <sup>2</sup> |
| 1 East Kootenay              | -3.39               | -4.09              | 4.12                | 3.37               | -18.96              | -19.55             | *                   | *                  | -3.64               | -4.34              |
| 2 Central Kootenay           | -7.94               | -9.55              | 7.54                | 5.65               | 0.00                | -1.75              | *                   | *                  | -2.17               | -3.88              |
| 4 North Okanagan             | -2.01               | -5.78              | 14.80               | 10.38              | -11.97              | -15.35             | *                   | *                  | 4.97                | 0.93               |
| 5 South Okanagan             | 3.86                | -1.63              | 3.51                | -1.96              | 0.00                | -5.29              | *                   | *                  | 3.55                | -1.92              |
| 6 South Central              | -7.20               | -9.28              | 4.08                | 1.75               | -9.70               | -11.73             | *                   | *                  | -4.24               | -6.39              |
| 7 Upper Fraser Valley        | 0.00                | -4.30              | 15.24               | 10.29              | -34.77              | -37.57             | *                   | *                  | 4.76                | 0.25               |
| 8 Central Fraser Valley      | 0.00                | -3.65              | 0.00                | -3.65              | 1.00                | -2.69              | *                   | *                  | 0.06                | -3.59              |
| 9 Boundary                   | 3.75                | 0.14               | 0.90                | -2.62              | 15.47               | 11.45              | *                   | *                  | 2.81                | -0.77              |
| 10 Simon Fraser              | 1.91                | -1.92              | 0.00                | -3.76              | -21.41              | -24.36             | *                   | *                  | 0.08                | -3.68              |
| 11 Coast Garibaldi           | -5.57               | -8.24              | 0.00                | -2.83              | -3.64               | -6.36              | *                   | *                  | -3.06               | -5.80              |
| 13 Central Vancouver Island  | -3.42               | -6.47              | 0.00                | -3.16              | -2.20               | -5.29              | *                   | *                  | -2.01               | -5.11              |
| 14 Upper Island              | -5.05               | -7.58              | 0.71                | -1.98              | -13.05              | -15.37             | *                   | *                  | -3.98               | -6.54              |
| 15 Cariboo                   | 0.00                | -0.79              | 0.00                | -0.79              | -6.84               | -7.57              | *                   | *                  | -0.96               | -1.74              |
| 16 Skeena                    | -0.80               | -1.73              | 0.00                | -0.94              | -19.68              | -20.43             | *                   | *                  | -2.68               | -3.60              |
| 17 Peace River               | 0.00                | -0.39              | 0.00                | -0.39              | 0.00                | -0.39              | *                   | *                  | 0.00                | -0.39              |
| 18 Northern Interior         | -5.87               | -6.63              | 0.00                | -0.81              | -31.08              | -31.63             | *                   | *                  | -8.03               | -8.78              |
| 20 Vancouver                 | 1.26                | -0.25              | 8.15                | 6.54               | -23.44              | -24.58             | -0.73               | -2.21              | 2.50                | 0.97               |
| 30 Burnaby                   | 0.00                | -2.09              | 15.63               | 13.21              | 0.00                | -2.09              | *                   | *                  | 7.54                | 5.29               |
| 40 North Shore               | 0.00                | -1.93              | 0.00                | -1.93              | -11.81              | -13.51             | *                   | *                  | -0.53               | -2.45              |
| 50 Richmond                  | 0.00                | -2.19              | 0.00                | -2.19              | 0.00                | -2.19              | *                   | *                  | 0.00                | -2.19              |
| 60 Capital Regional District | 0.76                | -1.17              | -0.81               | -2.71              | -15.06              | -16.69             | -2.65               | -4.52              | -0.69               | -2.59              |
| <b>TOTAL</b>                 | <b>-0.44</b>        | <b>-3.02</b>       | <b>4.11</b>         | <b>1.41</b>        | <b>-12.44</b>       | <b>-14.71</b>      | <b>-1.41</b>        | <b>-3.97</b>       | <b>0.62</b>         | <b>-1.99</b>       |

<sup>1</sup> Rate of change (in percent) in the number.

