## **ROLLCALL UPDATE 98**

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

#### HHRU 99:2

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

May 1999

#### **Canadian Cataloguing in Publication Data**

The National Library of Canada has catalogued this publication as follows:

Rollcall update

Biennial. ISSN 0828-9360

1. Medical personnel--British Columbia--Statistics--Periodicals. 2. Allied health personnel--British Columbia-Statistics--Periodicals. I. University of British Columbia. Health Human Resources Unit. II Series: Health Human Resources Unit research reports.

RA410.9.R64 610.69'09711 CS85-35136-7

#### HEALTH HUMAN RESOURCES UNIT

The Health Human Resources Unit (HHRU) was established as a demonstration project by the British Columbia Ministry of Health in 1973. Since that time, the Unit has continued to be funded on an ongoing basis (subject to annual review) as part of the Centre for Health Services and Policy Research. 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 discussions of key current issues and available resources with the senior staff of the Ministry of Health. Various health care provider groups participate indirectly, through on-going formal and informal communications with Ministry of Health officials and with HHRU researchers. Arminée Kazanjian is the Associate Director and Principal Investigator for the Unit.

Three types of research are included in the Unit's research agenda. In conjunction with professional licensing bodies or associations, the HHRU maintains the Cooperative Health Human Resources Database. The Unit uses these data to produce regular status reports that provide a basis for in-depth studies and for health human resources planning. The Unit undertakes more detailed analyses bearing on particular health human resources policy issues and assesses the impact of specific policy measures, using secondary analyses of data from the Cooperative Database, data from the administrative databases maintained under the HIDU, or primary data collected through surveys. The HHRU also conducts specific projects pertaining to the management of health human resources at local, regional and provincial levels.

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

Health Human Resources Unit Centre for Health Services and Policy Research #429-2194 Health Sciences Mall Vancouver, BC V6T 1Z3

Ph: (604) 822-4810 Fax: (604) 822-5690 email: hhru@chspr.ubc.ca URL: www.chspr.ubc.ca

#### **ACKNOWLEDGEMENTS**

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

ROLLCALL UPDATE 98 represents the culmination of six intensive months of data collection, consistency checks, table generation, definition and other text verification, proof-reading and analysis. The programing team working on this edition was headed by Kerry Kerluke and included Harold Yip, Brian McCashin, and Patrick Wong Fung. Allyson MacDonald and Laura Wood handled the data collection, editing and updating. Laura Wood, Kerry Kerluke, and Allyson MacDonald co-ordinated the report production. Tables were produced on an IBM<sup>TM</sup> compatible PC using, Microsoft Excel<sup>TM</sup> v7.0 and software written in FoxPRO<sup>TM</sup> v2.5. Text was produced using Microsoft Word<sup>TM</sup> for Windows v7.0.

Financial support from the British Columbia Ministry of Health and the University of British Columbia is gratefully acknowledged.

### TABLE OF CONTENTS

		Page
Introd	luction	v
Conte	ents:	
I.	Dental Services	1
	Certified Dental Assistants	3
	2. Dental Hygienists	12
	3. Dentists	21
II.	Medical and Treatment Services	35
	4. Emergency Medical Assistants	37
	5. Midwives	52
	6. Opticians	57
	7. Pharmacists	65
	8. Physicians	74
III.	Nursing Services	99
	9. Licensed Practical Nurses	101
	10. Registered Nurses	112
	11. Registered Psychiatric Nurses	143
IV.	Nutrition and Dietary Services	157
	12. Dietitians and Nutritionists	159
V.	Psychological/Social Services	169
	13. Psychologists	171

VI.	Rehabilitation Services	183
	14. Massage Therapists	185
	15. Occupational Therapists	198
	16. Physical Therapists	212
Appe	ndices	225
A.	(Revised) Local Health Areas, British Columbia Health Regions and Health Human Resources Unit Health Regions	227
B.	Population Estimates for British Columbia by Health Region	231
C.	Hospital Bed Capacity in British Columbia by Health Region, March 1997	235
D.	Community Pharmacies in British Columbia by Health Region, April 1998 and December 1998	239
Repo	rts of the Health Human Resources Unit	243

#### INTRODUCTION

The Cooperative Health Human Resources Database (CHHRD), developed and maintained by the Health Human Resources Unit (HHRU) since 1973, provides the basis for a number of our regular and special reports. The *ROLLCALL* series, documents the number and location of selected health profession groups in British Columbia. The series has two components - *ROLLCALL* and *ROLLCALL UPDATE* - which are produced in alternate years. *ROLLCALL UPDATE*, published for even-numbered years, contains information about selected health professions for which annual electronic data are available through the CHHRD. These data are owned by the regulatory bodies and professional associations of each group.

Interest in health human resources planning has waxed and waned over the past few years, with varying degrees of concern about the effective use of public funds allocated to health services. This report provides some of the health human resources data that are integral to undertaking rational planning and implementing routine procedures of public accountability. Information about the province's health personnel is published in *ROLLCALL* and *ROLLCALL UPDATE* with the expectation that it will be used for health human resources planning by the Regional Health Boards, Community Health Services Societies, Community Health Councils, professional associations and licensing/regulatory bodies in the province, and by the government.

This edition of *ROLLCALL UPDATE* includes for the first time data on the newly regulated profession of midwifery. The inclusion of the chapter on midwives was made possible this year because of the availability of a reliable registration database for this group. Opticians who first appeared last year in *ROLLCALL 97* also make their first appearance in *ROLLCALL UPDATE 98*.

ROLLCALL UPDATE 98 represents a return to the use of population 'projections' from the P.E.O.P.L.E. projection models which have been used in recent years in ROLLCALL and ROLLCALL UPDATE. The population 'projections' used this year are from P.E.O.P.L.E. #23 (see Appendix B) and are the most recent population 'projections' available from the Population Section, B.C. Stats (July 1998). The P.E.O.P.L.E. #23 population data reflect the 1997 revisions to the Local Health Area (LHA) and Health Region (HR) boundaries, and incorporate the 1996 Census data and preliminary estimates of net census under-counts. All tables showing inter-temporal comparisons of personnel per 10,000 population distributions for 1997 and 1998 and rates of change for personnel-to-population ratios have been computed using the P.E.O.P.L.E. #23 population data. Therefore, the 1997 and 1998 personnel to population ratios that appear in ROLLCALL UPDATE 98 may differ from those reported in ROLLCALL 97 because they have been recalculated based on these updated population data.

The governing statutes shown for each personnel group are those which were in effect as of December 1998. Please note, there are some pending changes to the governing statutes for Occupational Therapists and Registered Psychiatric Nurses. A footnote appears in each chapter

 $\label{eq:personnel} \begin{subarray}{l} \end{subarray} \begin{subarray}{l} \end{subarray} (Personnel 1998/Personnel 1997)^{12/n} - 1] X 100, \\ where $n = $number of months separating the two sets of data. \end{subarray}$ 

Rate of change (in percent) in the number of personnel relative to the change in population:

[{(Personnel 1998/Personnel 1997) x (Population 1997/Population 1998)} $^{12/n}$  - 1] x 100, where n = number of months separating the two sets of data.

<sup>&</sup>lt;sup>1</sup> Rate of change (in percent) in the number of personnel:

detailing the changes which are occurring. *ROLLCALL* 99, when published, will incorporate the changes to the governing statutes.

A map of the province's Health Regions and a table showing the conversion between Local Health Areas and Health Regions is found in Appendix A. The population by health region is provided in Appendix B, and Appendix C includes tables showing hospital bed capacity. Unfortunately, the March 31, 1998 data on hospital bed capacity were never approved by the B.C. Ministry of Health and are not available, so Appendix C presents only March 31, 1997 data on hospital bed capacity. A table showing community pharmacies by Health Region appears in Appendix D.

Table 1 shows the sixteen health professions and two sub-groups (first responders and licensed graduate nurses) included in *ROLLCALL UPDATE 98* by group type. All but two health professions included in the *ROLLCALL UPDATE* series are mandatory registration groups - registration with the regulatory body is required for employment in the field. Registered dietitians and nutritionists and occupational therapists, in contrast, are voluntary membership groups. They are included because electronic copies of their databases are readily available to the HHRU, and they are considered to have a fairly broad membership base. By definition, as voluntary membership groups, all those employed in these fields may not be included in the *ROLLCALL* tables. This should be kept in mind when using these data.

#### Health Personnel Groups in British Columbia by Group Type by Employment Status 1998

MANDATORY REGISTRATION GROUPS	Employed in Field <sup>1</sup>	Not Employed In Field <sup>2</sup>	Employment Status Unknown	TOTAL
Certified Dental Assistants (CDSBC)		518	4,354	4,872
Dental Hygienists (CDHBC)	1,414	75	210	1.699
Dentists (CDSBC)	-, · - ·	97	2,455	2,552
Emergency Medical Assistants (EMALB)	2,698	_	-	2,698
First Responders <sup>3</sup> (EMALB)	7,832	_	17	7,849
Midwives (CMBC)	-,052	_	49	49
Opticians (COBC)	1,011	192	31	1,234
Pharmacists (CPBC)	2,652	342	-	2,994
Physicians (CPSBC & MSC)	-	-	8,742	8,742
Licensed Practical Nurses (CLPNBC)	4,424	687	16	5,127
Registered Nurses (RNABC)	28,181	3,394	-	31,575
Licensed Graduate Nurses (RNABC)	247	33	-	280
Registered Psychiatric Nurses (RPNABC)	2,200	311	-	2,511
Psychologists (CPBC)	817	96	8	921
Massage Therapists (CMTBC)	1,025	92	197	1,314
Physical Therapists (CPTBC)	1,952	299	143	2,394
SUB TOTAL	54,453	6,136	16,222	76,811
VOLUNTARY MEMBERSHIP GROUPS				
Dietitians and Nutritionists (BCDNA)	702	99	5	806
Occupational Therapists (BCSOT)	813	64	21	898
SUB TOTAL	1,515	163	26	1,704

<sup>&</sup>lt;sup>1</sup> Includes personnel who are known to be employed in the field as reported by the regulatory body or membership society or association.

<sup>&</sup>lt;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", "on leave" or "not practicing" by the regulatory body, or membership society or association.

<sup>&</sup>lt;sup>3</sup> Information is collected only for those known to be employed and certified as first responders. However, acting as a first responder is not the primary duty of this employment group (i.e., most are firemen or policemen). See Chapter 4.

Table 1 also shows the number of professionals in each group by employment status where this information is available. The number in the entire group is useful as an estimate of the total employable population for each health profession. Actual employment levels, however, may be of use to health planners for both short- and long-term planning.

Data for all groups contained in both components of the *ROLLCALL* series are held in the CHHRD maintained by the HHRU, located within the Centre for Health Services and Policy Research. All files maintained by the Centre are stored in a manner which physically restricts access. Only those individuals authorized to handle them actually do so. This includes a small number of Centre programming and research staff, each of whom has filed a "Solemn Declaration of Assurance of Confidentiality" with the Centre and with the data stewards who require such documentation.

This report will be made available in an electronic format on the Centre for Health Services and Policy Research web site (www.chspr.ubc.ca) under "Publications" -- "Chronological listing of reports" -- "Health Human Resources Unit", as well as in the printed version.

The next regular report, *ROLLCALL 99*, will be available early in 2000. That publication will contain information on a much larger number of health human resources groups.

# I. 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;
- (1) 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
- (q) other procedures that the general examination committee may authorise while the certified dental assistant is participating in courses of study and training approved by the general examination committee, and subject to the requirements of that committee with respect thereto;
- (r) applying treatment liners in teeth without pulpal involvement;
- (s) removing retraction cord.<sup>2</sup>

On successful completion of the specific 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;

<sup>&</sup>lt;sup>1</sup> Regulations of The College of Dental Surgeons of British Columbia, Auxiliary Bodies, revised May 1995, Article 10.16. See also National Occupational Classification 1992, Major Group 34, No. 3411, Ottawa: Employment and Immigration Canada.

<sup>&</sup>lt;sup>2</sup> Ibid., Article 10.17.

- (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;
- (l) fitting headgear prior to assessment by a member;
- (m) these duties within the Prosthodonic Module:
  - (i) fabricating provisional restorations intraorally;
  - (ii) trying-in provisional restorations and adjusting occlusion outside of the mouth;
  - (iii) removing provisional cement;
  - (iv) removing provisional restorations;
  - (v) temporary cementation of provisional restorations prior to assessment by a member.<sup>3</sup>

**Enabling Statute:** Dentists Act, R.S.B.C. 1996, Chapter 94; administered by the Ministry of

Health and Ministry Responsible for Seniors.

Governing Body: 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.

**Date of Record:** December 1997 and December 1998.

**Source of Data:** 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 versus employment or other address are not known.

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

#### 1. Registration Status

Tables 1a and 1b report the number and number per 10,000 population of certified dental assistants by registration status in British Columbia. Table 1c shows the average annual rates of change in these numbers. CDAs can register with the CDSBC as either *licensed* (formerly *active*) or *non-practising*. Licensed CDAs may legally practise their skills in B.C., non-practising CDAs remain on the register but may not practise.

#### 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 the standard age categories developed and used by Statistics Canada.

<sup>&</sup>lt;sup>3</sup> Regulations, op. cit., revised April 1996, Article 10.19.

#### 3. Analysis of Change

Table 3 illustrates the sources of change which affected the supply of certified dental assistants from December 1997 to December 1998.

*New registrants* include CDAs who were registered as of December 1998 and who registered with the CDSBC for the first time subsequent to December 1997. 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 CDAs who were not registered in British Columbia in December 1997, but were registered in the province in December 1998, and whose date of initial registration was before December 1997. Also included as reactivations are CDAs who reported out-of-province addresses in December 1997, but who reported British Columbia addresses in December 1998.

Attrition describes CDAs who were included in the December 1997 population but who, because of death, retirement, suspension, out-of-province relocation, or non-renewal of registration, were not included in the December 1998 total.

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

Table 1a
Certified Dental Assistants in British Columbia
by Health Region by Registration Status

December 1997 and December 1998

	Lice	nsed	Non-Pr	actising	Total		
Health Region	1997	1998	1997	1998	1997	1998	
1 East Kootenay	86	86	15	20	101	106	
2 West Kootenay - Boundary	96	92	11	16	107	108	
3 North Okanagan	133	134	15	10	148	144	
4 South Okanagan - Similkameen	275	278	39	38	314	316	
5 Thompson	156	151	10	22	166	173	
6 Fraser Valley	299	319	39	47	338	366	
7 South Fraser Valley	657	666	43	53	700	719	
8 Simon Fraser	462	442	20	42	482	484	
9 Coast Garibaldi	71	76	7	7	78	83	
10 Central Vancouver Island	343	318	35	50	378	368	
11 Upper Island/Central Coast	173	166	13	23	186	189	
12 Cariboo	68	70	15	13	83	83	
13 North West	93	92	8	6	101	98	
14 Peace Liard	53	47	6	12	59	59	
15 Northern Interior	179	168	28	38	207	206	
16 Vancouver	375	373	16	28	391	401	
17 Burnaby	161	167	7	11	168	178	
18 North Shore	159	154	13	18	172	172	
19 Richmond	169	151	5	14	174	165	
20 Capital	407	404	43	50	450	454	
OTAL	4,415	4,354	388	518	4,803	4,872	

<sup>&</sup>lt;sup>1</sup> The registration category formerly titled "Active" is now titled "Licensed".

Table 1b
Certified Dental Assistants in British Columbia
per 10,000 Population by Health Region by Registration Status<sup>1</sup>
December 1997 and December 1998

	Lice	nsed	Non-Pra	actising	To	tal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	10.80	10.70	1.88	2.49	12.69	13.19
2 West Kootenay - Boundary	11.79	11.22	1.35	1.95	13.14	13.18
3 North Okanagan	11.50	11.44	1.30	0.85	12.80	12.29
4 South Okanagan - Similkameen	12.27	12.24	1.74	1.67	14.01	13.91
5 Thompson	11.82	11.27	0.76	1.64	12.58	12.91
6 Fraser Valley	12.79	13.32	1.67	1.96	14.45	15.28
7 South Fraser Valley	11.94	11.83	0.78	0.94	12.72	12.78
8 Simon Fraser	15.07	14.05	0.65	1.33	15.73	15.38
9 Coast Garibaldi	9.43	9.71	0.93	0.89	10.36	10.61
10 Central Vancouver Island	14.44	13.18	1.47	2.07	15.92	15.26
11 Upper Island/Central Coast	14.41	13.65	1.08	1.89	15.49	15.54
12 Cariboo	9.09	9.23	2.01	1.71	11.10	10.94
13 North West	10.25	10.09	0.88	0.66	11.13	10.75
14 Peace Liard	8.13	7.12	0.92	1.82	9.05	8.94
15 Northern Interior	13.74	12.74	2.15	2.88	15.89	15.62
16 Vancouver	6.80	6.66	0.29	0.50	7.09	7.16
17 Burnaby	8.59	8.77	0.37	0.58	8.96	9.35
18 North Shore	9.00	8.65	0.74	1.01	9.73	9.66
19 Richmond	10.76	9.40	0.32	0.87	11.08	10.27
20 Capital	12.26	12.08	1.30	1.49	13.55	13.57
OTAL	11.26	10.92	0.99	1.30	12.25	12.22

<sup>&</sup>lt;sup>1</sup> The registration category formerly titled "Active" is now titled "Licensed".

Table 1c Average Annual Rate of Change: Certified Dental Assistants in British Columbia by Health Region by Registration Status<sup>1</sup> December 1997 to December 1998

	Lice	nsed	Non-Pra	actising	Tot	al
Health Region	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	0.00	-0.93	33.33	32.10	4.95	3.98
2 West Kootenay - Boundary	-4.17	-4.79	45.45	44.51	0.93	0.28
3 North Okanagan	0.75	-0.55	-33.33	-34.20	-2.70	-3.96
4 South Okanagan - Similkameen	1.09	-0.26	-2.56	-3.86	0.64	-0.71
5 Thompson	-3.21	-4.65	120.00	116.71	4.22	2.66
6 Fraser Valley	6.69	4.15	20.51	17.64	8.28	5.70
7 South Fraser Valley	1.37	-0.89	23.26	20.50	2.71	0.42
8 Simon Fraser	-4.33	-6.82	110.00	104.54	0.41	-2.20
9 Coast Garibaldi	7.04	2.99	*	*	6.41	2.38
10 Central Vancouver Island	-7.29	-8.72	42.86	40.64	-2.65	-4.15
11 Upper Island/Central Coast	-4.05	-5.27	76.92	74.67	1.61	0.32
12 Cariboo	2.94	1.48	-13.33	-14.56	0.00	-1.42
13 North West	-1.08	-1.49	*	*	-2.97	-3.38
14 Peace Liard	-11.32	-12.41	*	*	0.00	-1.22
15 Northern Interior	-6.15	-7.30	35.71	34.04	-0.48	-1.71
16 Vancouver	-0.53	-2.05	75.00	72.34	2.56	1.00
17 Burnaby	3.73	2.12	*	*	5.95	4.31
18 North Shore	-3.14	-3.91	38.46	37.36	0.00	-0.79
19 Richmond	-10.65	-12.65	*	*	-5.17	-7.29
20 Capital	-0.74	-1.50	16.28	15.39	0.89	0.12
OTAL	-1.38	-3.00	33.51	31.31	1.44	-0.23

<sup>&</sup>lt;sup>1</sup> The registration category formerly titled "Active" is now titled "Licensed".

<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 Certified Dental Assistants<sup>1</sup> in British Columbia by Health Region by Age and Sex<sup>2</sup> December 1998

	<	25	2	5-34	3	5-44	45	-54	55-	64	65	+	Age Un	known	Sul	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	15	1	43	0	40	0	6	0	1	0	0	0	0	1	105	106
2 West Kootenay - Boundary	0	9	1	50	0	32	0	14	0	2	0	0	0	0	1	107	108
3 North Okanagan	0	6	0	55	0	55	0	22	0	6	0	0	0	0	0	144	144
4 South Okanagan - Similkameen	0	24	0	131	1	120	0	34	0	5	0	1	0	0	1	315	316
5 Thompson	0	15	0	66	0	66	0	25	0	1	0	0	0	0	0	173	173
6 Fraser Valley	0	73	1	149	0	117	0	21	0	5	0	0	0	0	1	365	366
7 South Fraser Valley	0	64	0	283	0	275	1	92	0	3	0	0	0	1	1	718	719
8 Simon Fraser	0	23	0	216	0	186	0	53	0	5	0	0	0	1	0	484	484
9 Coast Garibaldi	0	5	0	26	0	40	0	9	0	3	0	0	0	0	0	83	83
10 Central Vancouver Island	0	36	1	140	0	140	0	48	0	3	0	0	0	0	1	367	368
11 Upper Island/Central Coast	0	14	0	52	0	99	0	22	0	1	0	0	0	1	0	189	189
12 Cariboo	0	5	0	40	0	33	0	5	0	0	0	0	0	0	0	83	83
13 North West	0	11	0	37	0	37	0	12	0	1	0	0	0	0	0	98	98
14 Peace Liard	0	8	0	23	0	23	0	5	0	0	0	0	0	0	0	59	59
15 Northern Interior	0	22	0	77	1	79	0	26	0	1	0	0	0	0	1	205	206
16 Vancouver	0	37	1	178	0	129	0	47	0	9	0	0	0	0	1	400	401
17 Burnaby	0	19	0	81	0	58	0	19	0	1	0	0	0	0	0	178	178
18 North Shore	0	9	0	62	0	79	0	18	0	3	0	1	0	0	0	172	172
19 Richmond	0	13	0	58	0	66	0	24	0	4	0	0	0	0	0	165	165
20 Capital	0	57	0	201	0	151	0	40	0	5	0	0	0	0	0	454	454
TOTAL	0	465	5	1,968	2	1,825	1	542	0	59	0	2	0	3	8	4,864	4,872

 $<sup>^{1}</sup>$  Includes Licensed and Non-Practising CDA's.  $^{2}$  There are no CDA's with missing sex information.

Table 3

Analysis of Change in the Number of Certified Dental Assistants<sup>1</sup>
in British Columbia by Health Region
December 1997 to December 1998

		New I	Registrants <sup>2,3</sup> b	y Place of Gra	duation			Net Intra-	
Health Region	December 1997	B.C.	Other Canada	Other Country	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	December 1998
1 East Kootenay	101	5	1	0	6	2	4	1	106
2 West Kootenay - Boundary	107	5	1	0	6	0	5	0	108
3 North Okanagan	148	3	0	1	4	1	7	-2	144
4 South Okanagan - Similkameen	314	13	1	0	14	2	18	4	316
5 Thompson	166	7	0	0	7	1	5	4	173
6 Fraser Valley	338	35	2	1	38	4	17	3	366
7 South Fraser Valley	700	29	1	8	38	2	22	1	719
8 Simon Fraser	482	13	0	1	14	2	18	4	484
9 Coast Garibaldi	78	2	0	0	2	0	3	6	83
10 Central Vancouver Island	378	18	0	0	18	2	18	-12	368
11 Upper Island/Central Coast	186	9	1	0	10	0	7	0	189
12 Cariboo	83	2	1	0	3	0	5	2	83
13 North West	101	5	0	0	5	1	9	0	98
14 Peace Liard	59	6	1	0	7	2	5	-4	59
15 Northern Interior	207	8	0	0	8	1	13	3	206
16 Vancouver	391	27	2	0	29	1	15	-5	401
17 Burnaby	168	14	1	1	16	1	3	-4	178
18 North Shore	172	7	0	1	8	0	10	2	172
19 Richmond	174	9	0	0	9	0	8	-10	165
20 Capital	450	27	2	0	29	3	35	7	454
OTAL	4,803	244	14	13	271	25	227	0	4,872

<sup>&</sup>lt;sup>1</sup> Includes Licensed and Non-Practising CDA's.

<sup>&</sup>lt;sup>2</sup> CDA's who reported B.C. addresses and were registered in December 1998 and whose date of initial registration was after December 1997.

There are no new registrant CDA's with unknown place of graduation in December 1998.

<sup>&</sup>lt;sup>4</sup> CDA's who reported B.C. addresses and were registered in December 1998 but not in December 1997 and who were registered for the first time before December 1997.

<sup>&</sup>lt;sup>5</sup> CDA's who reported B.C. addresses and were registered in December 1997 but not in December 1998.

#### DENTAL HYGIENISTS

**Definition:** A dental hygienist

... assesses the status of teeth and adjacent tissues and provides preventive and therapeutic dental hygiene care for teeth and adjacent tissues. The range of activities for a dental hygienist include:

(a) clinical therapy;

- (b) health promotion;
- (c) education;
- (d) administration;
- (e) research.1

Governing Statute: Health Professions Act, R.S.B.C. 1996, Chapter 183; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** College of Dental Hygienists of British Columbia (CDHBC). In order to

practise as a dental hygienist in British Columbia, it is necessary to be registered by the CDHBC and hold a full or conditional licence. Registered

dental hygienists have exclusive use of the title: dental hygienist.

**Date of Record:** December 1997 and December 1998.

**Source of Data:** College of Dental Hygienists of British Columbia (CDHBC).

#### **Preparation and Updating:**

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

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

#### 1. Registration Status

Dental hygienists may hold a *full licence*, *conditional licence*, *community health licence* or a *non-practising licence* with the CDHBC. Fully, conditionally and community health licensed dental hygienists are those who may legally practice in B.C. Conditionally licensed hygienists are qualified to practise as dental hygienists, except that they are not authorised to administer local anaesthesia. Community health licensed dental hygienists (formerly referred to as dental public health hygienists) are qualified to practise as dental hygienists, except that they are not authorised to administer local anaesthesia and are only working under an employment or service contract with a local, provincial or federal government. Conditionally licensed hygienists and community health licensed hygienists are both included under the conditional licence category in the tables.

Adapted from the College of Dental Hygienists of British Columbia Registrants' Handbook, 1995, Chapter Four. See also *National Occupational Classification 1992*, Major Group 32, No. 3222, Ottawa: Employment and Immigration Canada.

Tables 1a and 1b report the number and number per 10,000 population of dental hygienists who are registered with the CDHBC by registration status on the date of record. Table 1c reports the average annual rates of change in these figures.

#### 2. Age and Sex

Age and sex information for dental hygienists, presented in Table 2, is derived from data maintained by the CDHBC. 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 reports the number of dental hygienists based on their employment status as noted on the CDHBC annual licence renewal form. The categories used are:

- (a) Employed in Dental Hygiene;
  - (i) Full-Time
  - (ii) Part-Time
  - (iii) On Leave
- (b) Unemployed, and Seeking Work in Dental Hygiene;

- (c) Employed in Other Field;
- (d) Not Employed;
- (e) Retired;
- (f) Unknown.

#### 4. Analysis of Change

Table 4 illustrates the sources of change which affected the supply of dental hygienists from December 1997 to December 1998.

*New registrants* include dental hygienists who were registered as of December 1998 and who registered with the CDHBC *for the first time* subsequent to December 1997. 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 full or conditionally licensed in British Columbia in December 1997, but were licensed in the province in December 1998, and whose date of initial registration was before December 1997. Also included as reactivations are full or conditionally licensed dental hygienists who reported out-of-province addresses in December 1997, but who reported British Columbia addresses in December 1998.

Attrition describes dental hygienists who were included in the December 1997 supply but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of licence were not included in the December 1998 supply.

*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.

Table 1a

Dental Hygienists<sup>1</sup> in British Columbia
by Health Region by Registration Status
December 1997 and December 1998

	Full I	icence	Condition	al Licence	Non-Pr	actising	To	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	25	27	1	1	1	1	27	29
2 West Kootenay - Boundary	27	32	2	2	0	1	29	35
3 North Okanagan	40	41	2	2	2	2	44	45
4 South Okanagan - Similkameen	94	97	5	7	2	3	101	107
5 Thompson	52	56	0	0	2	1	54	57
6 Fraser Valley	76	75	3	4	1	1	80	80
7 South Fraser Valley	189	187	4	6	2	3	195	196
8 Simon Fraser	100	119	7	9	0	0	107	128
9 Coast Garibaldi	27	27	0	0	1	0	28	27
10 Central Vancouver Island	82	83	3	1	2	3	87	87
11 Upper Island/Central Coast	48	49	0	1	0	2	48	52
12 Cariboo	28	27	0	2	1	1	29	30
13 North West	30	33	1	1	0	0	31	34
14 Peace Liard	12	13	0	3	0	0	12	16
15 Northern Interior	60	65	1	0	0	0	61	65
16 Vancouver	229	233	12	10	10	7	251	250
17 Burnaby	47	40	1	3	2	0	50	43
18 North Shore	111	120	6	3	5	3	122	126
19 Richmond	69	71	3	4	0	0	72	75
20 Capital	191	203	6	6	9	8	206	217
OTAL	1,537	1,598	57	65	40	36	1,634	1,699

<sup>&</sup>lt;sup>1</sup> Excludes 12 hygienists with unknown location in 1997 and 3 in 1998.

Table 1b

Dental Hygienists<sup>1</sup> in British Columbia

per 10,000 Population by Health Region by Registration Status

December 1997 and December 1998

	Full L	icence	Condition	al Licence	Non-Pr	actising	To	tal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	3.14	3.36	0.13	0.12	0.13	0.12	3.39	3.61
2 West Kootenay - Boundary	3.32	3.90	0.25	0.24	0.00	0.12	3.56	4.27
3 North Okanagan	3.46	3.50	0.17	0.17	0.17	0.17	3.81	3.84
4 South Okanagan - Similkameen	4.19	4.27	0.22	0.31	0.09	0.13	4.51	4.71
5 Thompson	3.94	4.18	0.00	0.00	0.15	0.07	4.09	4.26
6 Fraser Valley	3.25	3.13	0.13	0.17	0.04	0.04	3.42	3.34
7 South Fraser Valley	3.43	3.32	0.07	0.11	0.04	0.05	3.54	3.48
8 Simon Fraser	3.26	3.78	0.23	0.29	0.00	0.00	3.49	4.07
9 Coast Garibaldi	3.59	3.45	0.00	0.00	0.13	0.00	3.72	3.45
10 Central Vancouver Island	3.45	3.44	0.13	0.04	0.08	0.12	3.66	3.61
11 Upper Island/Central Coast	4.00	4.03	0.00	0.08	0.00	0.16	4.00	4.28
12 Cariboo	3.74	3.56	0.00	0.26	0.13	0.13	3.88	3.95
13 North West	3.31	3.62	0.11	0.11	0.00	0.00	3.42	3.73
14 Peace Liard	1.84	1.97	0.00	0.45	0.00	0.00	1.84	2.43
15 Northern Interior	4.61	4.93	0.08	0.00	0.00	0.00	4.68	4.93
16 Vancouver	4.15	4.16	0.22	0.18	0.18	0.13	4.55	4.47
17 Burnaby	2.51	2.10	0.05	0.16	0.11	0.00	2.67	2.26
18 North Shore	6.28	6.74	0.34	0.17	0.28	0.17	6.90	7.07
19 Richmond	4.39	4.42	0.19	0.25	0.00	0.00	4.58	4.67
20 Capital	5.75	6.07	0.18	0.18	0.27	0.24	6.20	6.49
TOTAL	3.92	4.01	0.15	0.16	0.10	0.09	4.17	4.26

<sup>&</sup>lt;sup>1</sup> Excludes 12 hygienists with unknown location in 1997 and 3 in 1998.

Table 1c Average Annual Rate of Change<sup>1</sup>: Dental Hygienists<sup>2</sup> in British Columbia by Health Region by Registration Status December 1997 to December 1998

	Full L	icence	Condition	al Licence	Non-Pr	actising	To	tal
Health Region	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio
1 East Kootenay	8.76	7.66	*	*	*	*	8.11	7.01
2 West Kootenay - Boundary	20.36	19.51	*	*	*	*	22.77	21.90
3 North Okanagan	2.73	1.28	*	*	*	*	2.48	1.04
4 South Okanagan - Similkameen	3.49	1.98	*	*	*	*	6.50	4.95
5 Thompson	8.42	6.65	*	*	*	*	6.08	4.35
6 Fraser Valley	-1.43	-3.99	*	*	*	*	0.00	-2.60
7 South Fraser Valley	-1.15	-3.56	*	*	*	*	0.56	-1.89
8 Simon Fraser	20.90	17.47	*	*	*	*	21.59	18.14
9 Coast Garibaldi	0.00	-4.13	*	*	*	*	-3.89	-7.8
10 Central Vancouver Island	1.33	-0.38	*	*	*	*	0.00	-1.69
11 Upper Island/Central Coast	2.27	0.85	*	*	*	*	9.12	7.6
12 Cariboo	-3.89	-5.38	*	*	*	*	3.77	2.10
13 North West	10.96	10.44	*	*	*	*	10.60	10.09
14 Peace Liard	9.12	7.67	*	*	*	*	36.87	35.0
15 Northern Interior	9.12	7.66	*	*	*	*	7.17	5.73
16 Vancouver	1.91	0.22	-18.04	-19.39	-32.23	-33.36	-0.43	-2.08
17 Burnaby	-16.13	-17.55	*	*	*	*	-15.17	-16.6
18 North Shore	8.88	7.93	*	*	*	*	3.58	2.68
19 Richmond	3.17	0.65	*	*	*	*	4.55	2.0
20 Capital	6.87	5.98	*	*	*	*	5.84	4.96
OTAL	4.34	2.47	15.40	13.34	-10.86	-12.45	4.35	2.48

<sup>&</sup>lt;sup>1</sup> An 11 month rate of change has been adjusted to an average annual figure. <sup>2</sup> Excludes 12 hygienists with unknown location in 1997 and 3 in 1998.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2

Dental Hygienists<sup>1,2</sup> in British Columbia
by Health Region by Age and Sex<sup>3</sup>

December 1998

	<	25	25	-34	35	-44	45-	-54	55-	64	65	+	Age Un	known	Sub	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	1	0	12	1	10	1	3	0	0	0	0	0	1	2	27	29
2 West Kootenay - Boundary	0	3	1	11	2	13	0	3	1	1	0	0	0	0	4	31	35
3 North Okanagan	0	3	0	16	1	17	0	8	0	0	0	0	0	0	1	44	45
4 South Okanagan - Similkameen	0	5	0	39	0	43	1	18	0	1	0	0	0	0	1	106	107
5 Thompson	0	2	1	23	0	22	0	8	0	1	0	0	0	0	1	56	57
6 Fraser Valley	0	3	1	29	1	33	2	10	1	0	0	0	0	0	5	75	80
7 South Fraser Valley	0	2	4	64	0	76	1	45	0	3	0	0	0	1	5	191	196
8 Simon Fraser	0	9	1	60	2	40	1	15	0	0	0	0	0	0	4	124	128
9 Coast Garibaldi	0	0	0	6	0	11	0	9	0	0	0	1	0	0	0	27	27
10 Central Vancouver Island	0	2	2	34	0	31	1	15	0	2	0	0	0	0	3	84	87
11 Upper Island/Central Coast	0	0	0	17	0	26	1	8	0	0	0	0	0	0	1	51	52
12 Cariboo	0	4	0	14	1	8	0	3	0	0	0	0	0	0	1	29	30
13 North West	0	5	0	19	0	9	0	1	0	0	0	0	0	0	0	34	34
14 Peace Liard	0	0	1	10	0	4	0	1	0	0	0	0	0	0	1	15	16
15 Northern Interior	0	1	0	45	0	12	0	7	0	0	0	0	0	0	0	65	65
16 Vancouver	1	7	9	97	7	88	2	35	0	2	0	1	0	1	19	231	250
17 Burnaby	0	2	1	23	0	15	0	2	0	0	0	0	0	0	1	42	43
18 North Shore	0	2	0	34	0	46	0	39	0	5	0	0	0	0	0	126	126
19 Richmond	0	3	0	19	1	29	1	21	0	1	0	0	0	0	2	73	75
20 Capital	0	2	1	81	5	83	2	40	1	2	0	0	0	0	9	208	217
TOTAL	1	56	22	653	21	616	13	291	3	18	0	2	0	3	60	1,639	1,699

 $<sup>^{\</sup>rm 1}$  Includes Fully Licensed, Conditionally Licensed and Non-Practising hygienists.

<sup>&</sup>lt;sup>2</sup> Excludes 3 hygienists with unknown location.

<sup>&</sup>lt;sup>3</sup> There are no hygienists with missing sex information.

Table 3

Dental Hygienists (Fully & Conditionally Licenced)<sup>1,2</sup> in British Columbia by Health Region by Employment Status

December 1998

	1	Employed in Dental Hygiene								
Health Region	Full-Time	Part-Time	On Leave	Subtotal	& Seeking Work in D. Hygiene	Employed in Other Field	Not Employed	Retired	Unknown	Total
1 East Kootenay	19	8	0	27	0	0	0	0	1	28
2 West Kootenay - Boundary	17	7	3	27	1	0	0	0	6	34
3 North Okanagan	23	15	0	38	1	0	2	1	1	43
4 South Okanagan - Similkameen	55	31	5	91	1	1	0	0	11	104
5 Thompson	32	15	1	48	0	0	0	0	8	56
6 Fraser Valley	39	27	1	67	0	0	1	0	11	79
7 South Fraser Valley	89	78	5	172	4	1	1	0	15	193
8 Simon Fraser	68	36	5	109	1	0	0	0	18	128
9 Coast Garibaldi	14	9	2	25	1	0	0	1	0	27
10 Central Vancouver Island	38	30	2	70	2	0	1	0	11	84
11 Upper Island/Central Coast	23	15	1	39	1	0	1	0	9	50
12 Cariboo	17	8	0	25	1	0	0	0	3	29
13 North West	24	4	0	28	0	0	0	0	6	34
14 Peace Liard	8	3	0	11	0	0	0	0	5	16
15 Northern Interior	37	12	5	54	0	0	0	0	11	65
16 Vancouver	132	64	6	202	2	3	3	0	33	243
17 Burnaby	27	9	0	36	0	0	0	0	7	43
18 North Shore	66	42	0	108	1	1	1	0	12	123
19 Richmond	39	23	1	63	0	0	1	0	11	75
20 Capital	119	45	10	174	0	1	3	0	31	209
ГОТАL	886	481	47	1,414	16	7	14	2	210	1,663

<sup>&</sup>lt;sup>1</sup> Excludes 3 hygienists with unknown location.

<sup>&</sup>lt;sup>2</sup> Excludes 36 hygienists with Non-Practising registration status.

Table 4 Analysis of Change in the Number of Dental Hygienists (Fully & Conditionally Licenced)<sup>1,2</sup> in British Columbia by Health Region December 1997 to December 1998

		New R	Registrants <sup>3,4</sup> b	y Place of Gra			Net Intra-		
Health Region	December 1997	B.C.	Other Canada	Other Country	Subtotal	Reactivation	Attrition <sup>6</sup>	provincial Migration	December 1998
1 East Kootenay	26	0	1	0	1	2	2	1	28
2 West Kootenay - Boundary	29	2	1	1	4	0	2	3	34
3 North Okanagan	42	0	1	0	1	0	1	1	43
4 South Okanagan - Similkameen	99	2	2	1	5	1	5	4	104
5 Thompson	52	3	0	0	3	1	1	1	56
6 Fraser Valley	79	0	4	1	5	1	4	-2	79
7 South Fraser Valley	193	2	3	0	5	0	7	2	193
8 Simon Fraser	107	6	9	0	15	3	4	7	128
9 Coast Garibaldi	27	0	0	0	0	1	0	-1	27
10 Central Vancouver Island	85	2	0	0	2	0	2	-1	84
11 Upper Island/Central Coast	48	1	1	0	2	0	2	2	50
12 Cariboo	28	0	2	0	2	0	2	1	29
13 North West	31	5	1	0	6	0	1	-2	34
14 Peace Liard	12	1	5	0	6	1	1	-2	16
15 Northern Interior	61	6	0	0	6	0	1	-1	65
16 Vancouver	241	5	9	0	14	8	11	-9	243
17 Burnaby	48	2	2	0	4	2	5	-6	43
18 North Shore	117	4	1	0	5	2	4	3	123
19 Richmond	72	2	3	0	5	0	1	-1	75
20 Capital	197	15	3	1	19	2	9	0	209
TOTAL	1,594	58	48	4	110	24	65	0	1,663

<sup>&</sup>lt;sup>1</sup> Excludes 12 hygienists with unknown location in 1997 and 3 in 1998.

<sup>&</sup>lt;sup>2</sup> Excludes 40 hygienists with Non-Practising registration status in 1997 and 36 in 1998.
<sup>3</sup> Dental hygienists who reported B.C. addresses and were full or conditional registrants in December 1998 and whose date of initial registration was after December 1997.

<sup>&</sup>lt;sup>4</sup> There are no new registrant hygienists with unknown place of graduation in 1998.
<sup>5</sup> Dental hygienists who reported B.C. addresses and were full or conditional registrants in December 1998 but not in December 1997 and who were registered for the first time before December 1997.

<sup>&</sup>lt;sup>6</sup> Dental hygienists who reported B.C. addresses and were full or conditional registrants in December 1997 but not in December 1998.

#### 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, R.S.B.C. 1996, Chapter 94; administered by the Ministry of

Health and Ministry Responsible for Seniors.

Governing Body: 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:** January 1998 and December 1998.

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

#### **Preparation and Updating:**

The tables were prepared from registration data maintained by the CDSBC and include 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 versus employment or other address are not known.

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

#### 1. Registration Status

Dentists may be *licensed*, or hold *temporary* or *non-practising* status in the CDSBC. Licensed dentists are those who may legally practice in B.C. Temporary status may be held for up to one year for the purpose of lecturing or other educational activities in the province; temporary status dentists may not perform dental services for a fee. Non-practising status encompasses dentists who are fully registered with the CDSBC but do not have a licence to practice in this province.

Adapted from National Occupational Classification 1992, Major Group 31, No. 3113, Ottawa: Employment and Immigration Canada.

Table 1a reports the distribution of dentists within British Columbia as per registration status. Table 1b shows the numbers per 10,000 population by health region and Table 1c shows the average annual rates of change in these numbers.

#### 2. Age and Sex

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

#### 3. Licensed Dentists

Table 3a reports the distribution of licensed dentists based on Generalist and Specialist designations, Table 3b shows numbers per 10,000 population and Table 3c shows the average annual rates of change for these numbers by health region. Since the number of dentists in most specialty categories is small, those for whom a specialty is reported have been grouped into one Specialist category. This was done to allow calculation of meaningful annual rates of change and population ratios.

#### 4. Specialty

In Table 4, licensed dentists are allocated to the specialty area in which they have been certified by the CDSBC. Dentists who are certified in more than one specialty are allocated to the specialty in which they were most recently certified. 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) Oral Medicine;
- (i) Generalist.

#### 5. Analysis of Change

Table 5 illustrates the sources of change which affected the supply of licensed dentists from January 1998 to December 1998.

*New registrants* include dentists who were licensed as of December 1998 and who registered with the CDSBC *for the first time* subsequent to January 1998. 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 January 1998, but were licensed in the province in December 1998, and whose date of initial registration was before January 1998. Also included as reactivations are licensed dentists who reported out-of-province addresses in January 1998, but who reported British Columbia addresses in December 1998.

*Attrition* describes licensed dentists who were included in the January 1998 population but who, because of death, retirement, suspension, out-of-province relocation, or non-renewal of licence, were not included in the December 1998 total.

*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.

Table 1a
Dentists<sup>1</sup> in British Columbia
by Health Region by Registration Status
January 1998 and December 1998

Health Region	Lice	Licensed		Temporary		Non-Practising		Total	
	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98	
1 East Kootenay	35	34	0	0	1	0	36	34	
2 West Kootenay - Boundary	49	46	0	0	0	1	49	47	
3 North Okanagan	60	56	0	0	1	1	61	57	
4 South Okanagan - Similkameen	123	124	0	0	5	4	128	128	
5 Thompson	54	58	0	0	3	2	57	60	
6 Fraser Valley	97	100	0	0	3	5	100	105	
7 South Fraser Valley	275	287	0	0	2	4	277	291	
8 Simon Fraser	169	181	0	0	2	3	171	184	
9 Coast Garibaldi	36	35	0	0	0	1	36	36	
10 Central Vancouver Island	120	120	0	0	1	0	121	120	
11 Upper Island/Central Coast	58	59	0	0	1	1	59	60	
12 Cariboo	30	28	0	0	0	1	30	29	
13 North West	39	39	0	0	1	0	40	39	
14 Peace Liard	22	22	0	0	2	0	24	22	
15 Northern Interior	56	57	0	0	1	1	57	58	
16 Vancouver	564	589	41	46	12	7	617	642	
17 Burnaby	128	131	0	0	1	3	129	134	
18 North Shore	150	156	0	0	9	8	159	164	
19 Richmond	113	114	0	0	1	1	114	115	
20 Capital	223	219	1	1	6	7	230	227	
OTAL	2,401	2,455	42	47	52	50	2,495	2,552	

<sup>&</sup>lt;sup>1</sup> Excludes 1 Temporary licenced dentist with unknown address in December 1998.

Table 1b
Dentists<sup>1</sup> in British Columbia
per 10,000 Population by Health Region by Registration Status
January 1998 and December 1998

_	Lice	nsed	Temporary		Non-Pr	actising	Total	
Health Region	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98
1 East Kootenay	4.40	4.23	0.00	0.00	0.13	0.00	4.52	4.23
2 West Kootenay - Boundary	6.02	5.61	0.00	0.00	0.00	0.12	6.02	5.73
3 North Okanagan	5.19	4.78	0.00	0.00	0.09	0.09	5.28	4.87
4 South Okanagan - Similkameen	5.49	5.46	0.00	0.00	0.22	0.18	5.71	5.64
5 Thompson	4.09	4.33	0.00	0.00	0.23	0.15	4.32	4.48
6 Fraser Valley	4.15	4.17	0.00	0.00	0.13	0.21	4.28	4.38
7 South Fraser Valley	5.00	5.10	0.00	0.00	0.04	0.07	5.03	5.17
8 Simon Fraser	5.51	5.75	0.00	0.00	0.07	0.10	5.58	5.85
9 Coast Garibaldi	4.78	4.47	0.00	0.00	0.00	0.13	4.78	4.60
10 Central Vancouver Island	5.05	4.97	0.00	0.00	0.04	0.00	5.10	4.97
11 Upper Island/Central Coast	4.83	4.85	0.00	0.00	0.08	0.08	4.91	4.93
12 Cariboo	4.01	3.69	0.00	0.00	0.00	0.13	4.01	3.82
13 North West	4.30	4.28	0.00	0.00	0.11	0.00	4.41	4.28
14 Peace Liard	3.38	3.34	0.00	0.00	0.31	0.00	3.68	3.34
15 Northern Interior	4.30	4.32	0.00	0.00	0.08	0.08	4.38	4.40
16 Vancouver	10.23	10.52	0.74	0.82	0.22	0.13	11.19	11.47
17 Burnaby	6.83	6.88	0.00	0.00	0.05	0.16	6.88	7.04
18 North Shore	8.49	8.76	0.00	0.00	0.51	0.45	9.00	9.21
19 Richmond	7.19	7.10	0.00	0.00	0.06	0.06	7.26	7.16
20 Capital	6.72	6.55	0.03	0.03	0.18	0.21	6.93	6.78
TOTAL	6.12	6.16	0.11	0.12	0.13	0.13	6.36	6.40

<sup>&</sup>lt;sup>1</sup> Excludes 1 Temporary licenced dentist with unknown address in December 1998.

Table 1c Average Annual Rate of Change<sup>1</sup>: Dentists<sup>2</sup> in British Columbia by Health Region by Registration Status January 1998 to December 1998

Health Region	Lice	Licensed		orary	Non-Practising		Total	
	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio
1 East Kootenay	-3.42	-4.49	*	*	*	*	-6.63	-7.67
2 West Kootenay - Boundary	-7.30	-8.03	*	*	*	*	-4.88	-5.62
3 North Okanagan	-7.95	-9.37	*	*	*	*	-7.82	-9.25
4 South Okanagan - Similkameen	0.98	-0.64	*	*	*	*	0.00	-1.60
5 Thompson	8.95	7.00	*	*	*	*	6.35	4.45
6 Fraser Valley	3.72	0.76	*	*	*	*	6.03	3.00
7 South Fraser Valley	5.26	2.44	*	*	*	*	6.10	3.26
8 Simon Fraser	8.58	5.20	*	*	*	*	9.19	5.79
9 Coast Garibaldi	-3.32	-7.70	*	*	*	*	0.00	-4.53
10 Central Vancouver Island	0.00	-1.86	*	*	*	*	-0.99	-2.83
11 Upper Island/Central Coast	2.07	0.51	*	*	*	*	2.04	0.48
12 Cariboo	-7.95	-9.51	*	*	*	*	-3.99	-5.62
13 North West	0.00	-0.51	*	*	*	*	-2.99	-3.49
14 Peace Liard	0.00	-1.47	*	*	*	*	-9.91	-11.24
15 Northern Interior	2.15	0.64	*	*	*	*	2.11	0.60
16 Vancouver	5.34	3.42	14.81	12.72	-47.63	-48.58	4.88	2.97
17 Burnaby	2.82	0.91	*	*	*	*	4.67	2.72
18 North Shore	4.82	3.82	*	*	*	*	3.79	2.80
19 Richmond	1.06	-1.64	*	*	*	*	1.05	-1.65
20 Capital	-2.15	-3.05	*	*	*	*	-1.56	-2.47
OTAL	2.70	0.68	14.45	12.20	-4.60	-6.47	2.75	0.73

 $<sup>^1</sup>$  A 10 month rate of change has been adjusted to an average annual figure.  $^2$  Excludes 1 Temporary licenced dentist with unknown address in December 1998.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2 Dentists<sup>1,2</sup> in British Columbia by Health Region by Age and Sex<sup>3</sup> December 1998

	<	25	25	-34	35-	-44	45-	54	55-	64	65	+	Age Un	known	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	7	0	5	1	14	1	5	0	1	0	0	0	32	2	34
2 West Kootenay - Boundary	0	0	11	4	10	1	17	0	4	0	0	0	0	0	42	5	47
3 North Okanagan	0	0	13	3	8	3	17	0	12	0	1	0	0	0	51	6	57
4 South Okanagan - Similkameen	0	0	22	6	25	8	41	1	19	0	6	0	0	0	113	15	128
5 Thompson	1	0	9	5	11	2	22	0	6	0	4	0	0	0	53	7	60
6 Fraser Valley	0	0	22	5	27	8	25	2	13	0	3	0	0	0	90	15	105
7 South Fraser Valley	1	0	29	21	83	36	72	12	31	2	4	0	0	0	220	71	291
8 Simon Fraser	0	1	33	20	45	13	36	8	21	1	6	0	0	0	141	43	184
9 Coast Garibaldi	0	0	6	1	6	1	10	2	6	1	3	0	0	0	31	5	36
10 Central Vancouver Island	0	0	19	3	36	11	29	2	17	0	3	0	0	0	104	16	120
11 Upper Island/Central Coast	0	1	13	4	6	2	24	2	7	0	1	0	0	0	51	9	60
12 Cariboo	0	0	8	1	7	3	8	0	2	0	0	0	0	0	25	4	29
13 North West	0	0	7	2	11	0	12	0	6	1	0	0	0	0	36	3	39
14 Peace Liard	0	0	7	3	4	0	4	0	4	0	0	0	0	0	19	3	22
15 Northern Interior	0	0	9	5	14	4	17	2	7	0	0	0	0	0	47	11	58
16 Vancouver	0	0	88	54	132	54	155	28	77	6	40	4	4	0	496	146	642
17 Burnaby	0	0	22	11	26	17	27	4	21	1	5	0	0	0	101	33	134
18 North Shore	0	0	14	9	40	18	29	9	33	1	11	0	0	0	127	37	164
19 Richmond	0	0	18	11	22	9	34	8	8	1	4	0	0	0	86	29	115
20 Capital	0	0	21	10	46	9	89	1	41	1	9	0	0	0	206	21	227
TOTAL	2	2	378	178	564	200	682	82	340	15	101	4	4	0	2,071	481	2,552

 $<sup>^{\</sup>rm 1}$  Includes Licensed, Temporary and Non-Practising dentists.

<sup>&</sup>lt;sup>2</sup> Excludes 1 Temporary licenced dentist with unknown address in December 1998. <sup>3</sup> There are no dentists with missing sex information.

Table 3a
Licensed Dentists<sup>1</sup> in British Columbia
by Health Region by Generalist and Specialist
January 1998 and December 1998

	Gene	eralist	Spec	rialist	To	tal
Health Region	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98
1 East Kootenay	34	33	1	1	35	34
2 West Kootenay - Boundary	47	44	2	2	49	46
3 North Okanagan	56	52	4	4	60	56
4 South Okanagan - Similkameen	109	109	14	15	123	124
5 Thompson	50	54	4	4	54	58
6 Fraser Valley	90	90	7	10	97	100
7 South Fraser Valley	254	265	21	22	275	287
8 Simon Fraser	154	166	15	15	169	181
9 Coast Garibaldi	36	35	0	0	36	35
10 Central Vancouver Island	107	107	13	13	120	120
11 Upper Island/Central Coast	53	54	5	5	58	59
12 Cariboo	28	26	2	2	30	28
13 North West	36	35	3	4	39	39
14 Peace Liard	22	22	0	0	22	22
15 Northern Interior	50	51	6	6	56	57
16 Vancouver	476	501	88	88	564	589
17 Burnaby	117	120	11	11	128	131
18 North Shore	136	140	14	16	150	156
19 Richmond	102	103	11	11	113	114
20 Capital	195	192	28	27	223	219
OTAL	2,152	2,199	249	256	2,401	2,455

<sup>&</sup>lt;sup>1</sup> Excludes dentists with Temporary and Non-Practising registration statuses.

Table 3b
Licensed Dentists<sup>1</sup> in British Columbia
per 10,000 Population by Health Region by Generalist and Specialist
January 1998 and December 1998

	Gene	eralist	Spec	ialist	To	tal
Health Region	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98
1 East Kootenay	4.27	4.11	0.13	0.12	4.40	4.23
2 West Kootenay - Boundary	5.77	5.37	0.25	0.24	6.02	5.61
3 North Okanagan	4.84	4.44	0.35	0.34	5.19	4.78
4 South Okanagan - Similkameen	4.86	4.80	0.62	0.66	5.49	5.46
5 Thompson	3.79	4.03	0.30	0.30	4.09	4.33
6 Fraser Valley	3.85	3.76	0.30	0.42	4.15	4.17
7 South Fraser Valley	4.62	4.71	0.38	0.39	5.00	5.10
8 Simon Fraser	5.02	5.28	0.49	0.48	5.51	5.75
9 Coast Garibaldi	4.78	4.47	0.00	0.00	4.78	4.47
10 Central Vancouver Island	4.51	4.44	0.55	0.54	5.05	4.97
11 Upper Island/Central Coast	4.41	4.44	0.42	0.41	4.83	4.85
12 Cariboo	3.74	3.43	0.27	0.26	4.01	3.69
13 North West	3.97	3.84	0.33	0.44	4.30	4.28
14 Peace Liard	3.38	3.34	0.00	0.00	3.38	3.34
15 Northern Interior	3.84	3.87	0.46	0.46	4.30	4.32
16 Vancouver	8.63	8.95	1.60	1.57	10.23	10.52
17 Burnaby	6.24	6.30	0.59	0.58	6.83	6.88
18 North Shore	7.70	7.86	0.79	0.90	8.49	8.76
19 Richmond	6.49	6.41	0.70	0.68	7.19	7.10
20 Capital	5.87	5.74	0.84	0.81	6.72	6.55
OTAL	5.49	5.52	0.63	0.64	6.12	6.16

<sup>&</sup>lt;sup>1</sup> Excludes dentists with Temporary and Non-Practising registration statuses.

Table 3c Average Annual Rate of Change<sup>1</sup>: Licensed Dentists<sup>2</sup> in British Columbia by Health Region by Generalist and Specialist January 1998 to December 1998

	Gene	ralist	Spec	ialist	To	tal
Health Region	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio <sup>4</sup>	Number <sup>3</sup>	Ratio
1 East Kootenay	-3.52	-4.59	*	*	-3.42	-4.49
2 West Kootenay - Boundary	-7.61	-8.33	*	*	-7.30	-8.03
3 North Okanagan	-8.51	-9.93	*	*	-7.95	-9.37
4 South Okanagan - Similkameen	0.00	-1.60	8.63	6.90	0.98	-0.64
5 Thompson	9.68	7.71	*	*	8.95	7.00
6 Fraser Valley	0.00	-2.85	*	*	3.72	0.76
7 South Fraser Valley	5.22	2.41	5.74	2.91	5.26	2.44
8 Simon Fraser	9.42	6.02	0.00	-3.11	8.58	5.20
9 Coast Garibaldi	-3.32	-7.70	*	*	-3.32	-7.70
10 Central Vancouver Island	0.00	-1.86	0.00	-1.86	0.00	-1.86
11 Upper Island/Central Coast	2.27	0.71	*	*	2.07	0.51
12 Cariboo	-8.51	-10.06	*	*	-7.95	-9.51
13 North West	-3.32	-3.82	*	*	0.00	-0.51
14 Peace Liard	0.00	-1.47	*	*	0.00	-1.47
15 Northern Interior	2.40	0.89	*	*	2.15	0.64
16 Vancouver	6.34	4.40	0.00	-1.82	5.34	3.42
17 Burnaby	3.08	1.17	0.00	-1.86	2.82	0.91
18 North Shore	3.54	2.55	17.38	16.26	4.82	3.82
19 Richmond	1.18	-1.53	0.00	-2.68	1.06	-1.64
20 Capital	-1.84	-2.74	-4.27	-5.15	-2.15	-3.05
OTAL	2.63	0.61	3.38	1.35	2.70	0.68

 $<sup>^1</sup>$  A 10 month rate of change has been adjusted to an average annual figure.  $^2$  Excludes dentists with Temporary and Non-Practising registration statuses.  $^3$  Rate of change (in percent) in the number.  $^4$  Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 4
Licensed Dentists<sup>1</sup> in British Columbia
by Health Region by Specialty
January 1998 and December 1998

Oral and

	Endo	lontics		ial Surgery	Ortho	dontics	Paediatrio	Dentistry	Perio	dontics
Health Region	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98
1 East Kootenay	0	0	0	0	1	1	0	0	0	0
2 West Kootenay - Boundary	0	0	0	0	2	2	0	0	0	0
3 North Okanagan	0	0	1	1	3	3	0	0	0	0
4 South Okanagan - Similkameen	2	2	1	2	5	5	1	1	3	3
5 Thompson	0	0	0	0	3	3	0	0	1	1
6 Fraser Valley	1	1	1	1	4	6	0	1	1	1
7 South Fraser Valley	3	3	5	5	10	10	0	1	2	2
8 Simon Fraser	3	3	3	3	5	5	1	1	2	2
9 Coast Garibaldi	0	0	0	0	0	0	0	0	0	0
10 Central Vancouver Island	2	2	2	2	5	5	2	2	1	1
11 Upper Island/Central Coast	0	0	1	1	4	4	0	0	0	0
12 Cariboo	0	0	0	0	2	2	0	0	0	0
13 North West	0	0	0	0	3	4	0	0	0	0
14 Peace Liard	0	0	0	0	0	0	0	0	0	0
15 Northern Interior	0	0	1	1	4	4	0	0	1	1
16 Vancouver	11	11	9	9	21	22	9	9	13	12
17 Burnaby	1	0	1	1	6	6	1	2	1	1
18 North Shore	0	0	2	2	6	8	1	1	2	2
19 Richmond	3	3	1	1	6	6	0	0	1	1
20 Capital	3	3	4	4	10	10	2	2	6	5
TOTAL	29	28	32	33	100	106	17	20	34	32

... continued

<sup>&</sup>lt;sup>1</sup> Excludes dentists with Temporary and Non-Practising registration statuses.

# Table 4 (continued) Licensed Dentists<sup>1</sup> in British Columbia by Health Region by Specialty January 1998 and December 1998

	Prostho	odontics	Oral Pa	athology	Oral R	adiology	Oral M	<b>I</b> edicine	Gene	eralist	To	otal
Health Region	Jan '98	Dec '98	Jan '98	Dec '98	Jan '98	Dec '98						
1 East Kootenay	0	0	0	0	0	0	0	0	34	33	35	34
2 West Kootenay - Boundary	0	0	0	0	0	0	0	0	47	44	49	46
3 North Okanagan	0	0	0	0	0	0	0	0	56	52	60	56
4 South Okanagan - Similkameen	2	2	0	0	0	0	0	0	109	109	123	124
5 Thompson	0	0	0	0	0	0	0	0	50	54	54	58
6 Fraser Valley	0	0	0	0	0	0	0	0	90	90	97	100
7 South Fraser Valley	0	0	0	0	0	0	1	1	254	265	275	287
8 Simon Fraser	1	1	0	0	0	0	0	0	154	166	169	181
9 Coast Garibaldi	0	0	0	0	0	0	0	0	36	35	36	35
10 Central Vancouver Island	1	1	0	0	0	0	0	0	107	107	120	120
11 Upper Island/Central Coast	0	0	0	0	0	0	0	0	53	54	58	59
12 Cariboo	0	0	0	0	0	0	0	0	28	26	30	28
13 North West	0	0	0	0	0	0	0	0	36	35	39	39
14 Peace Liard	0	0	0	0	0	0	0	0	22	22	22	22
15 Northern Interior	0	0	0	0	0	0	0	0	50	51	56	57
16 Vancouver	19	19	1	1	1	1	4	4	476	501	564	589
17 Burnaby	1	1	0	0	0	0	0	0	117	120	128	131
18 North Shore	3	3	0	0	0	0	0	0	136	140	150	156
19 Richmond	0	0	0	0	0	0	0	0	102	103	113	114
20 Capital	3	3	0	0	0	0	0	0	195	192	223	219
TOTAL	30	30	1	1	1	1	5	5	2,152	2,199	2,401	2,455

<sup>&</sup>lt;sup>1</sup> Excludes dentists with Temporary and Non-Practising registration statuses.