<sup>2</sup> Rate of change (in percent) in the number per 10,000 population.

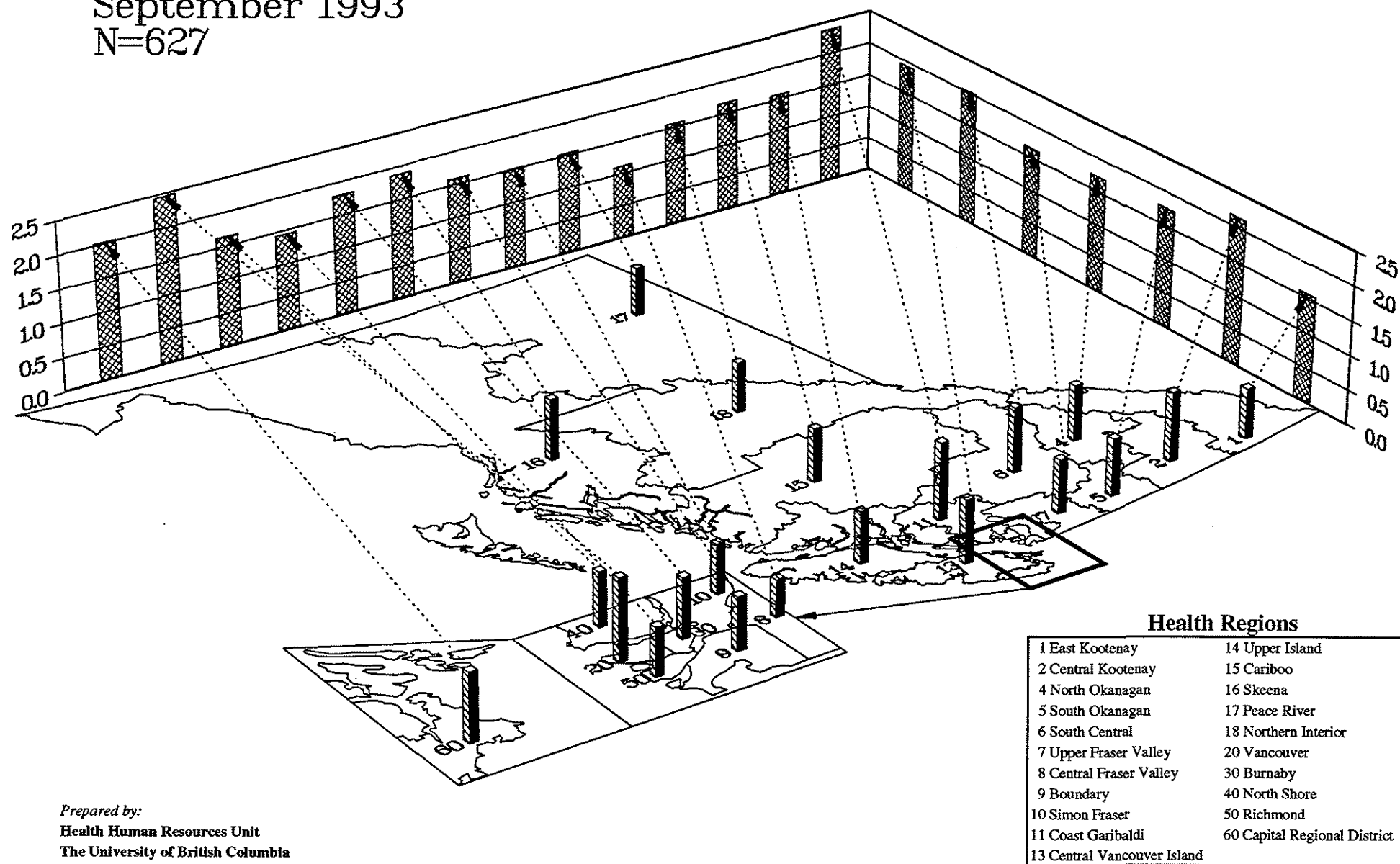
\* Indicates that the base for the rate of change is less than 10.