Table 5 Analysis of Change in the Number of Licensed Dentists<sup>1</sup> in British Columbia by Health Region January 1998 to December 1998

		New R	egistrants <sup>2,3</sup> b	y Place of Gra	duation	_		Net Intra-	
Health Region	January 1998	B.C.	Other Canada	Other Country	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	December 1998
1 East Kootenay	35	0	0	0	0	0	1	0	34
2 West Kootenay - Boundary	49	0	2	0	2	0	5	0	46
3 North Okanagan	60	1	0	0	1	0	4	-1	56
4 South Okanagan - Similkameen	123	0	5	0	5	1	3	-2	124
5 Thompson	54	2	1	0	3	1	3	3	58
6 Fraser Valley	97	1	3	0	4	1	4	2	100
7 South Fraser Valley	275	4	4	4	12	3	4	1	287
8 Simon Fraser	169	2	3	6	11	0	3	4	181
9 Coast Garibaldi	36	0	0	0	0	1	2	0	35
10 Central Vancouver Island	120	4	0	0	4	0	3	-1	120
11 Upper Island/Central Coast	58	0	0	0	0	1	1	1	59
12 Cariboo	30	0	1	0	1	0	2	-1	28
13 North West	39	0	2	0	2	0	0	-2	39
14 Peace Liard	22	1	4	0	5	0	4	-1	22
15 Northern Interior	56	0	0	2	2	1	1	-1	57
16 Vancouver	564	13	12	10	35	4	16	2	589
17 Burnaby	128	1	3	5	9	0	5	-1	131
18 North Shore	150	1	0	7	8	8	7	-3	156
19 Richmond	113	1	1	5	7	1	6	-1	114
20 Capital	223	3	3	0	6	2	13	1	219
TOTAL	2,401	34	44	39	117	24	87	0	2,455

<sup>&</sup>lt;sup>1</sup> Excludes dentists with Temporary and Non-Practising registration statuses.
<sup>2</sup> Dentists who reported B.C. addresses and were licensed in December 1998 and whose date of initial registration was after January 1998.

<sup>&</sup>lt;sup>3</sup> There are no new registrant licensed dentists with unknown place of graduation.

<sup>&</sup>lt;sup>4</sup> Dentists who reported B.C. addresses and were licensed in December 1998 but not in January 1998 and who were registered for the first time before January 1998.

<sup>&</sup>lt;sup>5</sup> Dentists who reported B.C. addresses and were licensed in January 1998 but not in December 1998.

# II. MEDICAL AND TREATMENT SERVICES

#### **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 EMA's are employed either with the EHSC or with a contractor who has a contract for service with the EHSC.

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 FA's 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 three 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 3 (ITT)'s are only employed in Vancouver, and are mostly involved in hospital to hospital transport.<sup>1</sup>

Adapted from the *Health Emergency Act*, R.S.B.C.1996, Chapter 182, and from information provided by the Emergency Medical Assistants Licensing Board, Ministry of Health, Province of British Columbia, January 1994.

Governing Statute: Health Emergency Act, R.S.B.C. 1996, Chapter 182; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**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.

**Dates of Record:** December 1997 and November 1998.

Source of Data: Emergency Medical Assistants Licensing Board (EMALB), B.C. Ministry of

Health.

#### **Preparation and Updating:**

The tables, prepared from registration data maintained by 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 EMA's and the number of EMA's per 10,000 population in British Columbia based on their licence category, excluding the category EMA FR. The tables include EMA's 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 EMA's and in the number of EMA's 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. Level of Training

Tables 1a and 1b present the number and number per 10,000 of EMA FR's in British Columbia by level of training. Table 1c shows the average annual rates of change in these numbers. 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.

#### 2. Age and Sex

Age and sex information for first responders, as derived from the registration database of the EMALB, is reported in Table 2. Age information reported in this table is grouped according to the standard age categories used by Statistics Canada.

# 3. Place of Employment

Table 3 presents place of employment information for first responders in British Columbia. The categories are as follows:

- (a) Fire Departments;
- (b) Police Departments;
- (c) Other Agency.

Table 1a

Emergency Medical Assistants in British Columbia
by Health Region by Licence Category
December 1997 and November 1998

	EMA	A FA	EM	IA 1	EM	IA 2	EMA 3	3 (ALS)	EMA 3	3 (ITT)	Te	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	16	17	100	98	22	19	0	0	0	0	138	134
2 West Kootenay - Boundary	31	31	93	97	28	25	0	0	0	0	152	153
3 North Okanagan	9	10	57	54	27	28	0	0	0	0	93	92
4 South Okanagan - Similkameen	22	26	86	84	36	39	19	17	0	0	163	166
5 Thompson	28	35	125	119	28	28	14	14	0	0	195	196
6 Fraser Valley	3	0	61	54	38	34	9	10	0	0	111	98
7 South Fraser Valley	1	0	27	32	92	93	8	10	0	0	128	135
8 Simon Fraser	0	0	11	18	68	63	7	9	0	0	86	90
9 Coast Garibaldi	6	8	96	94	22	21	0	0	0	0	124	123
10 Central Vancouver Island	36	34	129	118	61	62	0	0	0	0	226	214
11 Upper Island/Central Coast	50	45	128	114	27	25	0	0	0	0	205	184
12 Cariboo	19	11	54	55	20	18	0	0	0	0	93	84
13 North West	43	48	129	123	14	12	0	0	0	0	186	183
14 Peace Liard	44	23	70	72	8	8	0	0	0	0	122	103
15 Northern Interior	50	40	106	109	25	24	11	10	0	0	192	183
16 Vancouver	0	1	45	53	138	125	25	32	19	19	227	230
17 Burnaby	0	0	2	3	13	13	0	0	0	0	15	16
18 North Shore	1	2	39	35	34	34	8	11	0	0	82	82
19 Richmond	0	1	4	2	21	18	9	9	0	0	34	30
20 Capital	29	27	77	77	66	69	29	29	0	0	201	202
TOTAL	388	359	1,439	1,411	788	758	139	151	19	19	2,773	2,698

Table 1b

Emergency Medical Assistants in British Columbia
per 10,000 Population by Health Region by Licence Category
December 1997 and November 1998

	EM	A FA	EN	/IA 1	EM	IA 2	EMA 3	3 (ALS)	EMA:	3 (ITT)	To	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	2.01	2.12	12.56	12.20	2.76	2.36	0.00	0.00	0.00	0.00	17.33	16.68
2 West Kootenay - Boundary	3.81	3.78	11.42	11.83	3.44	3.05	0.00	0.00	0.00	0.00	18.67	18.67
3 North Okanagan	0.78	0.85	4.93	4.61	2.33	2.39	0.00	0.00	0.00	0.00	8.04	7.85
4 South Okanagan - Similkameen	0.98	1.14	3.84	3.70	1.61	1.72	0.85	0.75	0.00	0.00	7.27	7.31
5 Thompson	2.12	2.61	9.47	8.88	2.12	2.09	1.06	1.05	0.00	0.00	14.78	14.63
6 Fraser Valley	0.13	0.00	2.61	2.25	1.63	1.42	0.38	0.42	0.00	0.00	4.75	4.09
7 South Fraser Valley	0.02	0.00	0.49	0.57	1.67	1.65	0.15	0.18	0.00	0.00	2.33	2.40
8 Simon Fraser	0.00	0.00	0.36	0.57	2.22	2.00	0.23	0.29	0.00	0.00	2.81	2.86
9 Coast Garibaldi	0.80	1.02	12.75	12.02	2.92	2.68	0.00	0.00	0.00	0.00	16.47	15.72
10 Central Vancouver Island	1.52	1.41	5.43	4.89	2.57	2.57	0.00	0.00	0.00	0.00	9.52	8.87
11 Upper Island/Central Coast	4.16	3.70	10.66	9.37	2.25	2.06	0.00	0.00	0.00	0.00	17.07	15.13
12 Cariboo	2.54	1.45	7.22	7.25	2.67	2.37	0.00	0.00	0.00	0.00	12.44	11.07
13 North West	4.74	5.27	14.21	13.50	1.54	1.32	0.00	0.00	0.00	0.00	20.50	20.08
14 Peace Liard	6.75	3.49	10.74	10.91	1.23	1.21	0.00	0.00	0.00	0.00	18.72	15.61
15 Northern Interior	3.84	3.03	8.14	8.27	1.92	1.82	0.84	0.76	0.00	0.00	14.74	13.88
16 Vancouver	0.00	0.02	0.82	0.95	2.50	2.23	0.45	0.57	0.34	0.34	4.12	4.11
17 Burnaby	0.00	0.00	0.11	0.16	0.69	0.68	0.00	0.00	0.00	0.00	0.80	0.84
18 North Shore	0.06	0.11	2.21	1.97	1.92	1.91	0.45	0.62	0.00	0.00	4.64	4.60
19 Richmond	0.00	0.06	0.25	0.12	1.34	1.12	0.57	0.56	0.00	0.00	2.16	1.87
20 Capital	0.87	0.81	2.32	2.30	1.99	2.06	0.87	0.87	0.00	0.00	6.05	6.04
TOTAL	0.99	0.90	3.67	3.54	2.01	1.90	0.35	0.38	0.05	0.05	7.07	6.77

Table 1c

Average Annual Rate of Change<sup>1</sup>: Emergency Medical Assistants in British Columbia by Health Region by Licence Category

December 1997 to November 1998

	EMA	A FA	EM	A 1	EM	A 2	EMA 3	3 (ALS)	EMA 3	B (ITT)	To	otal
Health Region	Number <sup>2</sup>	Ratio <sup>3</sup>										
1 East Kootenay	6.84	5.76	-2.18	-3.17	-14.78	-15.64	*	*	*	*	-3.16	-4.14
2 West Kootenay - Boundary	0.00	-0.71	4.70	3.96	-11.63	-12.26	*	*	*	*	0.72	0.00
3 North Okanagan	*	*	-5.73	-7.06	4.05	2.58	*	*	*	*	-1.17	-2.57
4 South Okanagan - Similkameen	19.99	18.25	-2.53	-3.95	9.12	7.54	-11.43	-12.71	*	*	2.01	0.53
5 Thompson	27.56	25.48	-5.22	-6.77	0.00	-1.63	0.00	-1.63	*	*	0.56	-1.08
6 Fraser Valley	*	*	-12.45	-14.73	-11.43	-13.73	*	*	*	*	-12.71	-14.97
7 South Fraser Valley	*	*	20.36	17.43	1.19	-1.28	*	*	*	*	5.98	3.40
8 Simon Fraser	*	*	71.13	66.28	-7.99	-10.60	*	*	*	*	5.08	2.11
9 Coast Garibaldi	*	*	-2.27	-6.30	-4.95	-8.87	*	*	*	*	-0.88	-4.97
10 Central Vancouver Island	-6.05	-7.63	-9.27	-10.80	1.79	0.07	*	*	*	*	-5.78	-7.37
11 Upper Island/Central Coast	-10.86	-12.10	-11.87	-13.09	-8.05	-9.33	*	*	*	*	-11.12	-12.36
12 Cariboo	-44.91	-45.76	2.02	0.44	-10.86	-12.24	*	*	*	*	-10.51	-11.89
13 North West	12.75	12.23	-5.06	-5.50	-15.48	-15.87	*	*	*	*	-1.76	-2.21
14 Peace Liard	-50.72	-51.38	3.12	1.75	*	*	*	*	*	*	-16.86	-17.97
15 Northern Interior	-21.61	-22.66	3.09	1.71	-4.36	-5.64	-9.88	-11.09	*	*	-5.10	-6.38
16 Vancouver	*	*	19.54	17.56	-10.23	-11.72	30.91	28.74	0.00	-1.66	1.44	-0.24
17 Burnaby	*	*	*	*	0.00	-1.69	*	*	*	*	7.29	5.48
18 North Shore	*	*	-11.13	-11.90	0.00	-0.87	*	*	*	*	0.00	-0.87
19 Richmond	*	*	*	*	-15.48	-17.54	*	*	*	*	-12.76	-14.89
20 Capital	-7.50	-8.27	0.00	-0.83	4.97	4.09	0.00	-0.83	*	*	0.54	-0.30
TOTAL	-8.13	-9.77	-2.12	-3.87	-4.15	-5.86	9.45	7.49	0.00	-1.79	-2.95	-4.68

 $<sup>^{1}\</sup>mathrm{An}\,11$  month rate of change has been adjusted to an average annual figure.

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

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

<sup>\*</sup> 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<sup>1</sup>
November 1998

	<	25	25	-34	35-	-44	45-	-54	55-	64	65	+	Age Un	known	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	7	3	21	21	37	18	13	5	6	1	0	0	0	2	84	50	134
2 West Kootenay - Boundary	11	3	21	20	44	23	21	6	1	2	0	0	0	1	98	55	153
3 North Okanagan	4	0	16	5	20	14	19	8	5	1	0	0	0	0	64	28	92
4 South Okanagan - Similkameen	12	4	39	14	40	15	26	5	10	1	0	0	0	0	127	39	166
5 Thompson	10	10	46	22	36	24	36	5	4	2	0	0	1	0	133	63	196
6 Fraser Valley	6	2	24	5	34	1	20	1	5	0	0	0	0	0	89	9	98
7 South Fraser Valley	0	0	26	6	56	5	28	4	10	0	0	0	0	0	120	15	135
8 Simon Fraser	1	0	20	5	41	6	15	0	2	0	0	0	0	0	79	11	90
9 Coast Garibaldi	3	4	40	14	26	7	13	9	4	2	1	0	0	0	87	36	123
10 Central Vancouver Island	12	8	49	21	38	21	44	12	7	2	0	0	0	0	150	64	214
11 Upper Island/Central Coast	5	8	30	18	43	25	30	13	7	2	0	0	1	2	116	68	184
12 Cariboo	2	0	15	9	20	14	11	8	2	3	0	0	0	0	50	34	84
13 North West	11	2	47	32	28	22	19	12	6	2	0	0	2	0	113	70	183
14 Peace Liard	9	6	26	19	11	15	9	5	1	0	0	0	2	0	58	45	103
15 Northern Interior	11	5	43	16	52	16	21	10	7	2	0	0	0	0	134	49	183
16 Vancouver	3	1	45	15	108	16	37	0	5	0	0	0	0	0	198	32	230
17 Burnaby	0	0	3	0	7	3	3	0	0	0	0	0	0	0	13	3	16
18 North Shore	0	0	13	9	37	7	12	3	1	0	0	0	0	0	63	19	82
19 Richmond	0	0	5	3	13	2	6	0	1	0	0	0	0	0	25	5	30
20 Capital	5	2	42	15	70	15	34	11	5	2	0	0	1	0	157	45	202
TOTAL	112	58	571	269	761	269	417	117	89	22	1	0	7	5	1,958	740	2,698

<sup>&</sup>lt;sup>1</sup> There are no EMA's with missing sex information.

Table 3 **Emergency Medical Assistants in British Columbia** by Health Region by Employment Status<sup>1</sup> November 1998

Health Region	Full-Time	Part-Time <sup>2</sup>	Total
1 East Kootenay	13	121	134
2 West Kootenay - Boundary	14	139	153
3 North Okanagan	18	74	92
4 South Okanagan - Similkameen	44	122	166
5 Thompson	32	164	196
6 Fraser Valley	40	58	98
7 South Fraser Valley	102	33	135
8 Simon Fraser	74	16	90
9 Coast Garibaldi	15	108	123
10 Central Vancouver Island	49	165	214
11 Upper Island/Central Coast	14	170	184
12 Cariboo	9	75	84
13 North West	7	176	183
14 Peace Liard	6	97	103
15 Northern Interior	25	158	183
16 Vancouver	190	40	230
17 Burnaby	12	4	16
18 North Shore	38	44	82
19 Richmond	25	5	30
20 Capital	91	111	202
TOTAL	818	1,880	2,698

 $<sup>^{1}</sup>$  There are no EMA's with unknown employment status.  $^{2}$  Includes 1 EMA employed on a casual basis.

Table 1a **Emergency Medical Assistants - First Responders**<sup>1,2</sup> in British Columbia by Health Region by Level of Training December 1997 and November 1998

	FI	R-1	Fl	R-2	F	R-3	T	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	2	2	20	19	73	82	95	103
2 West Kootenay - Boundary	0	19	11	9	154	192	165	220
3 North Okanagan	0	0	0	0	101	156	101	156
4 South Okanagan - Similkameen	2	28	0	0	347	405	349	433
5 Thompson	21	19	6	3	219	245	246	267
6 Fraser Valley	83	83	26	3	277	322	386	408
7 South Fraser Valley	102	109	172	142	739	777	1,013	1,028
8 Simon Fraser	82	84	25	48	406	446	513	578
9 Coast Garibaldi	10	15	29	30	193	187	232	232
10 Central Vancouver Island	8	9	13	12	605	677	626	698
11 Upper Island/Central Coast	4	4	26	32	224	230	254	266
12 Cariboo	0	0	30	47	17	26	47	73
13 North West	4	3	13	13	285	307	302	323
14 Peace Liard	0	0	8	11	69	72	77	83
15 Northern Interior	11	13	16	16	225	269	252	298
16 Vancouver	62	83	0	0	774	783	836	866
17 Burnaby	10	8	0	0	242	241	252	249
18 North Shore	32	34	12	12	304	308	348	354
19 Richmond	0	0	8	10	216	222	224	232
20 Capital	323	325	25	31	605	626	953	982
TOTAL	756	838	440	438	6,075	6,573	7,271	7,849

 $<sup>^1</sup>$  Excludes 13 first responders with unknown level of training in 1997.  $^2$  Excludes 2 first responders with unknown location in 1997 and 14 in 1998.

Table 1b **Emergency Medical Assistants - First Responders**<sup>1,2</sup> in British Columbia per 10,000 Population by Health Region by Level of Training December 1997 and November 1998

	FI	R-1	Fl	R-2	F	R-3	T	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	0.25	0.25	2.51	2.36	9.17	10.20	11.93	12.82
2 West Kootenay - Boundary	0.00	2.32	1.35	1.10	18.91	23.42	20.26	26.84
3 North Okanagan	0.00	0.00	0.00	0.00	8.73	13.32	8.73	13.32
4 South Okanagan - Similkameen	0.09	1.23	0.00	0.00	15.48	17.83	15.57	19.06
5 Thompson	1.59	1.42	0.45	0.22	16.60	18.29	18.64	19.93
6 Fraser Valley	3.55	3.46	1.11	0.13	11.85	13.44	16.51	17.03
7 South Fraser Valley	1.85	1.94	3.13	2.52	13.43	13.81	18.41	18.27
8 Simon Fraser	2.68	2.67	0.82	1.53	13.25	14.17	16.74	18.37
9 Coast Garibaldi	1.33	1.92	3.85	3.83	25.64	23.90	30.82	29.66
10 Central Vancouver Island	0.34	0.37	0.55	0.50	25.48	28.07	26.36	28.94
11 Upper Island/Central Coast	0.33	0.33	2.17	2.63	18.65	18.91	21.15	21.87
12 Cariboo	0.00	0.00	4.01	6.20	2.27	3.43	6.29	9.62
13 North West	0.44	0.33	1.43	1.43	31.40	33.69	33.28	35.44
14 Peace Liard	0.00	0.00	1.23	1.67	10.59	10.91	11.82	12.58
15 Northern Interior	0.84	0.99	1.23	1.21	17.28	20.40	19.35	22.60
16 Vancouver	1.12	1.48	0.00	0.00	14.04	13.99	15.16	15.47
17 Burnaby	0.53	0.42	0.00	0.00	12.91	12.66	13.45	13.08
18 North Shore	1.81	1.91	0.68	0.67	17.21	17.29	19.70	19.88
19 Richmond	0.00	0.00	0.51	0.62	13.75	13.82	14.26	14.44
20 Capital	9.73	9.71	0.75	0.93	18.22	18.71	28.70	29.35
TOTAL	1.93	2.10	1.12	1.10	15.49	16.49	18.54	19.69

 $<sup>^1</sup>$  Excludes 13 first responders with unknown level of training in 1997.  $^2$  Excludes 2 first responders with unknown location in 1997 and 14 in 1998.

Table 1c

Average Annual Rate of Change<sup>1</sup>: Emergency Medical Assistants - First Responders<sup>2,3</sup> in British Columbia by Health Region by Level of Training

December 1997 to November 1998

	FF	R-1	FI	R-2	FR	1-3	1	Cotal
Health Region	Number <sup>4</sup>	Ratio <sup>5</sup>						
1 East Kootenay	*	*	-5.44	-6.40	13.52	12.37	9.22	8.12
2 West Kootenay - Boundary	*	*	-19.66	-20.23	27.20	26.29	36.87	35.89
3 North Okanagan	*	*	*	*	60.68	58.41	60.68	58.41
4 South Okanagan - Similkameen	*	*	*	*	18.37	16.65	26.53	24.69
5 Thompson	-10.34	-11.80	*	*	13.02	11.18	9.35	7.57
6 Fraser Valley	0.00	-2.60	-90.52	-90.76	17.85	14.79	6.23	3.47
7 South Fraser Valley	7.51	4.89	-18.87	-20.84	5.62	3.05	1.62	-0.86
8 Simon Fraser	2.66	-0.25	103.73	97.96	10.79	7.65	13.90	10.67
9 Coast Garibaldi	55.63	49.21	3.77	-0.52	-3.39	-7.37	0.00	-4.13
10 Central Vancouver Island	*	*	-8.36	-9.91	13.05	11.14	12.61	10.71
11 Upper Island/Central Coast	*	*	25.42	23.68	2.93	1.50	5.16	3.70
12 Cariboo	*	*	63.19	60.67	58.96	56.51	61.66	59.16
13 North West	*	*	0.00	-0.46	8.45	7.95	7.61	7.11
14 Peace Liard	*	*	*	*	4.75	3.36	8.53	7.08
15 Northern Interior	19.99	18.38	0.00	-1.34	21.51	19.88	20.07	18.46
16 Vancouver	37.47	35.19	*	*	1.27	-0.41	3.92	2.20
17 Burnaby	-21.61	-22.93	*	*	-0.45	-2.13	-1.30	-2.97
18 North Shore	6.84	5.91	0.00	-0.87	1.44	0.56	1.88	1.00
19 Richmond	*	*	*	*	3.03	0.52	3.90	1.37
20 Capital	0.68	-0.16	26.45	25.39	3.79	2.93	3.32	2.46
TOTAL	11.89	9.89	-0.50	-2.28	8.98	7.02	8.70	6.76

<sup>&</sup>lt;sup>1</sup> An 11 month rate of change has been adjusted to an average annual figure.

<sup>&</sup>lt;sup>2</sup> Excludes 13 first responders with unknown level of training in 1997.

<sup>&</sup>lt;sup>3</sup> Excludes 2 first responders with unknown location in 1997 and 14 in 1998.

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number.

<sup>&</sup>lt;sup>5</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2
Emergency Medical Assistants - First Responders<sup>1,2</sup> in British Columbia by Health Region by Age and Sex<sup>3</sup>
November 1998

	<	25	25-	-34	35-	-44	45-	-54	55-	64	65	+	Age Un	known	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	3	1	21	6	33	5	21	1	10	0	1	0	1	0	90	13	103
2 West Kootenay - Boundary	22	0	32	3	81	3	57	1	11	0	2	0	8	0	213	7	220
3 North Okanagan	10	3	30	6	47	14	34	4	7	1	0	0	0	0	128	28	156
4 South Okanagan - Similkameen	44	2	117	4	126	3	94	4	34	0	3	0	1	1	419	14	433
5 Thompson	16	2	77	12	82	14	48	3	11	1	0	0	0	1	234	33	267
6 Fraser Valley	29	0	145	9	145	7	37	1	6	0	0	0	23	6	385	23	408
7 South Fraser Valley	62	2	361	21	356	12	179	2	25	1	1	0	6	0	990	38	1,028
8 Simon Fraser	9	0	160	16	211	12	141	9	15	3	1	0	0	1	537	41	578
9 Coast Garibaldi	10	2	65	5	91	3	32	2	11	5	1	0	5	0	215	17	232
10 Central Vancouver Island	44	6	196	22	223	27	129	15	22	3	4	2	4	1	622	76	698
11 Upper Island/Central Coast	20	3	73	4	92	8	52	2	11	0	1	0	0	0	249	17	266
12 Cariboo	2	0	20	0	20	3	20	2	3	1	1	1	0	0	66	7	73
13 North West	26	1	104	11	98	9	55	3	7	0	2	0	5	2	297	26	323
14 Peace Liard	2	0	17	1	30	5	23	0	3	0	0	0	1	1	76	7	83
15 Northern Interior	28	8	62	9	88	20	52	4	20	3	0	0	4	0	254	44	298
16 Vancouver	6	1	202	22	321	9	239	1	60	0	0	0	4	1	832	34	866
17 Burnaby	3	0	60	4	91	1	79	0	11	0	0	0	0	0	244	5	249
18 North Shore	4	2	76	6	110	0	143	4	9	0	0	0	0	0	342	12	354
19 Richmond	0	1	45	4	69	2	101	1	9	0	0	0	0	0	224	8	232
20 Capital	45	4	225	53	341	34	201	19	37	4	6	1	11	1	866	116	982
TOTAL	385	38	2,088	218	2,655	191	1,737	78	322	22	23	4	73	15	7,283	566	7,849

 $<sup>^{\</sup>rm 1}$  Excludes 13 first responders with unknown level of training in 1997.

<sup>&</sup>lt;sup>2</sup> Excludes 2 first responders with unknown location in 1997 and 14 in 1998.

<sup>&</sup>lt;sup>3</sup> There are no first responders with missing sex information.

Table 3 Emergency Medical Assistants - First Responders<sup>1,2</sup> in British Columbia by Health Region by Place of Employment November 1998

Health Region	Fire Department	Police Department	Other Agency	Unknown	Total
1 East Kootenay	103	0	0	0	103
2 West Kootenay - Boundary	200	20	0	0	220
3 North Okanagan	123	0	33	0	156
4 South Okanagan - Similkameen	406	0	27	0	433
5 Thompson	244	7	15	1	267
6 Fraser Valley	335	73	0	0	408
7 South Fraser Valley	914	114	0	0	1,028
8 Simon Fraser	466	86	11	15	578
9 Coast Garibaldi	232	0	0	0	232
10 Central Vancouver Island	696	2	0	0	698
11 Upper Island/Central Coast	266	0	0	0	266
12 Cariboo	73	0	0	0	73
13 North West	314	0	9	0	323
14 Peace Liard	83	0	0	0	83
15 Northern Interior	286	0	12	0	298
16 Vancouver	771	94	0	1	866
17 Burnaby	249	0	0	0	249
18 North Shore	329	25	0	0	354
19 Richmond	231	1	0	0	232
20 Capital	637	345	0	0	982
OTAL	6,958	767	107	17	7,849

 $<sup>^1</sup>$  Excludes 13 first responders with unknown level of training in 1997.  $^2$  Excludes 2 first responders with unknown location in 1997 and 14 in 1998.

#### **MIDWIVES**

**Definition:** A midwife

...carries out examinations necessary to establish and monitor normal pregnancies, manages normal deliveries and advises pregnant women as soon as any pregnancy at risk is detected.

Midwives may perform some or all of the following duties:

- (a) counsel and educate women concerning diet, exercise and other prenatal health practices;
- (b) monitor the condition of the mother and the baby during labour and guide the birthing process;
- (c) take appropriate measures when an emergency arises and arrange for contact with physicians (obstetricians);
- (d) examine and care for newborn babies, and educate mothers on health care;

(e) conduct classes on pregnancy and childbirth, as well as family planning and other related topics in the community.<sup>1</sup>

Governing Statute: Health Professions Act, R.S.B.C. 1996, Chapter 183; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** College of Midwives of British Columbia (CMBC). In order to practice as a

midwife in British Columbia, it is necessary to be registered by the CMBC.

Registrants of the College have exclusive use of the title: midwife.

**Date of Record:** January 1999.

**Source of Data:** College of Midwives of British Columbia (CMBC).

# **Preparation and Updating:**

Information reported in the tables is derived from data supplied by the College of Midwives of British Columbia (CMBC) and includes midwives who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address for the majority of midwives. Precise percentages of home versus employment or other address are not known.

Midwives appear for the first time in *ROLLCALL UPDATE 98*. Therefore, there are no reported analyses of change from previous years.

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

# 1. Registration Status

Tables 1a and 1b show number and number per 10,000 population of midwives in B.C. at the date of record by registration status.

Adapted from National Occupational Classification 1992, Major Group 32, No. 3232, Ottawa: Employment and Immigration Canada.

The registration categories currently used by the College of Midwives of B.C. (CMBC) are as follows:

# (a) Initial

An initial registrant is a fully registered midwife who registered with the CMBC during the first two years of the College's existence (from April 3, 1997 to April 3, 1999).

# (b) Conditional

A conditional registrant is a midwife who has been identified through the CMBC assessment procedure to have a discrete gap in her/his clinical or theoretical knowledge at the time of registration. Conditional registrants must practice under the supervision of an Initial registrant for a period up to 12 months.<sup>2</sup>

All registrants must remain active in both the home and hospital environments.

 $<sup>^2\,</sup>$  Adapted from information supplied by the College of Midwives of B.C.

Table 1a
Midwives in British Columbia
by Health Region by Registration Status
January 1999

Health Region	Initial	Conditional	Total
1 East Kootenay	0	0	0
2 West Kootenay - Boundary	2	3	5
3 North Okanagan	0	0	0
4 South Okanagan - Similkameen	1	0	1
5 Thompson	0	0	0
6 Fraser Valley	0	1	1
7 South Fraser Valley	3	0	3
8 Simon Fraser	2	0	2
9 Coast Garibaldi	0	1	1
10 Central Vancouver Island	2	2	4
11 Upper Island/Central Coast	3	2	5
12 Cariboo	0	0	0
13 North West	0	0	0
14 Peace Liard	0	0	0
15 Northern Interior	1	0	1
16 Vancouver	9	3	12
17 Burnaby	0	0	0
18 North Shore	0	3	3
19 Richmond	0	0	0
20 Capital	11	0	11
TOTAL	34	15	49

Table 1b
Midwives in British Columbia
per 10,000 Population by Health Region by Registration Status
January 1999

Health Region	Initial	Conditional	Total
1 East Kootenay	0.00	0.00	0.00
2 West Kootenay - Boundary	0.24	0.37	0.61
3 North Okanagan	0.00	0.00	0.00
4 South Okanagan - Similkameen	0.04	0.00	0.04
5 Thompson	0.00	0.00	0.00
6 Fraser Valley	0.00	0.04	0.04
7 South Fraser Valley	0.05	0.00	0.05
8 Simon Fraser	0.06	0.00	0.06
9 Coast Garibaldi	0.00	0.13	0.13
10 Central Vancouver Island	0.08	0.08	0.17
11 Upper Island/Central Coast	0.25	0.16	0.41
12 Cariboo	0.00	0.00	0.00
13 North West	0.00	0.00	0.00
14 Peace Liard	0.00	0.00	0.00
15 Northern Interior	0.08	0.00	0.08
16 Vancouver	0.16	0.05	0.21
17 Burnaby	0.00	0.00	0.00
18 North Shore	0.00	0.17	0.17
19 Richmond	0.00	0.00	0.00
20 Capital	0.33	0.00	0.33
TOTAL	0.09	0.04	0.12

#### **OPTICIANS**

**Definition:** An optician

...fits clients with prescription eyeglasses or contact lenses, assists clients in the selection of eyeglass frames, arranges for the production of eyeglasses or contact lenses and mounts lenses in eyeglass frames.

Opticians may perform some or all of the following duties:

- (a) obtain specifications for eyeglasses or contact lenses from a prescription prepared by an ophthalmologist or optometrist or by analysing the client's eyeglasses or contact lenses, and by measuring the client's eye curvature, pupillary distance and bridge width, using optical measuring devices:
- (b) assist clients in selecting eyeglasses by advising on lens materials, frames, tints and anti-reflection coating;
- (c) advise on use and care of contact lenses;
- (d) arrange for grinding and polishing of lenses or grind and polish lenses;
- (e) cut and edge lenses and fit lenses into frames;
- (f) adjust finished eyeglasses to fit client;
- (g) supervise or manage the activities of other opticians or student opticians.<sup>1</sup>

Governing Statute: Health Professions Act, R.S.B.C. 1996, Chapter 183; administered by the

Ministry of Health and Ministry Responsible for Seniors.

Governing Body: College of Opticians of British Columbia (COBC). In order to practice as an

optician or contact lens fitter in British Columbia, it is necessary to be registered and licensed by the COBC. Registrants of the College have

exclusive use of the titles: optician, dispensing optician and contact lens fitter.

**Date of Record:** May 1998 and November 1998.

**Source of Data:** College of Opticians of British Columbia (COBC).

# **Preparation and Updating:**

Information reported in the tables is derived from data supplied by the College of Opticians of British Columbia (COBC) and includes opticians 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 *licensed*, and when employment address is available. In May 1998 and November 1998, employment address was available for 96.2% and 95.9% of licensed opticians, respectively. Home address is used for the remainder, and for opticians with non-practising or student membership status.

Adapted from National Occupational Classification 1992, Major Group 32, No. 3231, Ottawa: Employment and Immigration Canada.

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

### 1. Registration Status

Tables 1a and 1b show number and number per 10,000 population of opticians in B.C. at the date of record by registration status, and Table 1c shows the average annual rates of change in these numbers.

The registration categories used by the College of Opticians of B.C. (COBC) are as follows:

#### (a) Licensed

## (i) Dispensing Optician

A dispensing optician is licensed by the COBC to provide dispensing services for eyeglasses. They are not permitted to dispense contact lens.

### (ii) Contact Lens Fitter

A contact lens fitter is licensed by the COBC to provide dispensing services for both eyeglasses and contact lens. Licensed contact lens fitters have had additional training in fitting contact lens.

#### (b) Non-Practising

### (i) Dispensing Optician

A non-practising dispensing optician is currently not employed in the field of opticianry, but must be able to meet the requirements for full registration as a dispensing optician by the COBC.

#### (ii) Contact Lens Fitter

A non-practising contact lens fitter is currently not employed in the field of opticianry, but must be able to meet the requirements for full registration as a contact lens fitter by the COBC.

#### (c) Student Contact Lens Fitter

A student contact lens fitter is enrolled in an approved contact lens program. The COBC has three registration categories for student contact lens fitters: student contact lens fitter, dispensing optician license/student contact lens fitter, and non-practising optician/student contact lens fitter. All three categories are combined in the tables under "Student".<sup>2</sup>

# 2. Age and Sex

Age and sex information for opticians who are registered with the COBC is presented in Table 2. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada. Age information was not available for the majority of opticians (53%).

Adapted from information supplied by the College of Opticians of B.C., and from the Bylaws of the College of Opticians of B.C. as listed under Canadian Licensing Information for British Columbia on the web site of The Opticians Association of Canada (www.opticians.ca/english/practice1.htm#BRITISH\_COLUMBIA).

# 3. Employment Setting

Information about employment setting was provided by the COBC. Table 3 shows this information for licensed members of the COBC using the following categories:

- (a) Optical Company/Optician;
- (b) Optometrist/Ophthalmologist Office/Clinic;
- (c) Other Optic-related;
- (d) Non-Optic;
- (e) Unknown.

Table 1a
Opticians<sup>1</sup> in British Columbia
by Health Region by Registration Status
May 1998 and November 1998

		Lice	nsed			Non-Practising						
	Dispensin	g Optician	Contact I	ens Fitter	Dispensing	g Optician	Contact L	ens Fitter	Stu	dent	To	otal
Health Region	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98
1 East Kootenay	3	3	3	3	1	1	0	0	0	0	7	7
2 West Kootenay - Boundary	9	9	2	2	0	0	1	1	0	0	12	12
3 North Okanagan	16	17	13	13	0	0	2	1	0	0	31	31
4 South Okanagan - Similkameen	37	38	33	35	11	12	5	4	1	2	87	91
5 Thompson	18	17	6	9	2	4	1	0	1	1	28	31
6 Fraser Valley	43	40	25	30	2	4	0	0	1	1	71	75
7 South Fraser Valley	58	62	67	65	11	8	5	6	12	11	153	152
8 Simon Fraser	27	27	35	41	12	16	8	10	9	8	91	102
9 Coast Garibaldi	6	7	5	5	0	0	0	0	0	0	11	12
10 Central Vancouver Island	24	25	28	29	3	4	1	0	0	0	56	58
11 Upper Island/Central Coast	10	10	9	9	3	2	1	1	0	0	23	22
12 Cariboo	14	14	7	7	2	2	0	0	0	0	23	23
13 North West	11	10	0	1	0	0	1	1	0	0	12	12
14 Peace Liard	4	4	0	0	1	1	0	0	1	0	6	5
15 Northern Interior	13	13	8	8	1	1	0	1	0	1	22	24
16 Vancouver	68	60	120	121	14	17	10	10	7	5	219	213
17 Burnaby	41	39	44	47	7	8	4	5	3	5	99	104
18 North Shore	23	26	20	21	6	4	3	6	1	0	53	57
19 Richmond	21	23	56	58	4	6	3	5	1	1	85	93
20 Capital	50	50	46	46	7	10	2	1	2	3	107	110
TOTAL	496	494	527	550	87	100	47	52	39	38	1,196	1,234

<sup>&</sup>lt;sup>1</sup> Excludes 45 opticians with unknown location in May 1998.

Table 1b
Opticians<sup>1</sup> in British Columbia
per 10,000 Population by Health Region by Registration Status
May 1998 and November 1998

		Lice	nsed			Non-F	ractising					
	Dispensin	g Optician	Contact I	ens Fitter	Dispensing	g Optician	Contact I	ens Fitter	Stu	dent	To	tal
Health Region	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98	May 98	Nov 98
1 East Kootenay	0.38	0.37	0.38	0.37	0.13	0.12	0.00	0.00	0.00	0.00	0.88	0.87
2 West Kootenay - Boundary	1.11	1.10	0.25	0.24	0.00	0.00	0.12	0.12	0.00	0.00	1.47	1.46
3 North Okanagan	1.38	1.45	1.12	1.11	0.00	0.00	0.17	0.09	0.00	0.00	2.68	2.65
4 South Okanagan - Similkameen	1.65	1.67	1.47	1.54	0.49	0.53	0.22	0.18	0.04	0.09	3.88	4.01
5 Thompson	1.36	1.27	0.45	0.67	0.15	0.30	0.08	0.00	0.08	0.07	2.12	2.31
6 Fraser Valley	1.84	1.67	1.07	1.25	0.09	0.17	0.00	0.00	0.04	0.04	3.04	3.13
7 South Fraser Valley	1.05	1.10	1.22	1.15	0.20	0.14	0.09	0.11	0.22	0.20	2.78	2.70
8 Simon Fraser	0.88	0.86	1.14	1.30	0.39	0.51	0.26	0.32	0.29	0.25	2.97	3.24
9 Coast Garibaldi	0.80	0.89	0.66	0.64	0.00	0.00	0.00	0.00	0.00	0.00	1.46	1.53
10 Central Vancouver Island	1.01	1.04	1.18	1.20	0.13	0.17	0.04	0.00	0.00	0.00	2.36	2.40
11 Upper Island/Central Coast	0.83	0.82	0.75	0.74	0.25	0.16	0.08	0.08	0.00	0.00	1.92	1.81
12 Cariboo	1.87	1.85	0.94	0.92	0.27	0.26	0.00	0.00	0.00	0.00	3.08	3.03
13 North West	1.21	1.10	0.00	0.11	0.00	0.00	0.11	0.11	0.00	0.00	1.32	1.32
14 Peace Liard	0.61	0.61	0.00	0.00	0.15	0.15	0.00	0.00	0.15	0.00	0.92	0.76
15 Northern Interior	1.00	0.99	0.61	0.61	0.08	0.08	0.00	0.08	0.00	0.08	1.69	1.82
16 Vancouver	1.23	1.07	2.18	2.16	0.25	0.30	0.18	0.18	0.13	0.09	3.97	3.80
17 Burnaby	2.19	2.05	2.35	2.47	0.37	0.42	0.21	0.26	0.16	0.26	5.28	5.46
18 North Shore	1.30	1.46	1.13	1.18	0.34	0.22	0.17	0.34	0.06	0.00	3.00	3.20
19 Richmond	1.34	1.43	3.57	3.61	0.25	0.37	0.19	0.31	0.06	0.06	5.41	5.79
20 Capital	1.51	1.49	1.39	1.37	0.21	0.30	0.06	0.03	0.06	0.09	3.22	3.29
TOTAL	1.26	1,24	1.34	1.38	0.22	0.25	0.12	0.13	0.10	0.10	3.05	3.10

<sup>&</sup>lt;sup>1</sup> Excludes 45 opticians with unknown location in May 1998.

Table 1c

Average Annual Rate of Change<sup>1</sup>: Opticians<sup>2</sup> in British Columbia
by Health Region by Registration Status
May 1998 to November 1998

		Lice	ensed			Non-I	Practising					
	Dispensin	g Optician	Contact I	ens Fitter	Dispensin	g Optician	Contact L	ens Fitter	Student		Total	
Health Region	Number <sup>3</sup>	Ratio <sup>4</sup>										
1 East Kootenay	*	*	*	*	*	*	*	*	*	*	*	*
2 West Kootenay - Boundary	*	*	*	*	*	*	*	*	*	*	0.00	-1.30
3 North Okanagan	12.89	9.99	0.00	-2.57	*	*	*	*	*	*	0.00	-2.57
4 South Okanagan - Similkameen	5.48	2.68	12.49	9.51	19.01	15.86	*	*	*	*	9.41	6.51
5 Thompson	-10.80	-13.45	*	*	*	*	*	*	*	*	22.58	18.94
6 Fraser Valley	-13.47	-17.54	44.00	37.22	*	*	*	*	*	*	11.59	6.33
7 South Fraser Valley	14.27	9.22	-5.88	-10.04	-47.11	-49.44	*	*	-15.97	-19.68	-1.30	-5.66
8 Simon Fraser	0.00	-5.13	37.22	30.18	77.78	68.65	*	*	*	*	25.64	19.19
9 Coast Garibaldi	*	*	*	*	*	*	*	*	*	*	19.01	10.16
10 Central Vancouver Island	8.51	5.17	7.27	3.97	*	*	*	*	*	*	7.27	3.97
11 Upper Island/Central Coast	0.00	-2.53	*	*	*	*	*	*	*	*	-8.51	-10.82
12 Cariboo	0.00	-2.82	*	*	*	*	*	*	*	*	0.00	-2.82
13 North West	-17.36	-18.05	*	*	*	*	*	*	*	*	0.00	-0.85
14 Peace Liard	*	*	*	*	*	*	*	*	*	*	*	*
15 Northern Interior	0.00	-2.45	*	*	*	*	*	*	*	*	19.01	16.09
16 Vancouver	-22.15	-24.49	1.67	-1.39	47.45	43.00	0.00	-3.02	*	*	-5.40	-8.26
17 Burnaby	-9.52	-12.30	14.10	10.59	*	*	*	*	*	*	10.36	6.96
18 North Shore	27.79	25.77	10.25	8.51	*	*	*	*	*	*	15.66	13.83
19 Richmond	19.95	14.65	7.27	2.53	*	*	*	*	*	*	19.71	14.42
20 Capital	0.00	-1.52	0.00	-1.52	*	*	*	*	*	*	5.69	4.07
OTAL	-0.80	-4.04	8.92	5,37	32,12	27.81	22,41	18.42	-5.06	-8.15	6.46	2,99

<sup>&</sup>lt;sup>1</sup> A 6 month rate of change has been adjusted to an average annual figure.

<sup>&</sup>lt;sup>2</sup> Excludes 45 opticians with unknown location in May 1998.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2
Opticians<sup>1</sup> in British Columbia
by Health Region by Age and Sex<sup>2</sup>
November 1998

	<	25	25	5-34	35	-44	45	-54	55-	-64	65	+	Age U	nknown	Sub	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	0	1	0	0	0	1	0	0	0	0	4	1	4	3	7
2 West Kootenay - Boundary	0	0	0	0	3	1	2	1	0	1	0	0	2	2	7	5	12
3 North Okanagan	0	0	0	4	0	2	4	4	1	0	0	0	11	5	16	15	31
4 South Okanagan - Similkameen	0	0	4	12	4	15	2	11	3	3	0	0	18	19	31	60	91
5 Thompson	0	1	1	3	3	2	3	4	0	0	0	0	4	10	11	20	31
6 Fraser Valley	0	3	2	4	3	6	6	6	2	1	1	0	17	24	31	44	75
7 South Fraser Valley	4	8	9	10	7	14	6	5	2	1	0	0	37	49	65	87	152
8 Simon Fraser	1	4	7	12	3	11	6	3	1	1	0	0	25	28	43	59	102
9 Coast Garibaldi	0	0	1	2	1	1	1	1	0	0	0	0	3	2	6	6	12
10 Central Vancouver Island	0	0	5	10	3	5	5	4	1	4	0	0	8	13	22	36	58
11 Upper Island/Central Coast	0	1	3	3	1	3	1	1	0	0	0	0	1	8	6	16	22
12 Cariboo	0	0	0	4	1	4	1	3	0	0	0	0	2	8	4	19	23
13 North West	0	0	2	1	0	2	3	0	0	0	0	0	3	1	8	4	12
14 Peace Liard	0	1	0	1	1	0	0	0	0	0	0	0	1	1	2	3	5
15 Northern Interior	0	1	0	2	0	6	0	0	1	0	0	0	5	9	6	18	24
16 Vancouver	3	6	7	12	22	11	15	11	3	1	1	0	67	54	118	95	213
17 Burnaby	4	4	5	9	5	7	5	0	2	0	0	0	31	32	52	52	104
18 North Shore	0	0	7	4	4	1	4	0	1	1	0	0	12	23	28	29	57
19 Richmond	0	2	2	7	7	7	6	2	1	0	0	0	33	26	49	44	93
20 Capital	1	3	6	15	5	9	4	8	2	2	0	0	28	27	46	64	110
TOTAL	13	34	61	116	73	107	74	65	20	15	2	0	312	342	555	679	1,234

<sup>&</sup>lt;sup>1</sup> Includes Licensed, Non-Practising and Student members.

<sup>&</sup>lt;sup>2</sup> There are no opticians with missing sex information.

Table 3
Licensed Opticians<sup>1</sup> in British Columbia
by Health Region by Employment Setting
November 1998

#### Optometrist/ Ophthalmologist

	U	primiminoiogi	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	Optical Company/	Office/	Other		Other/	
Health Region	Optician	Clinic	Optic-related	Non-Optic	Unknown	Total
1 East Kootenay	6	0	0	0	0	6
2 West Kootenay - Boundary	8	2	0	0	1	11
3 North Okanagan	25	4	0	0	1	30
4 South Okanagan - Similkameer	n 61	3	8	0	1	73
5 Thompson	20	6	0	0	0	26
6 Fraser Valley	56	12	2	0	0	70
7 South Fraser Valley	104	13	7	0	3	127
8 Simon Fraser	48	6	4	0	10	68
9 Coast Garibaldi	8	3	1	0	0	12
10 Central Vancouver Island	48	4	0	0	2	54
11 Upper Island/Central Coast	18	1	0	0	0	19
12 Cariboo	13	8	0	0	0	21
13 North West	9	1	0	0	1	11
14 Peace Liard	4	0	0	0	0	4
15 Northern Interior	13	8	0	0	0	21
16 Vancouver	154	8	14	1	4	181
17 Burnaby	79	1	5	1	0	86
18 North Shore	36	7	1	0	3	47
19 Richmond	59	7	12	0	3	81
20 Capital	81	12	1	0	2	96
OTAL	850	106	55	2	31	1,044

<sup>&</sup>lt;sup>1</sup> Excludes Non-Practising and Student members.

#### **PHARMACISTS**

**Definition:** A pharmacist

...is responsible for the "practice of pharmacy", which includes the practice of and responsibility for:

- (a) interpretation and evaluation of prescriptions;
- (b) compounding, dispensing and added labelling of drugs and devices;
- (c) monitoring drug therapy;
- (d) identification, assessment and recommendations necessary to resolve or prevent drug related problems in patients;
- (e) advising persons of the therapeutic values, content and hazards of drugs and devices;
- (f) safe storage of drugs and devices;
- (g) maintenance of proper records, including patient records, for drugs and devices;
- (h) services, duties and transactions necessary to the management, operation and control of a pharmacy or to provide pharmacy services in a hospital, facility or care centre;
- (i) sale of drugs by pharmacists.<sup>1</sup>

Governing Statute: Pharmacists, Pharmacy Operations and Drug Scheduling Act, R.S.B.C. 1996,

Chapter 363; administered by the Ministry of Health and Ministry Responsible

for Seniors.

**Governing Body:** 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.

Registered pharmacists have exclusive use of the titles: chemist,

pharmaceutical chemist, druggist, apothecary, pharmacist, R. Ph., R. Pharm.

or words of similar meaning.

**Dates of Record:** April 1998 and December 1998.

**Source of Data:** 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 April 1998 and December 1998, employment address was available for 99.6% and 99.7% of pharmacists employed in pharmacy, respectively. Home address is used for the remainder, as well as for pharmacists not employed in pharmacy.

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.

#### **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 employer in Table 3 using the following categories:

- (a) Employed in Pharmacy;
  - (i) Community pharmacy
  - (ii) Hospital pharmacy
  - (iii) Other
- (b) Not Employed in Pharmacy.

# 4. Employment Status and Type of Position

Table 4 shows pharmacists by employment status and type of position using the following categories:

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

#### 5. Analysis of Change

Table 5 illustrates the sources of change which affected the supply of pharmacists from April 1998 to December 1998.

*New registrants* include pharmacists who were licensed as of December 1998 and who registered with the CPBC *for the first time* subsequent to April 1998. 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 April 1998, but were licensed in the province in December 1998, and whose date of initial registration was before April

1998. Also included are licensed pharmacists who reported out-of-province addresses in April 1998, but who reported British Columbia addresses in December 1998.

*Attrition* describes pharmacists who were included in the April 1998 supply but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of licence were not included in the December 1998 supply.

*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.

Table 1 Pharmacists in British Columbia by Health Region **April 1998 and December 1998** 

	Nun	nber		er per opulation	Average Annual Rate of Change <sup>1</sup>		
Health Region	Apr-98	Dec-98	Apr-98	Dec-98	Number <sup>2</sup>	Ratio <sup>3</sup>	
1 East Kootenay	39	44	4.90	5.48	17.45	16.00	
2 West Kootenay - Boundary	47	55	5.77	6.71	23.32	22.24	
3 North Okanagan	68	73	5.88	6.23	9.92	8.03	
4 South Okanagan - Similkameen	165	174	7.36	7.66	7.34	5.43	
5 Thompson	80	87	6.06	6.49	11.83	9.61	
6 Fraser Valley	142	152	6.07	6.35	9.50	6.03	
7 South Fraser Valley	317	347	5.76	6.17	12.81	9.47	
8 Simon Fraser	208	226	6.79	7.18	11.70	7.84	
9 Coast Garibaldi	45	51	5.98	6.52	18.16	12.23	
10 Central Vancouver Island	139	148	5.85	6.14	8.72	6.49	
11 Upper Island/Central Coast	56	62	4.66	5.10	14.53	12.59	
12 Cariboo	38	43	5.08	5.67	17.92	15.69	
13 North West	61	61	6.72	6.69	0.00	-0.56	
14 Peace Liard	29	31	4.45	4.70	9.30	7.52	
15 Northern Interior	69	68	5.30	5.16	-1.93	-3.54	
16 Vancouver	677	693	12.28	12.38	3.16	1.08	
17 Burnaby	145	140	7.74	7.35	-4.57	-6.54	
18 North Shore	151	144	8.55	8.09	-6.13	-7.13	
19 Richmond	122	125	7.77	7.78	3.29	0.23	
20 Capital	263	270	7.92	8.07	3.56	2.51	
OTAL	2,861	2,994	7.30	7.51	6.25	3.93	

 $<sup>^1</sup>$  A 9 month rate of change has been adjusted to an average annual figure.  $^2$  Rate of change (in percent) in the number.  $^3$  Rate of change (in percent) in the number per 10,000 population.

Table 2
Pharmacists in British Columbia
by Health Region by Age and Sex<sup>1</sup>
December 1998

	<	25	25	-34	35	-44	45	-54	55-	64	65	+	Age Un	known	Sul	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	1	1	7	9	2	5	3	5	5	2	3	0	1	0	22	22	44
2 West Kootenay - Boundary	0	2	11	8	6	8	6	7	4	0	1	0	2	0	30	25	55
3 North Okanagan	1	0	6	14	13	8	16	8	3	0	2	0	1	1	42	31	73
4 South Okanagan - Similkameen	2	4	28	24	16	25	26	16	18	6	6	0	2	1	98	76	174
5 Thompson	3	3	17	14	9	12	8	6	8	3	2	0	2	0	49	38	87
6 Fraser Valley	4	9	34	23	18	19	13	15	11	3	3	0	0	0	83	69	152
7 South Fraser Valley	4	7	58	86	38	50	38	31	18	5	6	0	5	1	167	180	347
8 Simon Fraser	3	7	33	39	21	38	31	29	13	6	2	0	3	1	106	120	226
9 Coast Garibaldi	1	1	7	11	6	11	3	3	5	1	2	0	0	0	24	27	51
10 Central Vancouver Island	1	4	22	21	21	21	19	17	12	4	4	0	1	1	80	68	148
11 Upper Island/Central Coast	0	1	10	15	11	9	4	5	4	0	2	0	0	1	31	31	62
12 Cariboo	4	4	8	7	6	2	3	1	4	2	1	1	0	0	26	17	43
13 North West	2	2	9	11	7	13	8	3	5	1	0	0	0	0	31	30	61
14 Peace Liard	1	3	5	7	1	2	7	2	2	1	0	0	0	0	16	15	31
15 Northern Interior	3	2	11	17	12	6	8	3	3	1	1	0	0	1	38	30	68
16 Vancouver	11	22	73	161	93	135	69	74	16	22	8	2	3	4	273	420	693
17 Burnaby	5	6	20	31	15	22	11	14	8	0	5	0	2	1	66	74	140
18 North Shore	2	5	10	38	8	23	17	15	11	10	2	1	0	2	50	94	144
19 Richmond	0	7	27	25	16	16	13	14	3	2	0	1	1	0	60	65	125
20 Capital	3	1	37	29	30	52	36	40	22	8	7	1	3	1	138	132	270
TOTAL	51	91	433	590	349	477	339	308	175	77	57	6	26	15	1,430	1,564	2,994

<sup>&</sup>lt;sup>1</sup> There are no pharmacists with missing sex information.

Table 3
Pharmacists in British Columbia
by Health Region by Employment Status and Type of Employer
December 1998

**Employed in Pharmacy** Community Hospital Not Employed **Health Region** Pharmacy Pharmacy Other Subtotal in Pharmacy Total 1 East Kootenay 2 West Kootenay - Boundary 3 North Okanagan 4 South Okanagan - Similkameen 5 Thompson 6 Fraser Valley 7 South Fraser Valley 8 Simon Fraser 9 Coast Garibaldi 10 Central Vancouver Island 11 Upper Island/Central Coast 12 Cariboo 13 North West 14 Peace Liard 15 Northern Interior 16 Vancouver 17 Burnaby 18 North Shore 19 Richmond 20 Capital **TOTAL** 2,000 2,652 2,994

Table 4
Pharmacists in British Columbia
by Health Region by Employment Status and Type of Position
December 1998

Employed in Pharmacy

		Employed in .	Pharmacy			
	Dispensin	g Pharmacist	•		Not Employed	
Health Region	Manager	Non-Manager	Other	Subtotal	in Pharmacy	Total
1 East Kootenay	19	21	0	40	4	44
2 West Kootenay - Boundary	25	21	0	46	9	55
3 North Okanagan	21	44	0	65	8	73
4 South Okanagan - Similkameen	47	112	2	161	13	174
5 Thompson	24	51	0	75	12	87
6 Fraser Valley	46	98	1	145	7	152
7 South Fraser Valley	93	212	4	309	38	347
8 Simon Fraser	52	150	1	203	23	226
9 Coast Garibaldi	21	28	0	49	2	51
10 Central Vancouver Island	51	90	1	142	6	148
11 Upper Island/Central Coast	25	35	0	60	2	62
12 Cariboo	17	20	0	37	6	43
13 North West	20	38	0	58	3	61
14 Peace Liard	13	12	0	25	6	31
15 Northern Interior	25	36	0	61	7	68
16 Vancouver	137	408	48	593	100	693
17 Burnaby	33	79	4	116	24	140
18 North Shore	29	85	8	122	22	144
19 Richmond	26	61	12	99	26	125
20 Capital	75	166	5	246	24	270
OTAL	799	1,767	86	2,652	342	2,994

Table 5

Analysis of Change in the Number of Pharmacists in British Columbia by Health Region

April 1998 to December 1998

			New Registra	nts¹ by Place	of Graduation		_		Net Intra-	
Health Region	April 1998	B.C.	Other Canada	Other Country	Unknown	Subtotal	Reactivation <sup>2</sup>	Attrition <sup>3</sup>	provincial Migration	December 1998
1 East Kootenay	39	0	3	0	0	3	1	0	1	44
2 West Kootenay - Boundary	47	1	2	0	0	3	1	1	5	55
3 North Okanagan	68	1	1	0	0	2	0	0	3	73
4 South Okanagan - Similkameen	165	8	2	0	0	10	1	2	0	174
5 Thompson	80	7	1	1	0	9	1	0	-3	87
6 Fraser Valley	142	8	0	0	0	8	1	2	3	152
7 South Fraser Valley	317	12	1	1	0	14	3	3	16	347
8 Simon Fraser	208	6	1	2	0	9	1	2	10	226
9 Coast Garibaldi	45	2	1	0	0	3	1	2	4	51
10 Central Vancouver Island	139	3	5	1	0	9	1	3	2	148
11 Upper Island/Central Coast	56	2	1	0	0	3	0	1	4	62
12 Cariboo	38	4	2	0	0	6	0	1	0	43
13 North West	61	1	1	0	0	2	1	1	-2	61
14 Peace Liard	29	2	2	0	0	4	0	2	0	31
15 Northern Interior	69	2	4	0	0	6	1	4	-4	68
16 Vancouver	677	25	4	1	2	32	7	15	-8	693
17 Burnaby	145	12	0	0	0	12	2	8	-11	140
18 North Shore	151	3	0	1	0	4	0	1	-10	144
19 Richmond	122	6	0	0	0	6	3	0	-6	125
20 Capital	263	5	5	0	0	10	4	3	-4	270
TOTAL	2,861	110	36	7	2	155	29	51	0	2,994

<sup>&</sup>lt;sup>1</sup> Pharmacists who reported B.C. addresses and were registered in December 1998 and whose date of initial registration was after April 1998.

<sup>&</sup>lt;sup>2</sup> Pharmacists who reported B.C. addresses and were registered in December 1998 but not in April 1998 and who were registered for the first time before April 1998.

<sup>&</sup>lt;sup>3</sup> Pharmacists who reported B.C. addresses and were registered in April 1998 but not in December 1998.

#### 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>

Osteopaths diagnose disorders and injuries of the musculo-skeletal, circulatory and nervous systems. Treatments include 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.

**Governing Statute:** Medical Practitioners Act, R.S.B.C. 1996, Chapter 285; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** College of Physicians and Surgeons of British Columbia (CPSBC). CPSBC

registration is a requirement of medical practice in British Columbia.

**Dates of Record:** September 1997 and September 1998.

**Sources of Data**: College of Physicians and Surgeons of British Columbia (CPSBC) and

Medical Services Commission of British Columbia (MSC).

Adapted from National Occupational Classification 1992, Major Group 31, No. 3112, Ottawa; Employment and Immigration Canada.

Adapted from National Occupational Classification 1992, Major Group 31, No. 3111, Ottawa; Employment and Immigration Canada.

<sup>&</sup>lt;sup>3</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3123, Ottawa; Employment and Immigration Canada.

#### **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 versus employment or other address are not known.

Specialist information is available, and is reported using both the Medical Services Commission of British Columbia (MSC) specialty codes and the Royal College of Physicians and Surgeons of Canada (RCPSC) certification categories. The MSC specialty data are comparable to specialty data in editions of *ROLLCALL* prior to 1995, and to the MSC specialty data in *ROLLCALL UPDATE 96* and *ROLLCALL 97*. The RCPSC specialty data are comparable to the *ROLLCALL 95* specialty data and to the RCPSC specialty data in *ROLLCALL UPDATE 96* and *ROLLCALL 97*.

There is currently only one directory active osteopath in the province; he(she) 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 are 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 for Directory Active physicians. Age information in the table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

### 3. MSC Specialty Group

Tables 3a and 3b present number and number per 10,000 population of non-postgraduate physicians by broad MSC specialty group. Table 3c shows the average annual rates of change in these numbers.

The MSC specialty codes are based on billings volume and are developed to establish practice profiles. The MSC specialty code may not necessarily reflect the actual MSC specialty field at the date of record. For September 1997 the MSC specialty codes from March 1997 were used, while for September 1998, the MSC specialty codes from March 1998 were used.