## APPENDIX D

### COMMUNITY PHARMACIES IN BRITISH COLUMBIA BY HEALTH REGION

# Community Pharmacies per 10,000 Population by Health Region September 1993 N=627



Prepared by:  
Health Human Resources Unit  
The University of British Columbia



**Table 1**  
**Community Pharmacies<sup>1</sup> in British Columbia**  
**by Health Region**  
**December 1991 and September 1993**

| Health Region                | Number            |            | Number per<br>10,000 Population |             | Average Annual<br>Rate of Change <sup>3</sup> |              |
|------------------------------|-------------------|------------|---------------------------------|-------------|---|--------------|
|                              | 1991 <sup>2</sup> | 1993       | 1991                            | 1993        | Number  | Ratio        |
| 1 East Kootenay              | 11                | 11         | 1.58                            | 1.56        | 0.00  | -0.83        |
| 2 Central Kootenay           | 14                | 16         | 1.95                            | 2.15        | 7.93  | 5.77         |
| 4 North Okanagan             | 16                | 18         | 1.66                            | 1.72        | 6.96  | 2.27         |
| 5 South Okanagan             | 33                | 35         | 1.85                            | 1.76        | 3.42  | -2.80        |
| 6 South Central              | 22                | 23         | 2.02                            | 2.02        | 2.57  | -0.05        |
| 7 Upper Fraser Valley        | 28                | 28         | 1.79                            | 1.64        | 0.00  | -4.90        |
| 8 Central Fraser Valley      | 22                | 21         | 1.25                            | 1.11        | -2.62   | -6.67        |
| 9 Boundary                   | 56                | 60         | 1.59                            | 1.59        | 4.02  | -0.11        |
| 10 Simon Fraser              | 31                | 30         | 1.69                            | 1.51        | -1.86   | -6.06        |
| 11 Coast Garibaldi           | 15                | 15         | 2.51                            | 2.37        | 0.00  | -3.22        |
| 13 Central Vancouver Island  | 38                | 40         | 1.96                            | 1.93        | 2.97  | -0.74        |
| 14 Upper Island              | 15                | 16         | 1.55                            | 1.57        | 3.76  | 0.60         |
| 15 Cariboo                   | 10                | 11         | 1.54                            | 1.67        | 5.60  | 4.65         |
| 16 Skeena                    | 14                | 16         | 1.69                            | 1.89        | 7.93  | 6.77         |
| 17 Peace River               | 9                 | 9          | 1.54                            | 1.53        | *   | *            |
| 18 Northern Interior         | 18                | 18         | 1.58                            | 1.56        | 0.00  | -0.92        |
| 20 Vancouver                 | 131               | 121        | 2.74                            | 2.46        | -4.44   | -6.06        |
| 30 Burnaby                   | 27                | 30         | 1.70                            | 1.81        | 6.21  | 3.67         |
| 40 North Shore               | 29                | 27         | 1.83                            | 1.64        | -4.00   | -6.12        |
| 50 Richmond                  | 19                | 19         | 1.50                            | 1.44        | 0.00  | -2.50        |
| 60 Capital Regional District | 62                | 63         | 2.07                            | 2.02        | 0.92  | -1.29        |
| <b>TOTAL</b>                 | <b>620</b>        | <b>627</b> | <b>1.89</b>                     | <b>1.81</b> | <b>0.64</b>                                   | <b>-2.34</b> |

<sup>1</sup> Includes retail pharmacies only. Hospital pharmacies are excluded. Source: College of Pharmacists of B.C.

<sup>2</sup> The total figure for 1991 differs from the corresponding figure for 1991 appearing in ROLLCALL 91 and ROLLCALL UPDATE 92 because of an error in the method of calculation used for ROLLCALL 91 and ROLLCALL UPDATE 92.

<sup>3</sup> Rate of change (in percent) in the number and in the number per 10,000 population.

\* Indicates that the base for the rate of change is less than 10.