Tables 3a, 3b, and 3c group the non-postgraduate physicians into broad specialty groups as follows:

(a) General Practice includes the MSC specialties:

Family Practice

General Practice

(b) Clinical Specialties include the following MSC specialties:

Anaesthesia Nuclear Medicine
Casualty Officer Occupational Medicine
Dermatology Paediatric Cardiology

Geriatric Medicine Paediatrics
Internal Medicine Physical Medicine

Medical GeneticsPsychiatryNeurologyPublic HealthNeuropsychiatryRadiology

(c) Laboratory Medicine Specialties include the following MSC specialties:

Medical Microbiology Pathology

(d) Surgical Specialties include the following MSC specialties:

General Surgery Otolaryngology Neurosurgery Plastic Surgery

Obstetrics and Gynaecology Thoracic and Cardiovascular Surgery

Ophthalmology Urology

Orthopaedic Surgery Vascular Surgery

### 4. MSC Specialty Group and Sex

Table 4 presents the non-postgraduate physician population by MSC specialty group and sex.

### 5. MSC Specialty

Table 5 shows the number of non-postgraduate physicians disaggregated into specific MSC specialties. The MSC specialties shown are as follows:

(a) General Practice; (f) Emergency Medicine;<sup>4</sup>

(b) Family Practice; (g) General Surgery;

(c) Anaesthesia; (h) Internal Medicine;<sup>5</sup>

(d) Community Medicine;<sup>6</sup> (i) Medical Genetics;

(e) Dermatology; (j) Medical Microbiology;

<sup>&</sup>lt;sup>4</sup> Includes the specialty designation Casualty Officer.

<sup>&</sup>lt;sup>5</sup> Includes the specialty designations Internal Medicine and Geriatric Medicine.

<sup>&</sup>lt;sup>6</sup> Includes the specialty designations Public Health and Occupational Medicine.

(k) Neurology;

- (l) Neuropsychiatry;
- (m) Neurosurgery;
- (n) Nuclear Medicine;
- (o) Obstetrics and Gynaecology;
- (p) Ophthalmology;
- (q) Orthopaedic Surgery;
- (r) Otolaryngology;
- (s) Paediatrics;<sup>7</sup>

- (t) Pathology;
- (u) Physical Medicine;
- (v) Plastic Surgery;
- (w) Psychiatry;
- (x) Radiology;
- (y) Thoracic and Cardiovascular Surgery;
- (z) Urology;
- (aa) Vascular Surgery.

# 6. RCPSC Specialty Group

Tables 6a and 6b present number and number per 10,000 population of non-postgraduate physicians by broad Royal College of Physicians and Surgeons of Canada (RCPSC) specialty group. Table 6c shows the average annual rates of change in these numbers. The RCPSC specialty codes reflect the actual training of physicians but may not necessarily reflect current practice.

Tables 6a, 6b, and 6c group the non-postgraduate physicians into broad specialty groups as follows:

(a) General Practice includes the RCPSC specialties:

Family Practice

General Practice

(b) Clinical Specialties include the following RCPSC specialties:

Anaesthesia Medical Oncology

Cardiology Nephrology Clinical Immunology and Allergy Neurology

Community Medicine

Dermatology

Dermatology and Syphilology<sup>8</sup>

Nuclear Medicine

Occupational Medicine

Paediatric Cardiology<sup>8</sup>

Diagnostic Radiology Paediatrics

Emergency Medicine Physical Medicine and Rehabilitation

Endocrinology and Metabolism

Gastroenterology

Geriatric Medicine

Haematology

Haematology

Infectious Diseases

Psychiatry

Public Health<sup>9</sup>

Radiation Oncology

Radiology - Therapeutic

Respiratory Medicine<sup>9</sup>

Internal Medicine Respirology
Medical Genetics Rheumatology

<sup>&</sup>lt;sup>7</sup> Includes the specialty designations Paediatrics and Paediatric Cardiology.

<sup>&</sup>lt;sup>8</sup> Specialty Program no longer offered by the RCPSC.

Specialty Program no longer offered by the RCPSC under this designation.

(c) Laboratory Medicine Specialties include the following RCPSC specialties:

Anatomical Pathology

Bacteriology<sup>10</sup>

General Pathology

Haematological Pathology

Medical Biochemistry

Medical Microbiology

Neuropathology

Pathology<sup>10</sup>

(d) Surgical Specialties include the following RCPSC specialties:

Cardiac Surgery Orthopaedic Surgery
Cardiothoracic Surgery Otolaryngology

Cardiovascular & Thoracic Surgery<sup>11</sup> Paediatric General Surgery

General Surgery Plastic Surgery
Neurosurgery Thoracic Surgery

Obstetrics and Gynaecology Urology

Ophthalmology Vascular Surgery

# 7. RCPSC Specialty Group and Sex

Table 7 presents the non-postgraduate physician population by RCPSC specialty group and sex.

# 8. RCPSC Specialty

Table 8 shows the number of non-postgraduate physicians disaggregated into specific RCPSC specialties. The RCPSC specialties shown are as follows:

(a) General Practice; (n) Medical Genetics;

(b) Family Practice; (o) Medical Microbiology;

(c) Anaesthesia; (p) Medical Oncology;

(d) Cardiology;<sup>12</sup> (q) Nephrology;

(e) Community Medicine;<sup>13</sup> (r) Neurology;

(f) Dermatology;<sup>14</sup> (s) Nuclear Medicine;

(g) Endocrinology and Metabolism (t) Paediatrics;

(h) Emergency Medicine; (u) General Pathology;<sup>15</sup>

(i) Gastroenterology; (v) Anatomical Pathology;

(j) Geriatric Medicine; (w) Physical Medicine and Rehabilitation;

(k) Haematology; (x) Psychiatry;

(1) Internal Medicine; 16 (y) Radiation Oncology;

(m) Medical Biochemistry; (z) Diagnostic Radiology; 17

<sup>&</sup>lt;sup>10</sup> Specialty Program no longer offered by the RCPSC.

<sup>11</sup> Specialty Program no longer offered by the RCPSC under this designation.

<sup>&</sup>lt;sup>12</sup> Includes the specialty designations Cardiology and Paediatric Cardiology.

<sup>13</sup> Includes the specialty designations Community Medicine, Occupational Medicine, and Public Health.

<sup>14</sup> Includes the specialty designations Dermatology and Dermatology & Syphilology.

<sup>15</sup> Includes the specialty designations General Pathology, Pathology, Bacteriology, Neuropathology, and Haematological Pathology.

<sup>16</sup> Includes the specialty designations Internal Medicine, Clinical Immunology & Allergy, and Infectious Diseases.

<sup>&</sup>lt;sup>17</sup> Includes the specialty designations Diagnostic Radiology and Therapeutic Radiology.

- (aa) Respiratory Medicine;
- (bb) Rheumatology;
- (cc) Cardiovascular and Thoracic Surgery; 18
- (dd) General Surgery;<sup>19</sup>
- (ee) Neurosurgery;
- (ff) Obstetrics and Gynaecology;

- (gg) Ophthalmology;
- (hh) Orthopaedic Surgery;
- (ii) Otolaryngology;
- (jj) Plastic Surgery;
- (kk) Urology;
- (ll) Vascular Surgery.

#### 9. Analysis of Change

Table 9 illustrates the sources of change which affected the supply of non-postgraduate physicians from September 1997 to September 1998.

*New registrants* include physicians who registered *for the first time* with the CPSBC subsequent to September 1997 and held Directory Active non-postgraduate status in September 1998. 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 September 1997 but held Directory Active non-postgraduate in September 1998, and whose initial registration with the CPSBC was before September 1997. Also included are physicians registered with the CPSBC who reported out-of-province addresses in September 1997, but reported a British Columbia address and held Directory Active non-postgraduate status in British Columbia in September 1998.

Attrition describes non-postgraduate physicians who were included in the September 1997 physician supply 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 1998 physician supply.

*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>&</sup>lt;sup>18</sup> Includes the specialty designations Cardiovascular & Thoracic Surgery, Cardiac Surgery, Cardiothoracic Surgery, and Thoracic Surgery.

<sup>&</sup>lt;sup>19</sup> Includes the specialty designations General Surgery and Paediatric General Surgery.

Table 1a

Directory Active Physicians in British Columbia
by Health Region by Registration Status
September 1997 and September 1998

	Non-Pos	tgraduate	Postgr	aduate	Te	otal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	123	124	1	0	124	124
2 West Kootenay - Boundary	140	142	0	0	140	142
3 North Okanagan	190	198	0	0	190	198
4 South Okanagan - Similkameen	395	420	1	0	396	420
5 Thompson	208	211	0	0	208	211
6 Fraser Valley	311	315	13	14	324	329
7 South Fraser Valley	694	701	0	2	694	703
8 Simon Fraser	540	550	32	36	572	586
9 Coast Garibaldi	106	106	0	0	106	106
10 Central Vancouver Island	391	404	2	2	393	406
11 Upper Island/Central Coast	186	192	0	0	186	192
12 Cariboo	79	81	0	1	79	82
13 North West	127	136	0	0	127	136
14 Peace Liard	59	61	0	0	59	61
15 Northern Interior	183	184	12	13	195	197
16 Vancouver	2,401	2,414	602	595	3,003	3,009
17 Burnaby	250	252	0	1	250	253
18 North Shore	372	374	2	1	374	375
19 Richmond	278	270	0	3	278	273
20 Capital	906	909	32	30	938	939
OTAL	7,939	8,044	697	698	8,636	8,742

Table 1b
Directory Active Physicians in British Columbia
per 10,000 Population by Health Region by Registration Status
September 1997 and September 1998

	Non-Post	graduate	Postgr	aduate	To	tal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	15.45	15.43	0.13	0.00	15.58	15.43
2 West Kootenay - Boundary	17.19	17.32	0.00	0.00	17.19	17.32
3 North Okanagan	16.43	16.90	0.00	0.00	16.43	16.90
4 South Okanagan - Similkameen	17.62	18.49	0.04	0.00	17.67	18.49
5 Thompson	15.76	15.75	0.00	0.00	15.76	15.75
6 Fraser Valley	13.30	13.15	0.56	0.58	13.86	13.73
7 South Fraser Valley	12.61	12.46	0.00	0.04	12.61	12.49
8 Simon Fraser	17.62	17.48	1.04	1.14	18.66	18.62
9 Coast Garibaldi	14.08	13.55	0.00	0.00	14.08	13.55
10 Central Vancouver Island	16.46	16.75	0.08	0.08	16.55	16.83
11 Upper Island/Central Coast	15.49	15.79	0.00	0.00	15.49	15.79
12 Cariboo	10.56	10.68	0.00	0.13	10.56	10.81
13 North West	13.99	14.92	0.00	0.00	13.99	14.92
14 Peace Liard	9.05	9.25	0.00	0.00	9.05	9.25
15 Northern Interior	14.05	13.95	0.92	0.99	14.97	14.94
16 Vancouver	43.55	43.12	10.92	10.63	54.47	53.75
17 Burnaby	13.34	13.24	0.00	0.05	13.34	13.29
18 North Shore	21.05	21.00	0.11	0.06	21.17	21.05
19 Richmond	17.70	16.81	0.00	0.19	17.70	16.99
20 Capital	27.29	27.17	0.96	0.90	28.25	28.07
OTAL	20.24	20.18	1.78	1.75	22.02	21.93

Table 1c

Average Annual Rate of Change: Directory Active Physicians in British Columbia by Health Region by Registration Status

September 1997 to September 1998

	Non-Post	graduate	Postgra	aduate	Tot	tal
Health Region	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	0.81	-0.12	*	*	0.00	-0.93
2 West Kootenay - Boundary	1.43	0.77	*	*	1.43	0.77
3 North Okanagan	4.21	2.86	*	*	4.21	2.86
4 South Okanagan - Similkameen	6.33	4.91	*	*	6.06	4.65
5 Thompson	1.44	-0.07	*	*	1.44	-0.07
6 Fraser Valley	1.29	-1.13	7.69	5.13	1.54	-0.88
7 South Fraser Valley	1.01	-1.25	*	*	1.30	-0.97
8 Simon Fraser	1.85	-0.80	12.50	9.57	2.45	-0.22
9 Coast Garibaldi	0.00	-3.79	*	*	0.00	-3.79
10 Central Vancouver Island	3.32	1.72	*	*	3.31	1.71
11 Upper Island/Central Coast	3.23	1.91	*	*	3.23	1.91
12 Cariboo	2.53	1.08	*	*	3.80	2.33
13 North West	7.09	6.63	*	*	7.09	6.63
14 Peace Liard	3.39	2.13	*	*	3.39	2.13
15 Northern Interior	0.55	-0.69	8.33	7.00	1.03	-0.22
16 Vancouver	0.54	-0.99	-1.16	-2.67	0.20	-1.32
17 Burnaby	0.80	-0.76	*	*	1.20	-0.37
18 North Shore	0.54	-0.26	*	*	0.27	-0.53
19 Richmond	-2.88	-5.05	*	*	-1.80	-3.99
20 Capital	0.33	-0.44	-6.25	-6.97	0.11	-0.66
OTAL	1.32	-0.34	0.14	-1.50	1.23	-0.43

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

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

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2
Directory Active Physicians in British Columbia
by Health Region by Age and Sex<sup>1</sup>
September 1998

	< 2	25	25	-34	35	-44	45	5-54	55-	-64	65	+	_ Age Uni	known	Sul	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	9	9	34	12	30	3	15	1	9	1	1	0	98	26	124
2 West Kootenay - Boundary	0	0	11	4	33	26	30	11	20	0	7	0	0	0	101	41	142
3 North Okanagan	0	0	22	7	53	19	39	5	36	3	14	0	0	0	164	34	198
4 South Okanagan - Similkameen	0	0	29	18	118	50	105	13	55	6	23	2	1	0	331	89	420
5 Thompson	0	0	15	10	61	11	53	11	35	3	11	1	0	0	175	36	211
6 Fraser Valley	0	0	29	26	82	14	88	18	34	5	30	2	0	1	263	66	329
7 South Fraser Valley	0	0	50	28	157	95	166	56	87	7	49	8	0	0	509	194	703
8 Simon Fraser	0	1	50	36	127	67	135	34	82	10	38	4	2	0	434	152	586
9 Coast Garibaldi	0	0	9	5	24	15	27	4	12	1	9	0	0	0	81	25	106
10 Central Vancouver Island	0	0	24	12	108	41	95	20	67	9	29	1	0	0	323	83	406
11 Upper Island/Central Coast	0	0	11	15	49	24	49	10	22	3	8	0	1	0	140	52	192
12 Cariboo	0	0	5	2	26	7	21	6	10	0	5	0	0	0	67	15	82
13 North West	0	0	10	13	42	9	29	7	17	3	5	1	0	0	103	33	136
14 Peace Liard	0	0	8	2	19	5	15	2	4	0	6	0	0	0	52	9	61
15 Northern Interior	0	0	29	12	54	27	39	5	18	1	11	0	1	0	152	45	197
16 Vancouver	5	2	458	328	517	340	550	218	315	64	183	19	8	2	2,036	973	3,009
17 Burnaby	0	0	20	14	59	37	46	20	31	3	19	3	1	0	176	77	253
18 North Shore	0	0	19	23	61	50	76	22	67	8	44	5	0	0	267	108	375
19 Richmond	0	0	25	11	58	36	71	14	34	2	20	1	1	0	209	64	273
20 Capital	1	0	54	47	164	92	233	61	167	19	88	7	5	1	712	227	939
TOTAL	6	3	887	622	1,846	977	1,897	540	1,128	148	608	55	21	4	6,393	2,349	8,742

<sup>&</sup>lt;sup>1</sup> There are no physicians with missing sex information.

Table 3a Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by MSC Specialty<sup>2</sup> September 1997 and September 1998

	Genera	l Practice	Clinical	Specialties	Medicine	Specialties	Surgical	Specialties	To	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	88	86	20	21	1	1	14	16	123	124
2 West Kootenay - Boundary	101	100	23	23	2	2	14	17	140	142
3 North Okanagan	124	129	37	39	3	3	26	27	190	198
4 South Okanagan - Similkameen	222	231	106	118	7	8	60	63	395	420
5 Thompson	120	126	45	43	7	7	36	35	208	211
6 Fraser Valley	204	206	59	61	8	10	40	38	311	315
7 South Fraser Valley	446	450	158	163	10	12	80	76	694	701
8 Simon Fraser	285	291	152	156	24	23	79	80	540	550
9 Coast Garibaldi	86	87	9	8	0	0	11	11	106	106
10 Central Vancouver Island	244	253	81	88	5	5	61	58	391	404
11 Upper Island/Central Coast	129	140	36	31	3	2	18	19	186	192
12 Cariboo	64	68	10	9	0	0	5	4	79	81
13 North West	95	105	17	17	2	2	13	12	127	136
14 Peace Liard	49	49	4	6	1	1	5	5	59	61
15 Northern Interior	117	121	33	33	5	6	28	24	183	184
16 Vancouver	994	1,025	987	974	95	90	325	325	2,401	2,414
17 Burnaby	161	164	45	47	14	15	30	26	250	252
18 North Shore	212	211	109	114	6	6	45	43	372	374
19 Richmond	162	158	81	80	4	4	31	28	278	270
20 Capital	508	518	275	268	17	19	106	104	906	909
OTAL	4,411	4,518	2,287	2,299	214	216	1,027	1,011	7,939	8,044

Excludes physicians with Directory Active postgraduate status.
 In Tables 3a to 5 specialty is based on the MSC specialty. Please see also Tables 6a to 8 in which specialty is based on RCPSC certification.

Table 3b Non-Postgraduate Physicians<sup>1</sup> in British Columbia per 10,000 Population by Health Region by MSC Specialty<sup>2</sup> September 1997 and September 1998

	General	Practice	Clinical S	Specialties	Medicine	Specialties	Surgical S	Specialties	To	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	11.05	10.70	2.51	2.61	0.13	0.12	1.76	1.99	15.45	15.43
2 West Kootenay - Boundary	12.40	12.20	2.82	2.81	0.25	0.24	1.72	2.07	17.19	17.32
3 North Okanagan	10.72	11.01	3.20	3.33	0.26	0.26	2.25	2.30	16.43	16.90
4 South Okanagan - Similkameen	9.91	10.17	4.73	5.19	0.31	0.35	2.68	2.77	17.62	18.49
5 Thompson	9.09	9.41	3.41	3.21	0.53	0.52	2.73	2.61	15.76	15.75
6 Fraser Valley	8.72	8.60	2.52	2.55	0.34	0.42	1.71	1.59	13.30	13.15
7 South Fraser Valley	8.11	8.00	2.87	2.90	0.18	0.21	1.45	1.35	12.61	12.46
8 Simon Fraser	9.30	9.25	4.96	4.96	0.78	0.73	2.58	2.54	17.62	17.48
9 Coast Garibaldi	11.43	11.12	1.20	1.02	0.00	0.00	1.46	1.41	14.08	13.55
10 Central Vancouver Island	10.27	10.49	3.41	3.65	0.21	0.21	2.57	2.40	16.46	16.75
11 Upper Island/Central Coast	10.74	11.51	3.00	2.55	0.25	0.16	1.50	1.56	15.49	15.79
12 Cariboo	8.56	8.96	1.34	1.19	0.00	0.00	0.67	0.53	10.56	10.68
13 North West	10.47	11.52	1.87	1.87	0.22	0.22	1.43	1.32	13.99	14.92
14 Peace Liard	7.52	7.43	0.61	0.91	0.15	0.15	0.77	0.76	9.05	9.25
15 Northern Interior	8.98	9.18	2.53	2.50	0.38	0.46	2.15	1.82	14.05	13.95
16 Vancouver	18.03	18.31	17.90	17.40	1.72	1.61	5.89	5.81	43.55	43.12
17 Burnaby	8.59	8.61	2.40	2.47	0.75	0.79	1.60	1.37	13.34	13.24
18 North Shore	12.00	11.85	6.17	6.40	0.34	0.34	2.55	2.41	21.05	21.00
19 Richmond	10.31	9.84	5.16	4.98	0.25	0.25	1.97	1.74	17.70	16.81
20 Capital	15.30	15.48	8.28	8.01	0.51	0.57	3.19	3.11	27.29	27.17
TOTAL	11,25	11.33	5.83	5.77	0.55	0.54	2.62	2.54	20.24	20.18

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 3a to 5 specialty is based on the MSC specialty. Please see also Tables 6a to 8 in which specialty is based on RCPSC certification.

Table 3c

Average Annual Rate of Change: Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by MSC Specialty<sup>2</sup>

September 1997 to September 1998

	General	Practice	Clinical S	pecialties	Medicine S	Specialties	Surgical S	Specialties	To	tal
Health Region	Number <sup>3</sup>	Ratio <sup>4</sup>								
1 East Kootenay	-2.27	-3.18	5.00	4.03	*	*	14.29	13.23	0.81	-0.12
2 West Kootenay - Boundary	-0.99	-1.64	0.00	-0.65	*	*	21.43	20.64	1.43	0.77
3 North Okanagan	4.03	2.69	5.41	4.04	*	*	3.85	2.50	4.21	2.86
4 South Okanagan - Similkameen	4.05	2.67	11.32	9.84	*	*	5.00	3.60	6.33	4.91
5 Thompson	5.00	3.43	-4.44	-5.87	*	*	-2.78	-4.23	1.44	-0.07
6 Fraser Valley	0.98	-1.43	3.39	0.93	*	*	-5.00	-7.26	1.29	-1.13
7 South Fraser Valley	0.90	-1.36	3.16	0.86	20.00	17.32	-5.00	-7.12	1.01	-1.25
8 Simon Fraser	2.11	-0.55	2.63	-0.04	-4.17	-6.66	1.27	-1.37	1.85	-0.80
9 Coast Garibaldi	1.16	-2.67	*	*	*	*	0.00	-3.79	0.00	-3.79
10 Central Vancouver Island	3.69	2.08	8.64	6.96	*	*	-4.92	-6.39	3.32	1.72
11 Upper Island/Central Coast	8.53	7.14	-13.89	-14.99	*	*	5.56	4.21	3.23	1.91
12 Cariboo	6.25	4.74	-10.00	-11.28	*	*	*	*	2.53	1.08
13 North West	10.53	10.06	0.00	-0.42	*	*	-7.69	-8.08	7.09	6.63
14 Peace Liard	0.00	-1.22	*	*	*	*	*	*	3.39	2.13
15 Northern Interior	3.42	2.14	0.00	-1.23	*	*	-14.29	-15.34	0.55	-0.69
16 Vancouver	3.12	1.55	-1.32	-2.82	-5.26	-6.70	0.00	-1.52	0.54	-0.99
17 Burnaby	1.86	0.28	4.44	2.82	7.14	5.48	-13.33	-14.68	0.80	-0.76
18 North Shore	-0.47	-1.26	4.59	3.76	*	*	-4.44	-5.20	0.54	-0.26
19 Richmond	-2.47	-4.65	-1.23	-3.44	*	*	-9.68	-11.70	-2.88	-5.05
20 Capital	1.97	1.19	-2.55	-3.29	11.76	10.91	-1.89	-2.64	0.33	-0.44
TOTAL	2.43	0.74	0.52	-1.13	0.93	-0.72	-1.56	-3.17	1.32	-0.34

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 3a to 5 specialty is based on the MSC specialty. Please see also Tables 6a to 8 in which specialty is based on RCPSC certification.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 4 Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by MSC Specialty<sup>2</sup> by Sex September 1998

	Genera	al Practice	Clinical	Specialties	Medicine	Specialties	Surgical	Specialties	
Health Region	M	F	M	F	M	F	M	F	Total
1 East Kootenay	62	24	20	1	1	0	15	1	124
2 West Kootenay - Boundary	66	34	18	5	2	0	15	2	142
3 North Okanagan	101	28	35	4	3	0	25	2	198
4 South Okanagan - Similkameen	171	60	94	24	7	1	59	4	420
5 Thompson	95	31	40	3	7	0	33	2	211
6 Fraser Valley	170	36	48	13	7	3	37	1	315
7 South Fraser Valley	311	139	120	43	11	1	65	11	701
8 Simon Fraser	211	80	116	40	17	6	76	4	550
9 Coast Garibaldi	63	24	7	1	0	0	11	0	106
10 Central Vancouver Island	195	58	67	21	5	0	54	4	404
11 Upper Island/Central Coast	92	48	29	2	2	0	17	2	192
12 Cariboo	55	13	7	2	0	0	4	0	81
13 North West	78	27	14	3	2	0	9	3	136
14 Peace Liard	42	7	5	1	1	0	4	1	61
15 Northern Interior	90	31	28	5	4	2	22	2	184
16 Vancouver	631	394	718	256	57	33	270	55	2,414
17 Burnaby	107	57	34	13	8	7	26	0	252
18 North Shore	128	83	95	19	4	2	39	4	374
19 Richmond	115	43	65	15	1	3	26	2	270
20 Capital	358	160	222	46	15	4	99	5	909
OTAL	3,141	1,377	1,782	517	154	62	906	105	8,044

Excludes physicians with Directory Active postgraduate status.
 In Tables 3a to 5 specialty is based on the MSC specialty. Please see also Tables 6a to 8 in which specialty is based on RCPSC certification.

Table 5 Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by MSC Specialty<sup>2,3</sup> September 1998

Health Region	General Practice	Family Practice	General Practice Subtotal	Anaes- thesia	Community Medicine <sup>4</sup>	Derma- tology	Emergency Medicine		Internal Medicine <sup>5</sup>	Medical Genetics	Medical Micro- biology	Neurology	Neuro- surgery	Nuclear Medicine
1 East Kootenay	59	27	86	1	2	0	0	7	3	0	0	0	0	0
2 West Kootenay - Boundary	67	33	100	4	0	0	0	8	7	0	0	2	0	1
3 North Okanagan	80	49	129	7	1	1	0	7	11	0	1	1	0	0
4 South Okanagan - Similkameen	163	68	231	19	1	2	2	9	36	0	0	5	2	1
5 Thompson	96	30	126	10	0	1	1	10	9	0	1	3	3	1
6 Fraser Valley	131	75	206	12	1	1	0	6	14	0	2	2	0	0
7 South Fraser Valley	324	126	450	22	3	6	5	15	44	0	1	1	1	0
8 Simon Fraser	232	59	291	23	0	4	10	17	39	0	1	8	5	1
9 Coast Garibaldi	58	29	87	0	1	0	0	6	2	0	0	0	0	0
10 Central Vancouver Island	167	86	253	19	2	1	0	11	17	0	0	4	0	1
11 Upper Island/Central Coast	105	35	140	9	0	1	0	4	6	0	0	0	0	0
12 Cariboo	57	11	68	0	1	0	0	2	4	0	0	0	0	0
13 North West	77	28	105	3	1	1	0	5	3	0	0	0	0	1
14 Peace Liard	43	6	49	0	0	0	0	3	3	0	0	0	0	0
15 Northern Interior	78	43	121	7	1	1	0	5	8	0	0	2	0	0
16 Vancouver	665	360	1,025	124	16	28	32	57	256	4	12	42	14	8
17 Burnaby	120	44	164	6	2	2	4	3	14	0	2	3	0	0
18 North Shore	139	72	211	23	0	6	1	4	29	0	0	3	4	1
19 Richmond	121	37	158	9	2	2	3	3	21	0	0	2	0	1
20 Capital	381	137	518	40	9	7	16	16	68	1	1	8	4	2
TOTAL	3,163	1,355	4,518	338	43	64	74	198	594	5	21	86	33	18

... continued

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.
<sup>2</sup> In Tables 3a to 5 specialty is based on the MSC specialty. Please see also Tables 6a to 8 in which specialty is based on RCPSC certification.

<sup>&</sup>lt;sup>3</sup> The MSC specialty designation Neuropsychiatry is not shown in the table as there are no physicians with this specialty in 1998.

<sup>&</sup>lt;sup>4</sup> Includes 5 physicians with the specialty designation Occupational Medicine and 38 with the specialty designation Public Health.

<sup>&</sup>lt;sup>5</sup> Includes 19 physicians with the specialty designation Geriatric Medicine.

# **Table 5 (continued)** Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by MSC Specialty<sup>2</sup> September 1998

											Thoracic &				
	Obstetrics & Gynae-	Ophthal-	Ortho- paedic	Otolaryn-	Paedi-		Physical	Plastic			Cardio- vascular		Vascular	Specialty	
Health Region	cology	mology	Surgery	gology	atrics <sup>3</sup>	Pathology	Medicine	Surgery	<b>Psychiatry</b>	Radiology	Surgery	Urology	Surgery	Subtotal	Total
1 East Kootenay	2	1	4	1	2	1	0	0	4	9	0	1	0	38	124
2 West Kootenay - Boundary	2	2	3	0	2	2	0	1	5	2	0	1	0	42	142
3 North Okanagan	4	6	5	3	5	2	0	0	8	5	0	2	0	69	198
4 South Okanagan - Similkameen	11	10	11	4	11	8	4	4	20	17	3	6	3	189	420
5 Thompson	5	3	6	2	6	6	1	2	5	6	1	2	1	85	211
6 Fraser Valley	8	5	9	4	7	8	0	2	14	10	0	3	1	109	315
7 South Fraser Valley	16	15	13	6	19	11	2	4	34	27	0	5	1	251	701
8 Simon Fraser	9	16	13	6	9	22	4	5	42	16	2	7	0	259	550
9 Coast Garibaldi	3	2	0	0	1	0	0	0	4	0	0	0	0	19	106
10 Central Vancouver Island	13	13	10	4	10	5	1	3	18	15	0	3	1	151	404
11 Upper Island/Central Coast	3	2	5	2	2	2	0	1	8	5	0	2	0	52	192
12 Cariboo	1	0	0	0	1	0	0	0	1	2	0	1	0	13	81
13 North West	4	1	1	0	1	2	0	0	3	4	0	1	0	31	136
14 Peace Liard	1	0	1	0	0	1	0	0	0	3	0	0	0	12	61
15 Northern Interior	5	3	5	1	3	6	0	2	5	6	0	3	0	63	184
16 Vancouver	69	59	38	25	119	78	19	19	228	98	19	16	9	1,389	2,414
17 Burnaby	3	7	5	3	5	13	1	2	10	0	0	2	1	88	252
18 North Shore	8	7	6	4	7	6	1	4	29	14	0	4	2	163	374
19 Richmond	5	3	6	3	10	4	0	2	12	18	0	4	2	112	270
20 Capital	14	24	15	6	14	18	7	6	62	34	5	12	2	391	909
ГОТАL	186	179	156	74	234	195	40	57	512	291	30	75	23	3,526	8,044

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.
<sup>2</sup> In Tables 3a to 5 specialty is based on the MSC specialty. Please see also Tables 6a to 8 in which specialty is based on RCPSC certification.

<sup>&</sup>lt;sup>3</sup> Includes 5 physicians with the specialty designation Paediatric Cardiology.

Table 6a
Non-Postgraduate Physicians<sup>1</sup> in British Columbia
by Health Region by RCPSC Specialty<sup>2</sup>
September 1997 and September 1998

Health Decien	Genera	l Practice	Clinical S	Specialties	Medicine	Specialties	Surgical	Specialties	Te	otal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	90	87	19	20	1	1	13	16	123	124
2 West Kootenay - Boundary	101	100	23	23	2	2	14	17	140	142
3 North Okanagan	124	127	37	41	3	3	26	27	190	198
4 South Okanagan - Similkameen	222	231	106	118	7	8	60	63	395	420
5 Thompson	121	126	45	43	7	8	35	34	208	211
6 Fraser Valley	204	204	60	62	7	9	40	40	311	315
7 South Fraser Valley	447	447	157	165	10	12	80	77	694	701
8 Simon Fraser	285	291	154	158	24	23	77	78	540	550
9 Coast Garibaldi	86	87	9	8	0	0	11	11	106	106
10 Central Vancouver Island	243	251	82	89	5	5	61	59	391	404
11 Upper Island/Central Coast	130	141	36	31	3	2	17	18	186	192
12 Cariboo	64	67	10	9	0	0	5	5	79	81
13 North West	95	105	18	18	2	2	12	11	127	136
14 Peace Liard	49	48	4	7	1	1	5	5	59	61
15 Northern Interior	117	120	33	34	5	6	28	24	183	184
16 Vancouver	995	1,000	992	992	94	93	320	329	2,401	2,414
17 Burnaby	161	163	46	48	13	14	30	27	250	252
18 North Shore	212	211	109	114	6	6	45	43	372	374
19 Richmond	162	157	81	80	4	5	31	28	278	270
20 Capital	509	516	275	269	16	18	106	106	906	909
OTAL	4,417	4,479	2,296	2,329	210	218	1,016	1,018	7,939	8,044

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

Table 6b Non-Postgraduate Physicians<sup>1</sup> in British Columbia per 10,000 Population by Health Region by RCPSC Specialty<sup>2</sup> September 1997 and September 1998

	General	Practice	Clinical S	Specialties	Medicine	Specialties	Surgical S	Specialties	To	tal
Health Region	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
1 East Kootenay	11.31	10.83	2.39	2.49	0.13	0.12	1.63	1.99	15.45	15.43
2 West Kootenay - Boundary	12.40	12.20	2.82	2.81	0.25	0.24	1.72	2.07	17.19	17.32
3 North Okanagan	10.72	10.84	3.20	3.50	0.26	0.26	2.25	2.30	16.43	16.90
4 South Okanagan - Similkameen	9.91	10.17	4.73	5.19	0.31	0.35	2.68	2.77	17.62	18.49
5 Thompson	9.17	9.41	3.41	3.21	0.53	0.60	2.65	2.54	15.76	15.75
6 Fraser Valley	8.72	8.52	2.57	2.59	0.30	0.38	1.71	1.67	13.30	13.15
7 South Fraser Valley	8.12	7.94	2.85	2.93	0.18	0.21	1.45	1.37	12.61	12.46
8 Simon Fraser	9.30	9.25	5.02	5.02	0.78	0.73	2.51	2.48	17.62	17.48
9 Coast Garibaldi	11.43	11.12	1.20	1.02	0.00	0.00	1.46	1.41	14.08	13.55
10 Central Vancouver Island	10.23	10.41	3.45	3.69	0.21	0.21	2.57	2.45	16.46	16.75
11 Upper Island/Central Coast	10.83	11.59	3.00	2.55	0.25	0.16	1.42	1.48	15.49	15.79
12 Cariboo	8.56	8.83	1.34	1.19	0.00	0.00	0.67	0.66	10.56	10.68
13 North West	10.47	11.52	1.98	1.98	0.22	0.22	1.32	1.21	13.99	14.92
14 Peace Liard	7.52	7.28	0.61	1.06	0.15	0.15	0.77	0.76	9.05	9.25
15 Northern Interior	8.98	9.10	2.53	2.58	0.38	0.46	2.15	1.82	14.05	13.95
16 Vancouver	18.05	17.86	17.99	17.72	1.70	1.66	5.80	5.88	43.55	43.12
17 Burnaby	8.59	8.56	2.45	2.52	0.69	0.74	1.60	1.42	13.34	13.24
18 North Shore	12.00	11.85	6.17	6.40	0.34	0.34	2.55	2.41	21.05	21.00
19 Richmond	10.31	9.77	5.16	4.98	0.25	0.31	1.97	1.74	17.70	16.81
20 Capital	15.33	15.42	8.28	8.04	0.48	0.54	3.19	3.17	27.29	27.17
TOTAL	11.26	11.23	5.85	5.84	0.54	0.55	2.59	2.55	20.24	20.18

 <sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.
 <sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

Table 6c

Average Annual Rate of Change: Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by RCPSC Specialty<sup>2</sup>

September 1997 to September 1998

	General	Practice	Clinical S	pecialties	Medicine S	Specialties	Surgical S	Specialties	To	tal
Health Region	Number <sup>3</sup>	Ratio <sup>4</sup>								
1 East Kootenay	-3.33	-4.23	5.26	4.29	*	*	23.08	21.94	0.81	-0.12
2 West Kootenay - Boundary	-0.99	-1.64	0.00	-0.65	*	*	21.43	20.64	1.43	0.77
3 North Okanagan	2.42	1.09	10.81	9.38	*	*	3.85	2.50	4.21	2.86
4 South Okanagan - Similkameen	4.05	2.67	11.32	9.84	*	*	5.00	3.60	6.33	4.91
5 Thompson	4.13	2.58	-4.44	-5.87	*	*	-2.86	-4.31	1.44	-0.07
6 Fraser Valley	0.00	-2.38	3.33	0.87	*	*	0.00	-2.38	1.29	-1.13
7 South Fraser Valley	0.00	-2.23	5.10	2.75	20.00	17.32	-3.75	-5.90	1.01	-1.25
8 Simon Fraser	2.11	-0.55	2.60	-0.07	-4.17	-6.66	1.30	-1.34	1.85	-0.80
9 Coast Garibaldi	1.16	-2.67	*	*	*	*	0.00	-3.79	0.00	-3.79
10 Central Vancouver Island	3.29	1.69	8.54	6.86	*	*	-3.28	-4.78	3.32	1.72
11 Upper Island/Central Coast	8.46	7.08	-13.89	-14.99	*	*	5.88	4.53	3.23	1.91
12 Cariboo	4.69	3.20	-10.00	-11.28	*	*	*	*	2.53	1.08
13 North West	10.53	10.06	0.00	-0.42	*	*	-8.33	-8.72	7.09	6.63
14 Peace Liard	-2.04	-3.24	*	*	*	*	*	*	3.39	2.13
15 Northern Interior	2.56	1.30	3.03	1.76	*	*	-14.29	-15.34	0.55	-0.69
16 Vancouver	0.50	-1.03	0.00	-1.52	-1.06	-2.57	2.81	1.25	0.54	-0.99
17 Burnaby	1.24	-0.33	4.35	2.73	7.69	6.02	-10.00	-11.40	0.80	-0.76
18 North Shore	-0.47	-1.26	4.59	3.76	*	*	-4.44	-5.20	0.54	-0.26
19 Richmond	-3.09	-5.25	-1.23	-3.44	*	*	-9.68	-11.70	-2.88	-5.05
20 Capital	1.38	0.60	-2.18	-2.93	12.50	11.64	0.00	-0.77	0.33	-0.44
OTAL	1.40	-0.26	1.44	-0.23	3.81	2.11	0.20	-1.45	1,32	-0.34

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 7

Non-Postgraduate Physicians<sup>1</sup> in British Columbia
by Health Region by RCPSC Specialty<sup>2</sup> by Sex
September 1998

					Labor				
		l Practice		pecialties	Medicine S		Surgical S		
Health Region	<u>M</u>	F	<u>M</u>	<u> </u>	<u> </u>	F	M	F	Total
1 East Kootenay	63	24	19	1	1	0	15	1	124
2 West Kootenay - Boundary	66	34	18	5	2	0	15	2	142
3 North Okanagan	100	27	36	5	3	0	25	2	198
4 South Okanagan - Similkameen	171	60	94	24	7	1	59	4	420
5 Thompson	95	31	40	3	8	0	32	2	211
6 Fraser Valley	168	36	49	13	6	3	39	1	315
7 South Fraser Valley	309	138	121	44	11	1	66	11	701
8 Simon Fraser	211	80	118	40	17	6	74	4	550
9 Coast Garibaldi	63	24	7	1	0	0	11	0	106
10 Central Vancouver Island	193	58	68	21	5	0	55	4	404
11 Upper Island/Central Coast	92	49	29	2	2	0	17	1	192
12 Cariboo	54	13	7	2	0	0	5	0	81
13 North West	78	27	14	4	2	0	9	2	136
14 Peace Liard	41	7	5	2	1	0	5	0	61
15 Northern Interior	90	30	28	6	4	2	22	2	184
16 Vancouver	610	390	736	256	57	36	273	56	2,414
17 Burnaby	106	57	35	13	7	7	27	0	252
18 North Shore	127	84	96	18	4	2	39	4	374
19 Richmond	114	43	65	15	2	3	26	2	270
20 Capital	356	160	222	47	15	3	101	5	909
TOTAL	3,107	1,372	1,807	522	154	64	915	103	8,044

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

Table 8 Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by RCPSC Specialty<sup>2</sup> September 1998

								Endocrin-	•				
	General	Family	General Practice	Anaes-		Community	Derma-	ology &	Emergency	Gastro-	Geriatric	Haema-	Internal
Health Region	Practice	Practice	Subtotal	thesia	Cardiology		tology <sup>5</sup>	Metabolism				tology	Medicine <sup>6</sup>
1 East Kootenay	60	27	87	1	0	1	0	0	0	1	0	0	2
2 West Kootenay - Boundary	67	33	100	4	0	0	0	0	0	0	0	0	6
3 North Okanagan	78	49	127	7	1	1	1	0	0	0	0	1	9
4 South Okanagan - Similkameen	163	68	231	19	5	1	2	0	2	3	1	1	13
5 Thompson	96	30	126	10	0	0	1	0	1	1	0	0	5
6 Fraser Valley	129	75	204	12	0	1	1	1	0	1	0	0	11
7 South Fraser Valley	321	126	447	22	4	4	6	1	6	3	2	0	25
8 Simon Fraser	232	59	291	23	8	0	4	2	10	4	0	2	12
9 Coast Garibaldi	58	29	87	0	0	1	0	0	0	0	0	0	2
10 Central Vancouver Island	165	86	251	20	0	2	1	0	1	0	0	0	13
11 Upper Island/Central Coast	105	36	141	9	0	0	1	0	0	0	0	0	5
12 Cariboo	56	11	67	0	1	1	0	0	0	0	0	0	3
13 North West	77	28	105	3	1	1	1	0	0	0	0	0	2
14 Peace Liard	42	6	48	0	0	0	0	0	0	0	0	1	2
15 Northern Interior	77	43	120	8	0	1	1	0	0	0	0	0	7
16 Vancouver	641	359	1,000	127	29	18	29	12	33	10	13	13	149
17 Burnaby	119	44	163	6	0	2	2	1	4	0	1	1	9
18 North Shore	139	72	211	22	2	0	6	1	1	2	1	0	20
19 Richmond	120	37	157	8	5	2	2	0	3	1	0	2	13
20 Capital	379	137	516	40	12	9	7	2	16	7	2	0	28
TOTAL	3,124	1,355	4,479	341	68	45	65	20	77	33	20	21	336

... continued

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.
<sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

<sup>&</sup>lt;sup>3</sup> Includes 5 physicians with the specialty designation Paediatric Cardiology.

<sup>&</sup>lt;sup>4</sup> Includes 5 physicians with the specialty designation Occupational Medicine and 6 with the specialty designation Public Health.

<sup>&</sup>lt;sup>5</sup> Includes 2 physicians with the specialty designation Dermatology and Syphilology.

<sup>&</sup>lt;sup>6</sup> Includes 10 physicians with the specialty designation Clinical Immunology and Allergy and 7 with the specialty designation Infectious Diseases.

# Table 8 (continued) Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by RCPSC Specialty<sup>2</sup> September 1998

	Medical Bio-	Medical	Medical Micro-	Medical			Nuclear		General	Anatomical	Physical Medicine	Psych-	Radiation	Diagnostic
Health Region	chemistry	Genetics	biology		Nephrology	Neurology		Paediatrics	Pathology <sup>3</sup>	Pathology	ilitation	iatry		Radiology <sup>4</sup>
1 East Kootenay	0	0	0	0	0	0	0	2	1	0	0	4	0	9
2 West Kootenay - Boundary	0	0	0	0	1	2	1	2	2	0	0	5	0	2
3 North Okanagan	0	0	1	0	0	1	0	6	2	0	0	8	0	5
4 South Okanagan - Similkameen	0	0	0	2	2	5	1	10	7	1	4	20	4	13
5 Thompson	0	0	1	1	1	3	1	6	5	2	1	5	0	6
6 Fraser Valley	0	0	1	0	0	2	0	7	6	2	0	14	0	10
7 South Fraser Valley	0	0	2	6	0	1	0	19	8	2	2	34	6	21
8 Simon Fraser	2	0	1	0	3	8	1	9	13	7	4	42	0	16
9 Coast Garibaldi	0	0	0	0	0	0	0	1	0	0	0	4	0	0
10 Central Vancouver Island	0	0	0	1	0	4	1	10	3	2	1	18	0	15
11 Upper Island/Central Coast	0	0	0	0	0	0	0	2	1	1	0	8	0	5
12 Cariboo	0	0	0	0	0	0	0	1	0	0	0	1	0	2
13 North West	0	0	0	0	0	0	1	2	1	1	0	3	0	4
14 Peace Liard	0	0	0	0	0	0	0	0	0	1	0	1	0	3
15 Northern Interior	0	0	0	0	0	2	0	3	3	3	0	5	0	6
16 Vancouver	7	4	15	6	6	42	9	112	31	40	20	229	23	77
17 Burnaby	1	0	3	0	0	3	1	5	9	1	1	10	0	0
18 North Shore	0	0	0	0	0	3	1	7	3	3	1	29	0	15
19 Richmond	0	0	0	0	0	2	1	9	4	1	0	12	0	18
20 Capital	2	1	1	7	3	8	2	13	9	6	7	62	8	27
TOTAL	12	5	25	23	16	86	20	226	108	73	41	514	41	254

... continued

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

<sup>&</sup>lt;sup>3</sup> Includes 32 physicians with the specialty designation Pathology, 5 with the specialty designation Neuropathology, 10 with the specialty designation Haematological Pathology and 2 with the specialty designation Bacteriology.

<sup>&</sup>lt;sup>4</sup> Includes 6 physicians with the specialty designation Therapeutic Radiology.

# Table 8 (continued) Non-Postgraduate Physicians<sup>1</sup> in British Columbia by Health Region by RCPSC Specialty<sup>2</sup> September 1998

Health Region	Respiratory Medicine	Rheuma- tology	Cardio- vascular & Thoracic Surgery <sup>3</sup>	General Surgery <sup>4</sup>	Neuro- surgery	Obstetrics & Gynae- cology	Ophthal- mology	Ortho- paedic Surgery	Otolaryn- gology	Plastic Surgery	Urology	Vascular Surgery	Specialty Subtotal	Total
1 East Kootenay	0	0	0	7	0	2	1	4	1	0	1	0	37	124
2 West Kootenay - Boundary	0	0	0	8	0	2	2	3	0	1	1	0	42	142
3 North Okanagan	0	1	0	7	0	4	7	5	2	0	2	0	71	198
4 South Okanagan - Similkameen	7	3	3	9	2	11	10	11	4	4	6	3	189	420
5 Thompson	0	1	1	9	3	5	3	6	2	2	2	1	85	211
6 Fraser Valley	1	1	0	7	0	8	5	9	4	2	4	1	111	315
7 South Fraser Valley	3	0	0	16	1	16	15	13	6	4	5	1	254	701
8 Simon Fraser	6	4	6	13	5	9	16	13	6	5	5	0	259	550
9 Coast Garibaldi	0	0	0	6	0	3	2	0	0	0	0	0	19	106
10 Central Vancouver Island	1	1	0	11	0	14	13	10	4	3	3	1	153	404
11 Upper Island/Central Coast	1	0	0	4	0	3	2	4	2	1	2	0	51	192
12 Cariboo	0	0	0	3	0	1	0	0	0	0	1	0	14	81
13 North West	0	0	0	5	0	3	1	1	0	0	1	0	31	136
14 Peace Liard	0	0	0	3	0	1	0	1	0	0	0	0	13	61
15 Northern Interior	1	0	0	5	0	5	3	5	1	2	3	0	64	184
16 Vancouver	19	12	20	55	14	71	59	41	25	20	15	9	1,414	2,414
17 Burnaby	1	1	0	3	0	3	8	5	3	2	2	1	89	252
18 North Shore	2	1	0	4	4	8	7	6	4	4	4	2	163	374
19 Richmond	0	2	0	3	0	5	3	6	3	2	4	2	113	270
20 Capital	6	2	7	16	4	14	24	15	6	6	12	2	393	909
ГОТАL	48	29	37	194	33	188	181	158	73	58	73	23	3,565	8,044

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> In Tables 6a to 8 specialty is based on the RCPSC specialty. Please see also Tables 3a to 5 in which specialty is based on MSC Specialty Code.

<sup>&</sup>lt;sup>5</sup> Includes 10 physicians with the specialty designation Thoracic Surgery, 2 with the specialty designation Cardiothoracic Surgery and 2 with the specialty designation Cardiac Surgery.

<sup>&</sup>lt;sup>4</sup> Includes 4 physicians with the specialty designation Paediatric General Surgery.

Table 9

Analysis of Change in the Number of Non-Postgraduate Physicians<sup>1</sup>
in British Columbia by Health Region
September 1997 to September 1998

		New I	Registrants <sup>2,3</sup> by	Place of Grad	luation			Net Intra-	
Health Region	September 1997	B.C.	Other Canada	Other Country	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	Septembe 1998
1 East Kootenay	123	0	3	2	5	2	6	0	124
2 West Kootenay - Boundary	140	0	2	1	3	5	4	-2	142
3 North Okanagan	190	0	2	2	4	9	10	5	198
4 South Okanagan - Similkameen	395	0	13	2	15	9	14	15	420
5 Thompson	208	0	2	5	7	2	6	0	211
6 Fraser Valley	311	0	2	4	6	14	11	-5	315
7 South Fraser Valley	694	2	8	7	17	8	25	7	701
8 Simon Fraser	540	1	6	4	11	9	16	6	550
9 Coast Garibaldi	106	0	1	2	3	4	10	3	106
10 Central Vancouver Island	391	2	6	2	10	9	17	11	404
11 Upper Island/Central Coast	186	3	4	4	11	6	12	1	192
12 Cariboo	79	0	1	5	6	3	5	-2	81
13 North West	127	0	3	10	13	7	8	-3	136
14 Peace Liard	59	0	1	5	6	4	3	-5	61
15 Northern Interior	183	0	1	2	3	10	7	-5	184
16 Vancouver	2,401	6	21	5	32	103	90	-32	2,414
17 Burnaby	250	0	6	0	6	7	10	-1	252
18 North Shore	372	0	4	1	5	5	13	5	374
19 Richmond	278	0	2	2	4	5	11	-6	270
20 Capital	906	0	12	1	13	20	38	8	909
OTAL	7,939	14	100	66	180	241	316	0	8,044

<sup>&</sup>lt;sup>1</sup> Excludes physicians with Directory Active postgraduate status.

<sup>&</sup>lt;sup>2</sup> Physicians who reported B.C. addresses and were non-postgraduate registrants in September 1998 and whose date of initial registration was after September 1997.

There are no new registrant physicians with unknown place of graduation.

<sup>&</sup>lt;sup>4</sup> Physicians who reported B.C. addresses and were non-postgraduate registrants in September 1998 but not in September 1997 and who were registered for the first time before September 1997.

<sup>&</sup>lt;sup>5</sup> Physicians who reported B.C. addresses and were non-postgraduate registrants in September 1997 but not in September 1998.

# III. 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 are consistent with [his/her] 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 registered nurse who is providing 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 (LPN's) to carry out such services in a satisfactory manner, LPN's may also undertake nursing service for patients in private homes.<sup>1</sup>

Governing Statute: Health Professions Act, R.S.B.C. 1996, Chapter 183; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** College of Licensed Practical Nurses of British Columbia (CLPNBC).

Licensed members of the CLPNBC have use of the title *nurse*; and exclusive

use of the titles: *licensed practical nurse* and *L.P.N.* 

**Dates of Record:** September 1997 and September 1998.

**Source of Data:** College of Licensed Practical Nurses of British Columbia (CLPNBC).

#### **Preparation and Updating:**

The tables were prepared from registration data maintained by the CLPNBC and include licensed practical nurses (LPN's) who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when LPN's report employment in nursing and employment address is available. In 1997 and 1998, employment address was available for 87% and 77% of LPN's employed in nursing, respectively. Home address is used for the remainder, as well as for LPN's 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 LPN's in British Columbia, as well as the average annual rates of change in these figures.

Adapted from information provided by the College of Licensed Practical Nurses of British Columbia, and the Licensed Practical Nurses Regulation (under the Health Professions Act), B.C. Reg. 71/96. 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 LPN's in British Columbia, derived from the CLPNBC 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

Table 3 reports the number of LPN's based on their employment status as noted on the CLPNBC 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;
- (d) Unknown.

#### 4. Place of Employment

Place of employment was reported by the registrant on the annual licence renewal form. Table 4 reports the number of LPN's employed in nursing by the type of institution in which they are employed. The categories used on the registration form were:

- (a) Acute Care General Hospital;
- (b) Activation/Rehab Hospital;
- (c) Extended Care Hospital;
- (d) Other Long Term Care Facility/Nursing Home (Intermediate Care/Personal Care);
- (e) Psychiatric Hospital;
- (f) Visiting Care Agency/Home Care;

- (g) Community Health Agency;
- (h) Physician's Office/Family Practice Unit;
- (i) Educational Institution;
- (i) Business/Industry;
- (k) Other;
- (1) Unknown.

#### 5. Field of Practice

Field of practice was reported by the registrant on the annual licence renewal form. Table 5 reports the number of LPN's employed in nursing by their field of practice. The categories used on the registration form were:

- (a) Medical/Surgical General;
- (b) Medical/Surgical Specialties (e.g., ICU, OR, Emergency, Dialysis);
- (c) Maternal/Newborn;
- (d) Psychiatric;
- (e) Paediatric;
- (f) Geriatric;

- (g) Generalized Practice (e.g., Float Pool, Occupational Health, Small Hospital);
- (h) Teaching;
- (i) Administration;
- (j) Rehabilitation;
- (k) Other;
- (l) Unknown.

#### 6. Job Title

Job title was reported by the registrant on the annual licence renewal form. Table 6 reports the number of LPN's 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;
- (e) Unknown.

#### 7. Analysis of Change

Table 7 shows sources of change that affected the supply of LPN's from September 1997 to September 1998.

*New registrants* include LPN's who were licensed in September 1998 and who registered with the CLPNBC *for the first time* subsequent to September 1997. 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 an out-of-province address.

*Reactivations* represent LPN's who were not licensed in British Columbia in September 1997 but were licensed in the province in September 1998, and whose date of initial registration was before September 1997. Also included are LPN's who reported out-of-province addresses in September 1997, but who reported British Columbia addresses in September 1998.

Attrition describes LPN's who were included in the September 1997 LPN supply, but who, because of death, retirement, out-of-province relocation or non-renewal of licence, were not included in the September 1998 supply.

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

Table 1 Licensed Practical Nurses in British Columbia by Health Region September 1997 and September 1998

				er per	_	Annual
	Nu	mber	10,000 P	opulation		Change
Health Region	1997	1998	1997	1998	Number <sup>1</sup>	Ratio
1 East Kootenay	188	181	23.62	22.53	-3.72	-4.62
2 West Kootenay - Boundary	219	210	26.89	25.62	-4.11	-4.74
3 North Okanagan	212	205	18.33	17.50	-3.30	-4.55
4 South Okanagan - Similkameen	517	505	23.07	22.23	-2.32	-3.62
5 Thompson	226	215	17.13	16.05	-4.87	-6.29
6 Fraser Valley	236	234	10.09	9.77	-0.85	-3.21
7 South Fraser Valley	392	404	7.12	7.18	3.06	0.76
8 Simon Fraser	313	295	10.21	9.38	-5.75	-8.20
9 Coast Garibaldi	94	103	12.49	13.17	9.57	5.42
10 Central Vancouver Island	456	448	19.20	18.57	-1.75	-3.28
11 Upper Island/Central Coast	195	176	16.24	14.47	-9.74	-10.89
12 Cariboo	110	99	14.71	13.05	-10.00	-11.28
13 North West	112	104	12.34	11.41	-7.14	-7.54
14 Peace Liard	88	91	13.51	13.79	3.41	2.14
15 Northern Interior	178	169	13.67	12.82	-5.06	-6.23
16 Vancouver	824	837	14.95	14.95	1.58	0.03
17 Burnaby	91	81	4.86	4.25	-10.99	-12.37
18 North Shore	151	146	8.55	8.20	-3.31	-4.08
19 Richmond	105	106	6.69	6.60	0.95	-1.30
20 Capital	545	518	16.41	15.48	-4.95	-5.68
OTAL	5,252	5,127	13.39	12.86	-2.38	-3.98

<sup>&</sup>lt;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
Licensed Practical Nurses in British Columbia
by Health Region by Age and Sex<sup>1</sup>
September 1998

	<	25	25	-34	35	5-44	45	5-54	55	-64	65	+	Age Un	known	Sul	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	1	9	2	23	1	56	2	61	0	21	0	1	1	3	7	174	181
2 West Kootenay - Boundary	0	2	1	16	3	73	3	83	0	25	0	0	0	4	7	203	210
3 North Okanagan	0	1	0	17	3	64	5	85	1	24	1	1	1	2	11	194	205
4 South Okanagan - Similkameen	1	13	10	57	20	143	13	172	2	64	0	2	0	8	46	459	505
5 Thompson	0	0	1	21	1	56	2	94	3	31	0	2	0	4	7	208	215
6 Fraser Valley	0	5	0	26	6	78	2	77	2	31	0	2	0	5	10	224	234
7 South Fraser Valley	3	11	2	55	6	108	7	146	5	53	0	4	0	4	23	381	404
8 Simon Fraser	0	5	2	30	6	90	12	113	1	27	0	2	0	7	21	274	295
9 Coast Garibaldi	0	4	0	16	2	34	0	34	1	12	0	0	0	0	3	100	103
10 Central Vancouver Island	0	10	4	49	6	149	4	168	3	48	0	3	0	4	17	431	448
11 Upper Island/Central Coast	0	1	0	20	1	68	0	64	1	19	0	1	0	1	2	174	176
12 Cariboo	0	0	0	7	0	32	0	42	0	17	0	0	0	1	0	99	99
13 North West	0	3	1	8	1	29	0	41	1	16	0	1	0	3	3	101	104
14 Peace Liard	1	1	1	12	0	21	0	45	0	8	0	2	0	0	2	89	91
15 Northern Interior	0	2	3	27	2	53	2	57	0	23	0	0	0	0	7	162	169
16 Vancouver	2	23	18	135	37	195	55	229	18	105	2	1	2	15	134	703	837
17 Burnaby	0	1	2	21	3	21	0	21	3	9	0	0	0	0	8	73	81
18 North Shore	0	2	3	30	4	50	2	37	1	13	0	0	1	3	11	135	146
19 Richmond	0	0	3	21	5	28	0	31	1	15	0	1	0	1	9	97	106
20 Capital	0	9	2	50	18	138	21	187	8	66	1	8	0	10	50	468	518
TOTAL	8	102	55	641	125	1,486	130	1,787	51	627	4	31	5	75	378	4,749	5,127

<sup>&</sup>lt;sup>1</sup> There are no LPN's with missing sex information.

Table 3
Licensed Practical Nurses in British Columbia
by Health Region by Employment Status
September 1998

Employed in Nursing<sup>1</sup>

		Employed i	in Nursing¹					
Health Region	Full-Time	Part-Time	Seasonal/ Casual	Subtotal	Employed in Other Field	Not Employed	Unknown	Tota
1 East Kootenay	71	31	49	151	15	15	0	181
2 West Kootenay - Boundary	104	41	40	185	10	14	1	210
3 North Okanagan	96	41	41	178	16	10	1	205
4 South Okanagan - Similkameen	237	103	112	452	25	26	2	505
5 Thompson	96	39	46	181	15	19	0	215
6 Fraser Valley	101	45	58	204	16	14	0	234
7 South Fraser Valley	144	99	85	328	34	42	0	404
8 Simon Fraser	125	73	57	255	23	16	1	295
9 Coast Garibaldi	30	24	30	84	11	8	0	103
10 Central Vancouver Island	167	80	123	370	40	36	2	448
11 Upper Island/Central Coast	67	45	41	153	13	10	0	176
12 Cariboo	32	21	30	83	6	10	0	99
13 North West	39	18	29	86	10	8	0	104
14 Peace Liard	39	15	24	78	6	7	0	91
15 Northern Interior	67	35	45	147	12	10	0	169
16 Vancouver	418	164	189	771	31	31	4	837
17 Burnaby	39	11	14	64	7	9	1	81
18 North Shore	71	31	22	124	12	8	2	146
19 Richmond	50	23	17	90	5	10	1	106
20 Capital	226	125	89	440	50	27	1	518
OTAL	2,219	1,064	1,141	4,424	357	330	16	5,127

<sup>&</sup>lt;sup>1</sup> There are no LPN's employed in nursing with unknown employment status.

Table 4
Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia
by Health Region by Place of Employment
September 1998

			Instituti	onal Care					Physician's	;				
Health Region	Acute Care General Hospital	Activation/ Rehab. Hospital	Extended Care Hospital	Other LTC Facility/ Nursing Home	Psychiatric Hospital	Subtotal	Visiting Care Agency/ Home Care	Community Health Agency	Office/ Family Practice Unit	Educational Institution	Business/ Industry	Other	Unknown	Total
1 East Kootenay	98	0	10	26	0	134	3	1	4	1	1	2	5	151
2 West Kootenay - Boundary	107	2	40	17	0	166	5	0	6	0	0	5	3	185
3 North Okanagan	104	1	35	23	0	163	5	1	2	0	0	0	7	178
4 South Okanagan - Similkameen	229	6	122	57	2	416	11	6	6	1	0	3	9	452
5 Thompson	128	0	19	11	0	158	4	2	1	0	0	7	9	181
6 Fraser Valley	123	0	16	38	2	179	11	0	8	0	0	3	3	204
7 South Fraser Valley	205	3	16	57	1	282	7	2	7	3	0	17	10	328
8 Simon Fraser	164	9	15	18	7	213	11	8	2	6	0	8	7	255
9 Coast Garibaldi	50	0	9	13	0	72	2	0	1	2	0	3	4	84
10 Central Vancouver Island	157	6	81	68	0	312	30	4	4	2	0	13	5	370
11 Upper Island/Central Coast	90	1	16	16	0	123	8	1	8	5	0	2	6	153
12 Cariboo	57	0	13	3	0	73	1	0	1	0	1	4	3	83
13 North West	60	0	7	8	0	75	1	2	3	0	0	2	3	86
14 Peace Liard	48	0	5	13	0	66	1	0	8	2	0	0	1	78
15 Northern Interior	101	5	2	18	0	126	2	2	5	0	1	6	5	147
16 Vancouver	251	64	119	145	2	581	57	54	9	12	3	30	25	771
17 Burnaby	6	0	4	36	0	46	3	2	1	0	0	6	6	64
18 North Shore	83	2	6	19	0	110	5	2	2	0	0	2	3	124
19 Richmond	67	0	2	14	0	83	0	1	1	0	0	2	3	90
20 Capital	180	50	97	45	1	373	22	9	6	2	1	11	16	440
OTAL	2,308	149	634	645	15	3,751	189	97	85	36	7	126	133	4,424

<sup>1</sup> Excludes 357 LPN's who are employed in other fields, 330 who are not employed and 16 who did not indicate their employment status.

Table 5
Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia
by Health Region by Field of Practice
September 1998

Health Region	Medical/ Surgical General	Medical/ Surgical Specialties	Maternal/ Newborn	<u>Psychiatric</u>	Paediatric	Geriatric	Generalized Practice	Teaching	Admin- istration	Rehab- ilitation	Other	Unknown	Total
1 East Kootenay	55	6	0	2	1	35	23	1	1	1	12	14	151
2 West Kootenay - Boundary	61	4	0	3	0	60	21	0	0	4	12	20	185
3 North Okanagan	76	0	0	0	0	62	12	0	0	3	2	23	178
4 South Okanagan - Similkameen	145	13	3	4	5	180	29	1	1	15	18	38	452
5 Thompson	74	6	0	2	7	28	22	0	0	9	20	13	181
6 Fraser Valley	96	2	1	9	3	50	12	0	3	3	10	15	204
7 South Fraser Valley	173	4	0	7	7	65	7	1	3	4	23	34	328
8 Simon Fraser	94	18	2	8	3	48	11	2	1	16	33	19	255
9 Coast Garibaldi	37	0	0	1	0	24	11	0	0	0	5	6	84
10 Central Vancouver Island	103	3	0	3	4	159	34	1	0	10	19	34	370
11 Upper Island/Central Coast	53	4	0	1	0	48	12	2	0	0	14	19	153
12 Cariboo	25	8	1	6	0	19	12	0	0	1	4	7	83
13 North West	29	2	1	1	0	20	9	0	0	1	8	15	86
14 Peace Liard	32	2	0	0	0	18	15	2	0	0	6	3	78
15 Northern Interior	58	12	5	2	1	18	17	0	2	11	11	10	147
16 Vancouver	169	43	14	10	26	259	13	5	11	71	81	69	771
17 Burnaby	5	0	0	3	0	37	1	0	0	1	9	8	64
18 North Shore	55	8	1	1	1	25	12	1	3	1	3	13	124
19 Richmond	57	1	0	1	1	15	1	0	0	0	4	10	90
20 Capital	95	21	0	13	0	184	7	3	4	52	24	37	440
ГОТАL	1,492	157	28	77	59	1,354	281	19	29	203	318	407	4,424

<sup>1</sup> Excludes 357 LPN's who are employed in other fields, 330 who are not employed and 16 who did not indicate their employment status.

Table 6
Licensed Practical Nurses Employed in Nursing<sup>1</sup> in British Columbia
by Health Region by Job Title
September 1998

LTC Aide/

		Nurses				
Health Region	LPN	Aide	Orderly	Other	Unknown	Total
1 East Kootenay	112	21	0	11	7	151
2 West Kootenay - Boundary	117	44	0	13	11	185
3 North Okanagan	130	23	2	9	14	178
4 South Okanagan - Similkameen	351	46	6	21	28	452
5 Thompson	126	21	3	21	10	181
6 Fraser Valley	136	34	0	24	10	204
7 South Fraser Valley	255	25	0	25	23	328
8 Simon Fraser	175	19	5	44	12	255
9 Coast Garibaldi	58	10	0	8	8	84
10 Central Vancouver Island	266	54	0	27	23	370
11 Upper Island/Central Coast	105	17	0	19	12	153
12 Cariboo	62	8	0	10	3	83
13 North West	51	10	0	11	14	86
14 Peace Liard	55	10	0	10	3	78
15 Northern Interior	108	10	0	21	8	147
16 Vancouver	564	49	10	98	50	771
17 Burnaby	36	10	0	8	10	64
18 North Shore	97	11	0	10	6	124
19 Richmond	7 1	4	0	8	7	90
20 Capital	312	46	9	48	25	440
TOTAL	3,187	472	35	446	284	4,424

<sup>&</sup>lt;sup>1</sup> Excludes 357 LPN's who are employed in other fields, 330 who are not employed and 16 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 1997 to September 1998

			New Registra	nts1 by Place	of Graduation				Net Intra-	
Health Region	September 1997	B.C.	Other Canada	Other Country	Unknown	Subtotal	Reactivation <sup>2</sup>	Attrition <sup>3</sup>	provincial Migration	September 1998
1 East Kootenay	188	4	4	0	1	9	4	23	3	181
2 West Kootenay - Boundary	219	2	2	0	0	4	5	18	0	210
3 North Okanagan	212	0	3	0	2	5	6	18	0	205
4 South Okanagan - Similkameen	517	11	7	1	3	22	9	43	0	505
5 Thompson	226	4	1	0	0	5	3	16	-3	215
6 Fraser Valley	236	2	4	0	0	6	11	19	0	234
7 South Fraser Valley	392	17	4	1	2	24	14	35	9	404
8 Simon Fraser	313	6	3	1	0	10	7	30	-5	295
9 Coast Garibaldi	94	3	2	0	0	5	7	7	4	103
10 Central Vancouver Island	456	14	5	0	2	21	13	43	1	448
11 Upper Island/Central Coast	195	2	2	0	0	4	8	26	-5	176
12 Cariboo	110	0	0	0	0	0	2	12	-1	99
13 North West	112	2	2	1	0	5	3	12	-4	104
14 Peace Liard	88	1	4	0	0	5	5	7	0	91
15 Northern Interior	178	5	0	0	1	6	3	22	4	169
16 Vancouver	824	29	6	7	3	45	23	70	15	837
17 Burnaby	91	6	0	1	1	8	4	9	-13	81
18 North Shore	151	6	2	1	0	9	6	13	-7	146
19 Richmond	105	5	0	1	0	6	3	8	0	106
20 Capital	545	5	7	0	0	12	17	58	2	518
ГОТАL	5,252	124	58	14	15	211	153	489	0	5,127

<sup>&</sup>lt;sup>1</sup> LPN's who reported B.C. addresses and were licensed in September 1998 and whose date of initial registration was after September 1997.

<sup>&</sup>lt;sup>2</sup> LPN's who reported B.C. addresses and were licensed in September 1998 but not in September 1997 and who were registered for the first time before September 1997.

<sup>&</sup>lt;sup>3</sup> LPN's who reported B.C. addresses and were licensed in September 1997 but not in September 1998.

#### REGISTERED NURSES

**Definition:** A registered nurse

...performs for others health care services which require the application of professional nursing knowledge and skills. The practice of nursing includes:

- (a) promoting, maintaining or restoring the health of the general public;
- (b) teaching nursing theory or practice;
- (c) counselling persons in respect of health care;
- (d) coordinating health care services;

(e) engaging in administation, supervision, education, consultation, teaching or research for any of the foregoing.<sup>1</sup>

Governing Statute: Nurses (Registered) Act, R.S.B.C. 1996, Chapter 335; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**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 a member of the RNABC. Members of the RNABC who are registered nurses have use of the title *nurse*, and exclusive use of the titles *Registered Nurse* and

R.N.

**Dates of Record:** December 1997 and December 1998.

**Source of Data:** Registered Nurses Association of British Columbia (RNABC).

#### **Preparation and Updating:**

The tables were prepared from registration data maintained by the RNABC and include registered nurses (RN's) 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 1997 and 1998, employment address was available for 89% and 86% of practising RN's employed in nursing, respectively. Home address is used for the remainder, as well as for practising RN's who are not employed in nursing, and for RN's with non-practising membership status.

Please note the change in the date of record from June of each year to December of each year. The data shown for 1997 will therefore differ from those published in *ROLLCALL 97*.

There was a small number of RN's dually registered with the Registered Psychiatric Nurses Association of British Columbia (see Chapter 25 on RPN's). Dual registrants are included in both RN and RPN tables.

<sup>&</sup>lt;sup>1</sup> Adapted from the Rules under the *Nurses (Registered) Act*, R.S.B.C. 1996, Chapter 335, Part 2, s.2.1. (Information provided by the Registered Nurses Association of British Columbia.)

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

#### 1. Membership Status

Tables 1a and 1b report number and number per 10,000 population of RN's by their RNABC membership status. Table 1c shows the average annual rates of change in these numbers. 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 RN's, 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

Table 3 reports the number of practising RN's according to their employment status as indicated on the RNABC registration form. The categories shown in the table for employment status are created from the information on the registration form, first by dividing practising RN's into those who are employed in nursing (those RN's with an employer code on the registration form) and those who are not employed in nursing. Practising RN's who *are employed in nursing* are then separated into those employed on a casual/seasonal basis, those employed on a regular basis, and those who supplied no further information. The practising RN's employed on a regular basis are further separated into those employed full-time and those employed part-time. Practising RN's who are *not employed in nursing* (those RN's with no employer code on the registration form) are separated in the table into those who indicated on the registration form either "employed - not in nursing" or "not employed", or gave no further information on their employment status.

Thus, the categories shown in the table are:

- (a) Employed in nursing;
  - (i) Regular Full-Time
  - (ii) Regular Part-Time
  - (iii) Seasonal/Casual
  - (iv) Status unknown

- (b) Not employed in nursing;
  - (i) Employed in other field
  - (ii) Not employed
  - (iii) Status unknown.

#### 4. Employment Status by Age and Sex

Tables 4a and 4b were new additions to *ROLLCALL* last year They provide an age and sex breakdown for some of the employment status categories shown in Table 3. Table 4a shows age and sex for practising RN's *employed in nursing*, while Table 4b shows age and sex for practising RN's *not employed in nursing*. Table 4a includes an age and sex breakdown for "regular full-time", "regular part-time" and "casual/seasonal", but does not include an age and sex breakdown for "employed in nursing - status unknown" because the numbers within this last group are quite small. Table 4b provides an age and sex breakdown for "not employed in nursing - not employed" and "not employed in nursing - status unknown" combined, but does not include an age and sex breakdown for "not employed in nursing - employed in other field" as the numbers within this last group are quite small. Age

information in the tables is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

#### 5. Type of Employer

Type of employer is reported initially upon registration, and updated annually on the RNABC registration renewal form. Table 5 shows the number of practising RN's employed in nursing by type of employer. The categories used on the 1998 registration renewal form were:

- (a) Hospital;
- (b) Rehabilitation/Convalescent Centre;
- (c) Extended Care;
- (d) Long Term Care/Nursing Home;
- (e) Mental Health Centre;
- (f) Home Care Agency;
- (g) Community Health Agency/Health Centre;
- (h) Business/Industry/Occupational Health;

- (i) Physician's Office/Family Practice Unit;
- (i) Educational Institution;
- (k) Self-employed/Private Practice;
- (1) Private Nursing Agency/Private Duty;
- (m) Association/Government;
- (n) Nursing Stations/Outpost/Clinic;
- (o) Other;
- (p) Unknown.

#### 6. Primary Area of Responsibility

Primary area of responsibility is reported initially upon registration, and updated annually on the RNABC registration renewal form. Table 6 shows the number of practising RN's employed in nursing by primary area of responsibility. The categories used on the 1998 registration form were:

- (a) Direct Patient Care:
  - (i) Medical/Surgical
  - (ii) Critical Care (e.g., ICU, CCU)
  - (iii) Oncology
  - (iv) Operating Room
  - (v) Post-Anesthetic Recovery Room
  - (vi) Ambulatory Care
  - (vii) Emergency Care
  - (viii) Maternal/Newborn
  - (ix) Psychiatric/Mental Health
  - (x) Paediatrics
  - (xi) Rehabilitation
  - (xii) Geriatrics/Long Term Care
  - (xiii) Occupational Health
  - (xiv) Several Clinical Areas
  - (xv) Community Health
  - (xvi) Home Care
  - (xvii) 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;
- (e) Unknown.

Some categories represent groupings of primary area of responsibility when the numbers are small. When this is done, a footnote is used to list specific responses for each category.

#### 7. Employment Position

Employment position is reported initially upon registration, and updated annually on the RNABC registration renewal form. Table 7 shows the number of practising RN's employed in nursing by employment position. The categories used on the 1998 registration form were:

- (a) Chief Nursing Officer/Director;
- (b) Assistant/Associate Director;
- (c) Supervisor/Coordinator;
- (d) Clinical Nurse Specialist;
- (e) Head Nurse/Unit Manager;
- (f) Staff Nurse/Home Care/Community Nurse
- (g) Office/Occupational/Industrial Nurse;
- (h) Instructor/Professor;
- (i) Consultant/Counsellor;
- (j) Researcher;
- (k) Other:
- (l) Unknown.

#### 8. Analysis of Change

Table 8 illustrates the sources of change which affected the supply of RN's from December 1997 to December 1998.

*New registrants* include RN's who were registered as of December 1998 and who registered with the RNABC *for the first time* subsequent to December 1997. 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 RN's who were not registered in December 1997 but were registered members in British Columbia in December 1998, and whose date of initial registration was before December 1997. Also included as reactivations are RN's who reported out-of-province addresses in December 1997, but who reported British Columbia addresses in December 1998.

Attrition describes RN's who were included in the December 1997 registered nurse supply, but who, because of death, retirement, out-of-province relocation, or non-renewal of registration, were not included in the December 1998 supply.

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

Table 1a
Registered Nurses in British Columbia
by Health Region by Membership Status
December 1997 and December 1998<sup>1</sup>

	Pra	ctising	Non-Pi	ractising	T	otal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	501	509	43	41	544	550
2 West Kootenay - Boundary	645	632	77	76	722	708
3 North Okanagan	732	719	98	94	830	813
4 South Okanagan - Similkameen	1,646	1,654	154	159	1,800	1,813
5 Thompson	984	988	97	87	1,081	1,075
6 Fraser Valley	1,310	1,294	104	100	1,414	1,394
7 South Fraser Valley	2,570	2,575	339	324	2,909	2,899
8 Simon Fraser	2,542	2,563	202	186	2,744	2,749
9 Coast Garibaldi	352	345	55	47	407	392
10 Central Vancouver Island	1,346	1,404	172	171	1,518	1,575
11 Upper Island/Central Coast	728	755	83	83	811	838
12 Cariboo	383	376	50	51	433	427
13 North West	549	535	42	32	591	567
14 Peace Liard	333	334	22	20	355	354
15 Northern Interior	854	843	74	66	928	909
16 Vancouver	7,360	7,382	316	327	7,676	7,709
17 Burnaby	998	1,018	96	75	1,094	1,093
18 North Shore	1,110	1,073	162	157	1,272	1,230
19 Richmond	624	603	110	92	734	695
20 Capital	3,549	3,431	342	354	3,891	3,785
OTAL	29,116	29,033	2,638	2,542	31,754	31,575

<sup>&</sup>lt;sup>1</sup> The date of record for RN's has changed from June of each year to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97*.

Table 1b
Registered Nurses in British Columbia
per 10,000 Population by Health Region by Membership Status
December 1997 and December 1998<sup>1</sup>

	Prac	etising	Non-Pr	actising	Te	otal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	62.93	63.34	5.40	5.10	68.33	68.45
2 West Kootenay - Boundary	79.21	77.10	9.46	9.27	88.66	86.38
3 North Okanagan	63.30	61.37	8.47	8.02	71.78	69.40
4 South Okanagan - Similkameen	73.44	72.82	6.87	7.00	80.32	79.82
5 Thompson	74.57	73.76	7.35	6.49	81.92	80.25
6 Fraser Valley	56.02	54.02	4.45	4.17	60.47	58.19
7 South Fraser Valley	46.71	45.75	6.16	5.76	52.87	51.51
8 Simon Fraser	82.94	81.45	6.59	5.91	89.53	87.3€
9 Coast Garibaldi	46.77	44.10	7.31	6.01	54.07	50.11
10 Central Vancouver Island	56.68	58.20	7.24	7.09	63.92	65.29
11 Upper Island/Central Coast	60.63	62.07	6.91	6.82	67.54	68.90
12 Cariboo	51.22	49.57	6.69	6.72	57.90	56.29
13 North West	60.50	58.70	4.63	3.51	65.12	62.21
14 Peace Liard	51.11	50.63	3.38	3.03	54.48	53.66
15 Northern Interior	65.57	63.93	5.68	5.01	71.26	68.94
16 Vancouver	133.50	131.86	5.73	5.84	139.23	137.70
17 Burnaby	53.25	53.47	5.12	3.94	58.37	57.41
18 North Shore	62.82	60.24	9.17	8.81	71.99	69.06
19 Richmond	39.73	37.54	7.00	5.73	46.73	43.26
20 Capital	106.89	102.55	10.30	10.58	117.19	113.13
OTAL	74.25	72.82	6.73	6.38	80.97	79.19

<sup>&</sup>lt;sup>1</sup> The date of record for RN's has changed from June of each year to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97*.

Table 1c Average Annual Rate of Change: Registered Nurses in British Columbia by Health Region by Membership Status December 1997 to December 1998<sup>1</sup>

	Pract	ising	Non-Pra	actising	Tot	tal
Health Region	Number <sup>2</sup>	Ratio <sup>3</sup>	Number <sup>2</sup>	Ratio <sup>3</sup>	Number <sup>2</sup>	Ratio
1 East Kootenay	1.60	0.65	-4.65	-5.54	1.10	0.17
2 West Kootenay - Boundary	-2.02	-2.66	-1.30	-1.94	-1.94	-2.58
3 North Okanagan	-1.78	-3.05	-4.08	-5.32	-2.05	-3.32
4 South Okanagan - Similkameen	0.49	-0.85	3.25	1.87	0.72	-0.62
5 Thompson	0.41	-1.09	-10.31	-11.65	-0.56	-2.04
6 Fraser Valley	-1.22	-3.58	-3.85	-6.14	-1.41	-3.76
7 South Fraser Valley	0.19	-2.04	-4.42	-6.56	-0.34	-2.57
8 Simon Fraser	0.83	-1.80	-7.92	-10.32	0.18	-2.42
9 Coast Garibaldi	-1.99	-5.70	-14.55	-17.78	-3.69	-7.34
10 Central Vancouver Island	4.31	2.69	-0.58	-2.12	3.75	2.15
11 Upper Island/Central Coast	3.71	2.39	0.00	-1.27	3.33	2.01
12 Cariboo	-1.83	-3.22	2.00	0.55	-1.39	-2.78
13 North West	-2.55	-2.96	-23.81	-24.13	-4.06	-4.47
14 Peace Liard	0.30	-0.93	-9.09	-10.20	-0.28	-1.50
15 Northern Interior	-1.29	-2.50	-10.81	-11.91	-2.05	-3.25
16 Vancouver	0.30	-1.23	3.48	1.91	0.43	-1.10
17 Burnaby	2.00	0.42	-21.88	-23.09	-0.09	-1.64
18 North Shore	-3.33	-4.10	-3.09	-3.86	-3.30	-4.07
19 Richmond	-3.37	-5.53	-16.36	-18.23	-5.31	-7.43
20 Capital	-3.32	-4.06	3.51	2.72	-2.72	-3.47
OTAL	-0.29	-1.92	-3.64	-5.22	-0.56	-2.20

<sup>&</sup>lt;sup>1</sup> The date of record for RN's has changed from June of each year to December of each year, so the 1997 data will differ from those published in ROLLCALL 97.

<sup>&</sup>lt;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
Registered Nurses in British Columbia
by Health Region by Age and Sex<sup>1</sup>
December 1998

	<	25	25	5-34	3.	5-44	45	5-54	55	5-64	65	5 +	Sub	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	8	5	91	6	159	4	183	0	88	0	6	15	535	550
2 West Kootenay - Boundary	1	6	6	71	12	226	13	265	0	98	0	10	32	676	708
3 North Okanagan	0	8	5	78	5	251	5	319	1	135	0	6	16	797	813
4 South Okanagan - Similkameen	0	24	16	239	23	560	14	604	6	302	0	25	59	1,754	1,813
5 Thompson	1	11	8	192	12	369	6	336	3	130	0	7	30	1,045	1,075
6 Fraser Valley	1	23	9	237	17	386	16	451	11	221	0	22	54	1,340	1,394
7 South Fraser Valley	3	63	20	447	25	770	24	995	11	487	0	54	83	2,816	2,899
8 Simon Fraser	0	52	22	436	29	887	51	860	18	369	1	24	121	2,628	2,749
9 Coast Garibaldi	1	4	3	64	1	134	4	117	1	55	0	8	10	382	392
10 Central Vancouver Island	0	20	6	191	21	443	10	569	4	284	0	27	41	1,534	1,575
11 Upper Island/Central Coast	0	5	6	116	11	268	4	287	1	128	0	12	22	816	838
12 Cariboo	0	7	0	79	1	116	3	155	0	59	1	6	5	422	427
13 North West	2	15	6	118	10	175	6	176	2	53	0	4	26	541	567
14 Peace Liard	1	8	2	84	4	112	0	97	0	44	0	2	7	347	354
15 Northern Interior	0	27	6	201	12	268	8	282	1	100	0	4	27	882	909
16 Vancouver	12	189	97	1,759	139	2,403	97	2,023	31	883	2	74	378	7,331	7,709
17 Burnaby	3	33	8	206	9	297	12	335	4	173	0	13	36	1,057	1,093
18 North Shore	2	20	6	213	11	332	5	348	1	273	0	19	25	1,205	1,230
19 Richmond	1	14	7	115	9	175	8	236	0	119	0	11	25	670	695
20 Capital	2	40	22	461	68	1,119	58	1,292	15	633	0	75	165	3,620	3,785
TOTAL	30	577	260	5,398	425	9,450	348	9,930	110	4,634	4	409	1,177	30,398	31,575

<sup>&</sup>lt;sup>1</sup> There are no RN's with missing age or missing sex information.

Table 3
Practising Registered Nurses<sup>1</sup> in British Columbia
by Health Region by Employment Status
December 1998

		Emp	ployed in Nur	sing		Not Er	nployed in Nu	ırsing	
Health Region	Reg Full-Time	ular Part-Time	Seasonal/ Casual	Unknown	Subtotal	Employed in Other Field	Not Employed	Status Unknown	Total
1 East Kootenay	176	144	172	2	494	1	1	13	509
2 West Kootenay - Boundary	262	158	194	2	616	0	0	16	632
3 North Okanagan	262	207	224	8	701	0	1	17	719
4 South Okanagan - Similkameen	675	443	475	11	1,604	4	1	45	1,654
5 Thompson	420	243	298	8	969	1	2	16	988
6 Fraser Valley	609	348	297	12	1,266	0	3	25	1,294
7 South Fraser Valley	1,074	705	644	11	2,434	5	2	134	2,575
8 Simon Fraser	1,195	740	547	18	2,500	1	6	56	2,563
9 Coast Garibaldi	120	110	95	6	331	0	0	14	345
10 Central Vancouver Island	574	366	415	14	1,369	0	0	35	1,404
11 Upper Island/Central Coast	264	207	255	4	730	0	0	25	755
12 Cariboo	135	105	127	1	368	0	0	8	376
13 North West	238	125	144	3	510	0	3	22	535
14 Peace Liard	125	97	104	0	326	0	0	8	334
15 Northern Interior	345	179	280	1	805	1	2	35	843
16 Vancouver	3,954	1,468	1,762	47	7,231	6	9	136	7,382
17 Burnaby	537	181	250	3	971	3	2	42	1,018
18 North Shore	486	261	291	8	1,046	1	1	25	1,073
19 Richmond	263	151	147	3	564	0	0	39	603
20 Capital	1,523	866	939	18	3,346	2	3	80	3,431
OTAL	13,237	7,104	7,660	180	28,181	25	36	791	29,033

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.

Table 4a

Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Employment Status<sup>3</sup> by Age and Sex<sup>4</sup>

December 1998

Employed in Nursing - Regular Full-Time

-	< 1	25	25	5-34	3:	5-44	45	5-54	55	5-64	65	+	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	1	1	12	1	53	0	78	0	30	0	0	2	174	176
2 West Kootenay - Boundary	0	0	0	10	2	76	9	121	0	44	0	0	11	251	262
3 North Okanagan	0	0	0	17	1	63	3	130	0	48	0	0	4	258	262
4 South Okanagan - Similkameen	0	1	1	40	12	189	6	276	4	140	0	6	23	652	675
5 Thompson	0	1	2	48	6	135	5	161	1	60	0	1	14	406	420
6 Fraser Valley	0	0	2	79	12	154	12	228	8	110	0	4	34	575	609
7 South Fraser Valley	0	2	6	118	15	236	21	443	7	217	0	9	49	1,025	1,074
8 Simon Fraser	0	0	10	143	17	325	47	441	17	193	0	2	91	1,104	1,195
9 Coast Garibaldi	0	0	0	16	1	34	3	45	0	21	0	0	4	116	120
10 Central Vancouver Island	0	1	1	36	12	142	8	261	1	111	0	1	22	552	574
11 Upper Island/Central Coast	0	0	2	17	7	73	2	108	0	52	0	3	11	253	264
12 Cariboo	0	0	0	14	0	32	3	65	0	19	0	2	3	132	135
13 North West	0	0	1	43	8	61	5	85	0	33	0	2	14	224	238
14 Peace Liard	0	2	1	27	1	32	0	44	0	18	0	0	2	123	125
15 Northern Interior	0	2	3	54	8	100	3	131	0	44	0	0	14	331	345
16 Vancouver	0	7	42	752	83	1,234	75	1,194	24	518	1	24	225	3,729	3,954
17 Burnaby	0	2	4	80	5	137	9	190	4	103	0	3	22	515	537
18 North Shore	0	0	3	87	6	121	5	149	1	112	0	2	15	471	486
19 Richmond	0	0	4	36	7	48	3	108	0	56	0	1	14	249	263
20 Capital	0	0	3	92	35	390	43	650	10	290	0	10	91	1,432	1,523
TOTAL	0	19	86	1,721	239	3,635	262	4,908	77	2,219	1	70	665	12,572	13,237

... continued

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.

<sup>&</sup>lt;sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

<sup>&</sup>lt;sup>3</sup> Excludes 180 RN's who are known to be employed in nursing but did not indicate whether they were regular full-time, regular part-time or seasonal/casual.

<sup>&</sup>lt;sup>4</sup> There are no RN's with missing age or missing sex information.

#### Table 4a (continued)

# Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Employment Status<sup>3</sup> by Age and Sex<sup>4</sup> December 1998

35-44 45-54 55-64 65 +

**Employed in Nursing - Regular Part-Time** 

Health Region	M	F	M	F	M	F	M	F	M	F	M	F	<u>M</u>	F	Total
1 East Kootenay	0	0	0	17	2	45	3	52	0	25	0	0	5	139	144
2 West Kootenay - Boundary	0	0	0	10	4	48	0	79	0	17	0	0	4	154	158
3 North Okanagan	0	0	2	10	2	78	2	80	0	33	0	0	6	201	207
4 South Okanagan - Similkameen	0	1	1	50	4	154	1	165	1	63	0	3	7	436	443
5 Thompson	0	0	1	29	0	92	1	88	0	30	0	2	2	241	243
6 Fraser Valley	0	0	0	46	2	114	1	133	0	50	0	2	3	345	348
7 South Fraser Valley	0	5	3	70	3	215	2	286	1	114	0	6	9	696	705
8 Simon Fraser	0	0	2	79	1	305	0	265	0	85	0	3	3	737	740
9 Coast Garibaldi	0	1	1	14	0	47	0	35	0	12	0	0	1	109	110
10 Central Vancouver Island	0	0	0	37	1	118	0	138	2	67	0	3	3	363	366
11 Upper Island/Central Coast	0	1	0	13	2	77	1	88	1	24	0	0	4	203	207
12 Cariboo	0	0	0	14	1	26	0	48	0	16	0	0	1	104	105
13 North West	1	0	1	22	1	52	0	39	1	8	0	0	4	121	125
14 Peace Liard	0	1	0	7	1	47	0	30	0	11	0	0	1	96	97
15 Northern Interior	0	0	1	37	1	60	3	59	0	18	0	0	5	174	179
16 Vancouver	0	12	8	257	17	562	6	431	2	171	0	2	33	1,435	1,468
17 Burnaby	1	0	2	26	0	71	0	58	0	22	0	1	3	178	181
18 North Shore	0	1	0	24	1	66	0	94	0	73	0	2	1	260	261
19 Richmond	0	0	0	15	0	45	1	61	0	29	0	0	1	150	151
20 Capital	0	2	1	89	11	295	6	307	2	143	0	10	20	846	866
TOTAL	2	24	23	866	54	2,517	27	2,536	10	1,011	0	34	116	6,988	7,104

... continued

Subtotal

25-34

< 25

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.

<sup>&</sup>lt;sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

<sup>&</sup>lt;sup>3</sup> Excludes 180 RN's who are known to be employed in nursing but did not indicate whether they were regular full-time, regular part-time or seasonal/casual.

<sup>&</sup>lt;sup>4</sup> There are no RN's with missing age or missing sex information.

Table 4a (continued)

# Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Employment Status<sup>3</sup> by Age and Sex<sup>4</sup> December 1998

						Emp	loyed in l	Nursing - So	easonal/Ca	sual					
-	<	25	25	5-34	35	5-44		5-54		-64	65	+	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	7	3	52	2	55	0	39	0	13	0	1	5	167	172
2 West Kootenay - Boundary	1	3	4	42	4	78	2	46	0	13	0	1	11	183	194
3 North Okanagan	0	6	3	41	2	85	0	70	0	17	0	0	5	219	224
4 South Okanagan - Similkameen	0	18	12	129	6	162	5	108	1	33	0	1	24	451	475
5 Thompson	1	7	4	101	5	109	0	57	0	13	0	1	10	288	298
6 Fraser Valley	1	19	7	79	3	93	1	59	1	31	0	3	13	284	297
7 South Fraser Valley	1	28	9	174	5	210	1	152	0	61	0	3	16	628	644
8 Simon Fraser	0	39	8	176	7	186	3	85	1	40	0	2	19	528	547
9 Coast Garibaldi	1	3	2	23	0	43	1	18	0	4	0	0	4	91	95
10 Central Vancouver Island	0	14	5	99	8	143	2	104	1	35	0	4	16	399	415
11 Upper Island/Central Coast	0	4	3	72	1	85	1	65	0	24	0	0	5	250	255
12 Cariboo	0	6	0	45	0	45	0	26	0	4	0	1	0	127	127
13 North West	1	13	3	42	1	42	1	35	0	5	0	1	6	138	144
14 Peace Liard	1	5	1	46	2	26	0	14	0	9	0	0	4	100	104
15 Northern Interior	0	16	2	81	3	90	1	73	0	13	0	1	6	274	280
16 Vancouver	7	146	39	651	31	486	8	284	2	101	0	7	87	1,675	1,762
17 Burnaby	1	24	1	79	3	59	3	52	0	23	0	5	8	242	250
18 North Shore	2	18	3	86	2	87	0	58	0	31	0	4	7	284	291
19 Richmond	1	6	2	40	2	50	1	37	0	8	0	0	6	141	147
20 Capital	2	29	14	222	21	339	5	217	0	82	0	8	42	897	939
TOTAL	20	411	125	2,280	108	2,473	35	1,599	6	560	0	43	294	7,366	7,660

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.

<sup>&</sup>lt;sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

<sup>&</sup>lt;sup>3</sup> Excludes 180 RN's who are known to be employed in nursing but did not indicate whether they were regular full-time, regular part-time or seasonal/casual.

<sup>&</sup>lt;sup>4</sup> There are no RN's with missing age or missing sex information.

Table 4b Practising Registered Nurses Not Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Employment Status<sup>3</sup> by Age and Sex<sup>4</sup> December 1998

Not Employed in Nursing - Not Employed and Status Unknown combined

				I.	vot Empio	yea in Nur	sing - Not	Employed	and Status	s unknown	combined	l			
-	<	25	25-	-34	35	-44	45	-54	55-	64	65	+	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	1	7	1	1	0	4	0	0	0	0	2	12	14
2 West Kootenay - Boundary	0	2	0	3	0	7	1	1	0	0	0	2	1	15	16
3 North Okanagan	0	1	0	3	0	8	0	4	0	2	0	0	0	18	18
4 South Okanagan - Similkameen	0	4	1	7	1	18	0	10	0	5	0	0	2	44	46
5 Thompson	0	3	1	4	0	6	0	3	0	1	0	0	1	17	18
6 Fraser Valley	0	2	0	8	0	8	2	5	0	2	0	1	2	26	28
7 South Fraser Valley	1	23	2	48	1	29	0	20	0	10	0	2	4	132	136
8 Simon Fraser	0	13	1	18	0	15	0	9	0	5	0	1	1	61	62
9 Coast Garibaldi	0	0	0	4	0	4	0	3	0	2	0	1	0	14	14
10 Central Vancouver Island	0	4	0	8	0	8	0	11	0	4	0	0	0	35	35
11 Upper Island/Central Coast	0	0	0	8	0	13	0	3	0	1	0	0	0	25	25
12 Cariboo	0	1	0	2	0	2	0	3	0	0	0	0	0	8	8
13 North West	0	2	1	9	0	8	0	5	0	0	0	0	1	24	25
14 Peace Liard	0	0	0	2	0	3	0	3	0	0	0	0	0	8	8
15 Northern Interior	0	8	0	19	0	4	0	4	0	2	0	0	0	37	37
16 Vancouver	4	20	5	51	1	35	3	18	0	7	0	1	13	132	145
17 Burnaby	0	4	1	13	1	12	0	10	0	2	0	1	2	42	44
18 North Shore	0	1	0	4	2	10	0	6	0	3	0	0	2	24	26
19 Richmond	0	8	0	11	0	13	2	3	0	2	0	0	2	37	39
20 Capital	0	8	2	24	0	19	0	21	0	7	0	2	2	81	83
TOTAL	5	104	15	253	7	223	8	146	0	55	0	11	35	792	827

Excludes 2,542 Non-Practising RN's.
 Excludes 28,181 RN's employed in nursing.
 Excludes 25 RN's who are employed in other fields.
 There are no RN's with missing age or missing sex information.

Table 5 Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Type of Employer December 1998

Health Region	Hospital	Rehabilitation/ Convalescent Centre	Extended Care	Long Term Care/ Nursing Home	Mental Health Centre	Home Care Agency	Community Health Agency/ Health Centre	Business/ Industry/ Occupational Health	Physician's Office/ Family Practice Unit
1 East Kootenay	296	0	18	64	3	10	57	0	10
2 West Kootenay - Boundary	374	0	43	65	3	17	63	1	16
3 North Okanagan	413	1	40	73	12	18	71	1	14
4 South Okanagan - Similkameen	963	2	103	181	17	44	122	2	58
5 Thompson	591	1	51	39	21	17	133	3	13
6 Fraser Valley	722	1	92	169	19	21	105	2	21
7 South Fraser Valley	1,418	4	175	238	30	48	224	24	58
8 Simon Fraser	1,818	3	122	140	38	22	126	13	40
9 Coast Garibaldi	180	0	20	18	5	7	61	0	7
10 Central Vancouver Island	781	3	56	151	20	37	151	1	39
11 Upper Island/Central Coast	428	0	26	42	3	21	90	3	33
12 Cariboo	229	0	20	23	7	12	38	1	8
13 North West	330	0	8	20	5	11	76	4	17
14 Peace Liard	184	1	11	38	0	6	56	2	8
15 Northern Interior	566	6	12	43	6	5	79	4	13
16 Vancouver	4,959	172	233	417	66	155	456	56	51
17 Burnaby	480	0	69	157	17	19	80	4	18
18 North Shore	611	5	61	108	5	32	86	18	36
19 Richmond	342	1	20	54	3	22	67	10	17
20 Capital	1,956	27	227	310	40	87	276	14	63
TOTAL	17,641	227	1,407	2,350	320	611	2,417	163	540

... continued

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.
<sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

### Table 5 (continued) Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Type of Employer December 1998

Health Region	Educational Institution	Self- Employed/ Private Practice	Private Nursing Agency/ Private Duty	Association/ Government	Nursing Stations/ Outpost/ Clinic	Other	Unknown	Total
1 East Kootenay	8	5	0	7	0	11	5	494
2 West Kootenay - Boundary	11	9	1	5	1	6	1	616
3 North Okanagan	3	13	2	11	2	23	4	701
4 South Okanagan - Similkameen	41	14	11	12	6	21	7	1,604
5 Thompson	36	10	2	14	5	21	12	969
6 Fraser Valley	21	15	3	42	3	25	5	1,266
7 South Fraser Valley	56	35	4	41	2	62	15	2,434
8 Simon Fraser	70	13	2	43	1	40	9	2,500
9 Coast Garibaldi	1	6	3	10	2	10	1	331
10 Central Vancouver Island	37	19	7	23	5	31	8	1,369
11 Upper Island/Central Coast	14	18	2	17	5	23	5	730
12 Cariboo	1	5	1	4	5	9	5	368
13 North West	6	0	0	6	12	12	3	510
14 Peace Liard	2	1	0	7	0	8	2	326
15 Northern Interior	19	8	0	20	5	18	1	805
16 Vancouver	157	56	43	144	20	190	56	7,231
17 Burnaby	75	11	12	10	3	12	4	971
18 North Shore	7	23	10	9	2	27	6	1,046
19 Richmond	3	5	3	7	0	5	5	564
20 Capital	101	42	11	97	6	72	17	3,346
TOTAL	669	308	117	529	85	626	171	28,181

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.
<sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

Table 6
Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Primary Area of Responsibility

December 1998

									Direct Par	tient Care								
					Post-Anest.	Ambul-	Emerg-	I	Sychiatric	:/		Geriatrics/	Occupa-	Several			Other	
	Medical/	Critical		Operating	g Recovery	atory	ency	Maternal/	Mental	Paedia-	Rehab-	Long Term	tional	Clinical	Community	Home	Patient	
Health Region	Surgical	Care	Oncology	Room	Room	Care	Care	Newborn	Health	trics	ilitation	Care	Health	Areas	Health	Care	Care	Subtotal
1 East Kootenay	115	13	0	25	3	1	15	14	22	0	1	93	0	76	35	21	20	454
2 West Kootenay - Boundary	118	40	4	28	8	3	27	35	32	6	5	111	3	49	42	30	32	573
3 North Okanagan	143	45	1	38	11	7	34	41	44	14	2	123	5	45	50	31	24	658
4 South Okanagan - Similkameen	347	96	14	71	27	16	67	97	67	46	24	290	8	73	86	65	85	1,479
5 Thompson	174	64	2	45	20	20	39	70	63	26	20	91	9	62	93	40	49	887
6 Fraser Valley	239	67	2	53	24	10	83	89	86	25	6	280	3	40	77	35	64	1,183
7 South Fraser Valley	556	108	16	92	40	27	137	166	143	49	12	468	15	48	194	76	122	2,269
8 Simon Fraser	658	232	3	100	57	44	126	160	259	35	20	286	20	45	90	39	120	2,294
9 Coast Garibaldi	55	24	0	20	0	4	25	13	11	2	0	48	1	41	38	18	12	312
10 Central Vancouver Island	292	71	6	69	28	14	60	90	80	22	14	224	5	47	124	54	55	1,255
11 Upper Island/Central Coast	147	42	2	32	9	3	33	42	38	4	1	82	4	72	64	43	54	672
12 Cariboo	80	23	0	22	2	8	17	27	13	3	0	53	0	35	36	12	18	349
13 North West	98	28	0	32	2	3	24	44	14	9	3	36	3	62	65	18	28	469
14 Peace Liard	44	10	0	16	1	4	28	27	8	6	0	50	2	33	35	19	16	299
15 Northern Interior	159	52	4	36	11	11	48	75	49	24	15	57	6	78	62	19	46	752
16 Vancouver	1,548	731	228	293	114	148	221	474	317	449	202	755	40	130	335	174	409	6,568
17 Burnaby	202	59	6	31	18	5	46	47	33	11	3	240	9	17	60	35	42	864
18 North Shore	257	46	12	48	23	8	42	68	42	19	15	184	6	38	72	36	56	972
19 Richmond	124	37	3	25	15	5	34	52	18	4	2	85	12	13	59	25	10	523
20 Capital	758	243	18	145	61	22	118	150	197	71	58	578	24	64	206	127	194	3,034
TOTAL	6,114	2,031	321	1,221	474	363	1,224	1,781	1,536	825	403	4,134	175	1,068	1,823	917	1,456	25,866

... continued

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.

<sup>&</sup>lt;sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

#### Table 6 (continued)

## Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Primary Area of Responsibility December 1998

		Admini	stration									
	Nursing	Nursing	041				Education					
Health Region	Education Admin- istration	Services Admin- istration	Other Admin- istration	Subtotal	Teaching Students	Teaching Employees	Teaching Patients/ Clients	Other Education	Subtotal	Research <sup>3</sup>	Unknown	Total
1 East Kootenay	0	16	6	22	7	1	3	1	12	1	5	494
2 West Kootenay - Boundary	2	18	7	27	9	1	4	0	14	0	2	616
3 North Okanagan	0	13	9	22	1	5	5	4	15	2	4	701
4 South Okanagan - Similkameen	2	37	19	58	36	6	14	0	56	2	9	1,604
5 Thompson	2	17	10	29	32	3	3	1	39	1	13	969
6 Fraser Valley	3	22	16	41	16	10	7	0	33	2	7	1,266
7 South Fraser Valley	3	42	23	68	45	10	17	3	75	7	15	2,434
8 Simon Fraser	3	38	28	69	68	27	18	3	116	12	9	2,500
9 Coast Garibaldi	0	4	6	10	0	2	1	1	4	1	4	331
10 Central Vancouver Island	3	33	25	61	28	5	10	1	44	1	8	1,369
11 Upper Island/Central Coast	2	20	10	32	13	1	5	0	19	1	6	730
12 Cariboo	0	10	4	14	2	0	1	0	3	0	2	368
13 North West	1	17	4	22	5	1	4	2	12	0	7	510
14 Peace Liard	0	14	2	16	2	3	1	1	7	0	4	326
15 Northern Interior	3	17	6	26	14	3	8	0	25	0	2	805
16 Vancouver	16	102	114	232	118	75	60	21	274	98	59	7,231
17 Burnaby	4	14	13	31	60	5	4	2	71	4	1	971
18 North Shore	1	18	14	33	5	10	11	3	29	6	6	1,046
19 Richmond	1	8	6	15	3	6	6	3	18	1	7	564
20 Capital	10	74	67	151	76	20	26	13	135	10	16	3,346
ГОТАL	56	534	389	979	540	194	208	59	1,001	149	186	28,181

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.
<sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

<sup>&</sup>lt;sup>3</sup> Includes 30 RN's who indicated "Nursing Research Only" as their primary area of responsibility and 119 who indicated "Other Research".

Table 7
Practising Registered Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Position
December 1998

Health Region	Chief Nursing Officer/ Director	Assistant/ Associate Director	Supervisor/ Coordinator	Clinical Nurse Specialist	Head Nurse/ Unit Manager	Staff Nurse/ Home Care/ Community Nurse	Office/Occu- pational/ Industrial Nurse	Instructor/ Professor	Consultant/	Researcher	Other	Unknown	Total
1 East Kootenay	10	2	20	5	22	386	7	8	7	0	19	8	494
2 West Kootenay - Boundary	15	3	33	5	17	487	15	10	7	0	22	2	616
3 North Okanagan	10	1	28	10	24	556	12	4	13	0	35	8	701
4 South Okanagan - Similkameen	34	9	71	25	44	1,260	45	41	12	1	47	15	1,604
5 Thompson	13	4	20	8	18	785	16	35	7	2	47	14	969
6 Fraser Valley	27	4	39	17	29	1,025	16	26	8	0	65	10	1,266
7 South Fraser Valley	51	15	55	26	55	1,944	62	57	39	3	99	28	2,434
8 Simon Fraser	20	4	71	20	76	2,017	47	84	20	8	109	24	2,500
9 Coast Garibaldi	7	1	13	2	9	263	9	1	8	1	15	2	331
10 Central Vancouver Island	30	10	46	12	41	1,065	30	28	26	0	64	17	1,369
11 Upper Island/Central Coast	13	3	29	5	19	569	26	14	11	2	30	9	730
12 Cariboo	3	0	10	2	15	305	9	1	4	1	11	7	368
13 North West	7	3	18	5	20	394	18	7	6	0	22	10	510
14 Peace Liard	8	1	12	3	14	260	5	3	2	0	7	11	326
15 Northern Interior	15	0	15	7	9	672	16	18	14	0	32	7	805
16 Vancouver	86	28	174	103	118	5,775	66	201	111	68	405	96	7,231
17 Burnaby	14	5	26	7	29	745	21	67	18	4	28	7	971
18 North Shore	12	6	24	10	24	837	23	18	33	4	48	7	1,046
19 Richmond	10	3	15	8	15	443	21	6	9	0	24	10	564
20 Capital	43	10	123	24	80	2,634	65	96	52	3	181	35	3,346
ГОТАL	428	112	842	304	678	22,422	529	725	407	97	1,310	327	28,181

<sup>&</sup>lt;sup>1</sup> Excludes 2,542 Non-Practising RN's.

<sup>&</sup>lt;sup>2</sup> Excludes 852 RN's not employed in nursing (25 who are employed in other fields, 36 who are not employed and 791 who provided no other information on their employment status).

Table 8

Analysis of Change in the Number of Registered Nurses<sup>1</sup> in British Columbia by Health Region

December 1997 to December 1998<sup>2</sup>

			New Registra	nts <sup>3</sup> by Place	of Graduation		_		Net Intra-	
Health Region	December 1997	B.C.	Other Canada	Other Country	Unknown	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	December 1998
1 East Kootenay	544	9	14	1	0	24	7	31	6	550
2 West Kootenay - Boundary	722	5	3	0	0	8	7	30	1	708
3 North Okanagan	830	16	4	0	0	20	11	58	10	813
4 South Okanagan - Similkameen	1,800	39	23	2	0	64	28	90	11	1,813
5 Thompson	1,081	20	5	1	0	26	14	58	12	1,075
6 Fraser Valley	1,414	15	12	7	0	34	17	75	4	1,394
7 South Fraser Valley	2,909	75	15	20	0	110	40	158	-2	2,899
8 Simon Fraser	2,744	66	14	16	0	96	31	119	-3	2,749
9 Coast Garibaldi	407	4	5	1	0	10	13	35	-3	392
10 Central Vancouver Island	1,518	31	14	2	0	47	16	84	78	1,575
11 Upper Island/Central Coast	811	12	10	2	0	24	20	47	30	838
12 Cariboo	433	13	2	0	0	15	4	16	-9	427
13 North West	591	2	12	0	0	14	11	41	-8	567
14 Peace Liard	355	5	12	0	0	17	7	19	-6	354
15 Northern Interior	928	16	5	2	0	23	14	48	-8	909
16 Vancouver	7,676	189	60	46	0	295	84	320	-26	7,709
17 Burnaby	1,094	30	14	10	2	56	10	60	-7	1,093
18 North Shore	1,272	16	6	9	0	31	12	90	5	1,230
19 Richmond	734	22	5	9	0	36	8	51	-32	695
20 Capital	3,891	45	43	7	0	95	52	200	-53	3,785
TOTAL	31,754	630	278	135	2	1,045	406	1,630	0	31,575

<sup>&</sup>lt;sup>1</sup> Includes Practising and Non-Practising RN's.

<sup>&</sup>lt;sup>2</sup> The date of record for RN's has changed from June of each year to December of each year, so the 1997 data will differ from those published in *ROLLCALL* 97.

<sup>&</sup>lt;sup>3</sup> RN's who reported B.C. addresses and were registered in December 1998 and whose date of initial registration was after December 1997.

<sup>&</sup>lt;sup>4</sup> RN's who reported B.C. addresses and were registered in December 1998 but not in December 1997 and who were registered for the first time before December 1997.

<sup>&</sup>lt;sup>5</sup> RN's who reported B.C. addresses and were registered in December 1997 but not in December 1998.

#### 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>1</sup>

Governing Statute: Nurses (Registered) Act, R.S.B.C. 1996, Chapter 335; administered by the

Ministry of Health and Ministry Responsible for Seniors.

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 member of 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 use of the title *nurse*, and exclusive use of the titles *Licensed Graduate Nurse* and *L.G.N.* 

**Dates of Record:** December 1997 and December 1998.

**Source of Data:** Registered Nurses Association of British Columbia (RNABC).

#### **Preparation and Updating:**

The tables were prepared from registration data maintained by the RNABC and include licensed graduate nurses (LGN's) 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 1997 and 1998, employment address was available for 90% and 89% of practising LGN's employed in nursing, respectively. Home address is used for the remainder, as well as for practising LGN's who are not employed in nursing, and for LGN's with non-practising membership status.

#### **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 LGN's in British Columbia. Table 1c reports the average annual rates of change in these figures.

Adapted from the *Nursing Statutes Amendment Act*, S.B.C. 1988, Chapter 51, Section 15.

#### 2. Age and Sex

Age and sex information on practising and non-practising LGN's, 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

Table 3 reports the number of practising LGN's according to their employment status as indicated on the RNABC registration form. The categories shown in the table for employment status are created from the information on the registration form, by first dividing practising LGN's into those who are employed in nursing (those LGN's with an employer code on the registration form) and those who are not employed in nursing. Practising LGN's who *are employed in nursing* are then separated into those employed on a casual/seasonal basis, those employed on a regular basis, and those who supplied no further information. The practising LGN's employed on a regular basis are further separated into those employed full-time and those employed part-time. Practising LGN's who are *not employed in nursing* (those LGN's with no employer code on the registration form) are separated in the table into those who indicated on the registration form either "employed - not in nursing" or "not employed", or gave no further information on their employment status.

Thus, the categories used in the table are:

- (a) Employed in nursing;
  - (i) Regular Full-Time
  - (ii) Regular Part-Time
  - (iii) Seasonal/Casual
  - (iv) Status unknown

- (b) Not employed in nursing;
  - (i) Employed in other field
  - (ii) Not employed
  - (iii) Status unknown.

Please note that the *employed in nursing* category of "status unknown" and the *not employed in nursing* categories of "employed in other field" and "not employed" are not shown in the table this year as there were no LGN's in these categories in 1998.

#### 4. Type of Employer

Type of employer is reported initially upon registration, and updated annually on the RNABC registration renewal form. Table 4 shows this information for practising LGN's employed in nursing. The categories used on the 1998 registration renewal form, and reported by LGN's, were:

- (a) Hospital;
- (b) Rehabilitation/Convalescent Centre;
- (c) Extended Care;
- (d) Long Term Care/Nursing Home;
- (e) Home Care Agency/Community Health Agency/Health Centre;
- (f) Physicians Office/Family Practice Unit;
- (g) Other.

Some categories represent groupings of employers where the numbers are small. When this is done, a footnote appears in Table 4 to define how many LGN's reported in each specific area.

#### 5. Primary Area of Responsibility

Primary area of responsibility is reported initially upon registration, and updated annually on the RNABC registration renewal form. Table 5 shows this information for practising LGN's employed in nursing. The categories shown in the table are:

(a) Critical Care;

(b) Acute Care;

(c) Psychiatric/Mental Health;

(d) Rehabilitation;

- (e) Geriatrics/Long Term Care;
- (f) Community Care;
- (g) Other Patient Care;
- (h) Other.

Some of these categories represent groupings of areas of responsibility when the numbers are small. When this is done, a footnote specifies responses for each category.

#### 6. Employment Position

Employment position is reported initially upon registration, and updated annually on the RNABC registration renewal form. Table 6 shows this information for practising LGN's employed in nursing. The categories used on the 1998 registration form, and reported by LGN's, were:

(a) Chief Nursing Officer/Director/ Assistant/Associate Director;

- (b) Supervisor/Coordinator;
- (c) Head Nurse/Unit Manager;

- (d) Staff Nurse/Home Care/Community Nurse;
- (e) Other/Unknown.

Some of these categories represent groupings of employment positions when the numbers are small. When this is done, a footnote lists specific responses for each category.

Table 1a
Licensed Graduate Nurses in British Columbia
by Health Region by Membership Status
December 1997 and December 1998

	Prac	tising	Non-Pr	actising	To	tal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	0	0	0	0	0	0
2 West Kootenay - Boundary	12	12	0	0	12	12
3 North Okanagan	0	0	0	0	0	0
4 South Okanagan - Similkameen	7	5	0	0	7	5
5 Thompson	0	0	1	1	1	1
6 Fraser Valley	7	7	0	1	7	8
7 South Fraser Valley	31	27	5	7	36	34
8 Simon Fraser	19	19	1	2	20	21
9 Coast Garibaldi	1	1	0	0	1	1
10 Central Vancouver Island	5	5	2	1	7	6
11 Upper Island/Central Coast	5	4	1	1	6	5
12 Cariboo	1	1	0	0	1	1
13 North West	4	4	0	0	4	4
14 Peace Liard	3	3	1	1	4	4
15 Northern Interior	3	3	0	0	3	3
16 Vancouver	102	76	7	9	109	85
17 Burnaby	34	24	2	5	36	29
18 North Shore	37	34	1	2	38	36
19 Richmond	11	9	1	0	12	9
20 Capital	15	15	2	1	17	16
OTAL	297	249	24	31	321	280

Table 1b
Licensed Graduate Nurses in British Columbia
per 10,000 Population by Health Region by Membership Status
December 1997 and December 1998

	Prac	tising	Non-Pr	actising	Total		
Health Region	1997	1998	1997	1998	1997	1998	
1 East Kootenay	0.00	0.00	0.00	0.00	0.00	0.00	
2 West Kootenay - Boundary	1.47	1.46	0.00	0.00	1.47	1.46	
3 North Okanagan	0.00	0.00	0.00	0.00	0.00	0.00	
4 South Okanagan - Similkameen	0.31	0.22	0.00	0.00	0.31	0.22	
5 Thompson	0.00	0.00	0.08	0.07	0.08	0.07	
6 Fraser Valley	0.30	0.29	0.00	0.04	0.30	0.33	
7 South Fraser Valley	0.56	0.48	0.09	0.12	0.65	0.60	
8 Simon Fraser	0.62	0.60	0.03	0.06	0.65	0.67	
9 Coast Garibaldi	0.13	0.13	0.00	0.00	0.13	0.13	
10 Central Vancouver Island	0.21	0.21	0.08	0.04	0.29	0.25	
11 Upper Island/Central Coast	0.42	0.33	0.08	0.08	0.50	0.41	
12 Cariboo	0.13	0.13	0.00	0.00	0.13	0.13	
13 North West	0.44	0.44	0.00	0.00	0.44	0.44	
14 Peace Liard	0.46	0.45	0.15	0.15	0.61	0.61	
15 Northern Interior	0.23	0.23	0.00	0.00	0.23	0.23	
16 Vancouver	1.85	1.36	0.13	0.16	1.98	1.52	
17 Burnaby	1.81	1.26	0.11	0.26	1.92	1.52	
18 North Shore	2.09	1.91	0.06	0.11	2.15	2.02	
19 Richmond	0.70	0.56	0.06	0.00	0.76	0.56	
20 Capital	0.45	0.45	0.06	0.03	0.51	0.48	
OTAL	0.76	0.62	0.06	0.08	0.82	0.70	

Table 1c Average Annual Rate of Change: Licensed Graduate Nurses in British Columbia by Health Region by Membership Status December 1997 to December 1998

	Prac	tising	Non-Pra	actising	Total		
Health Region	Number <sup>1</sup>	Ratio <sup>2</sup>	Number <sup>1</sup>	Ratio <sup>2</sup>	Number <sup>1</sup>	Ratio	
1 East Kootenay	*	*	*	*	*	*	
2 West Kootenay - Boundary	0.00	-0.65	*	*	0.00	-0.65	
3 North Okanagan	*	*	*	*	*	*	
4 South Okanagan - Similkameen	*	*	*	*	*	*	
5 Thompson	*	*	*	*	*	*	
6 Fraser Valley	*	*	*	*	*	*	
7 South Fraser Valley	-12.90	-14.85	*	*	-5.56	-7.66	
8 Simon Fraser	0.00	-2.60	*	*	5.00	2.27	
9 Coast Garibaldi	*	*	*	*	*	*	
10 Central Vancouver Island	*	*	*	*	*	*	
11 Upper Island/Central Coast	*	*	*	*	*	*	
12 Cariboo	*	*	*	*	*	*	
13 North West	*	*	*	*	*	*	
14 Peace Liard	*	*	*	*	*	*	
15 Northern Interior	*	*	*	*	*	*	
16 Vancouver	-25.49	-26.62	*	*	-22.02	-23.20	
17 Burnaby	-29.41	-30.51	*	*	-19.44	-20.69	
18 North Shore	-8.11	-8.84	*	*	-5.26	-6.02	
19 Richmond	-18.18	-20.01	*	*	-25.00	-26.68	
20 Capital	0.00	-0.77	*	*	-5.88	-6.60	
OTAL	-16.16	-17.54	29.17	27.05	-12.77	-14.20	

 $<sup>^{1}</sup>$  Rate of change (in percent) in the number.  $^{2}$  Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> 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 and Sex<sup>1</sup>
December 1998

	25-	34	35	-44	45	5-54	55-	-64	65	+	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	0	0	0	0	0	0	0	0	0	0	0
2 West Kootenay - Boundary	0	0	0	0	0	9	0	3	0	0	0	12	12
3 North Okanagan	0	0	0	0	0	0	0	0	0	0	0	0	0
4 South Okanagan - Similkameen	0	0	0	1	0	2	0	2	0	0	0	5	5
5 Thompson	0	0	0	0	0	0	0	1	0	0	0	1	1
6 Fraser Valley	0	0	0	0	0	3	0	4	0	1	0	8	8
7 South Fraser Valley	0	1	0	8	1	16	0	8	0	0	1	33	34
8 Simon Fraser	0	0	0	3	0	11	0	7	0	0	0	21	21
9 Coast Garibaldi	0	0	0	0	0	1	0	0	0	0	0	1	1
10 Central Vancouver Island	0	0	0	0	0	2	0	4	0	0	0	6	6
11 Upper Island/Central Coast	0	0	0	0	0	3	0	2	0	0	0	5	5
12 Cariboo	0	0	0	0	0	0	0	1	0	0	0	1	1
13 North West	0	0	0	0	0	4	0	0	0	0	0	4	4
14 Peace Liard	0	0	1	1	0	1	0	1	0	0	1	3	4
15 Northern Interior	0	0	0	0	0	3	0	0	0	0	0	3	3
16 Vancouver	0	0	0	15	1	51	0	14	0	4	1	84	85
17 Burnaby	0	0	0	5	0	21	0	2	0	1	0	29	29
18 North Shore	0	0	0	12	1	15	0	7	0	1	1	35	36
19 Richmond	0	0	0	2	0	6	0	1	0	0	0	9	9
20 Capital	0	0	0	1	0	12	0	3	0	0	0	16	16
TOTAL	0	1	1	48	3	160	0	60	0	7	4	276	280

<sup>&</sup>lt;sup>1</sup> There were no LGN's under the age of 25 and no LGN's with missing age or sex information.

Table 3 Practising Licensed Graduate Nurses<sup>1</sup> in British Columbia by Health Region by Employment Status December 1998

Reg		in Nursing <sup>3</sup>				
	ular	n Nursing <sup>2</sup> Seasonal/		Status		
Full-Time	Part-Time	Casual	Subtotal	Unknown	Total	
0	0	0	0	0	0	
4	4	3	11	1	12	
0	0	0	0	0	0	
2	2	0	4	1	5	
0	0	0	0	0	0	
4	2	1	7	0	7	
17	8	2	27	0	27	
14	3	2	19	0	19	
0	0	1	1	0	1	
3	2	0	5	0	5	
3	1	0	4	0	4	
1	0	0	1	0	1	
3	1	0	4	0	4	
3	0	0	3	0	3	
2	1	0	3	0	3	
53	16	7	76	0	76	
17	3	4	24	0	24	
30	4	0	34	0	34	
7	2	0	9	0	9	
12	2	1	15	0	15	
	4 0 2 0 4 17 14 0 3 3 1 3 2 53 17 30 7	4 4 4 4 0 0 0 0 2 2 2 0 0 0 4 2 2 17 8 114 3 0 0 0 3 2 3 1 1 1 0 0 3 1 1 3 0 0 2 1 1 53 116 117 3 3 30 4 7 2 2	4 4 3 0 0 0 0 0 2 2 0 0 0 0 4 2 1 17 8 2 14 3 2 0 0 1 3 2 0 3 1 0 1 0 3 1 0 3 1 0 3 1 0 5 3 16 7 17 3 4 30 4 0 7 2 0	4       4       3       11         0       0       0       0         2       2       0       4         0       0       0       0         4       2       1       7         17       8       2       27         14       3       2       19         0       0       1       1         3       2       0       5         3       1       0       4         1       0       0       1         3       1       0       4         3       0       0       3         2       1       0       3         2       1       0       3         53       16       7       76         17       3       4       24         30       4       0       34         7       2       0       9	4       4       3       11       1         0       0       0       0       0         2       2       0       4       1         0       0       0       0       0         4       2       1       7       0         17       8       2       27       0         14       3       2       19       0         0       0       1       1       0         3       2       0       5       0         3       1       0       4       0         3       1       0       4       0         3       1       0       4       0         3       0       0       3       0         2       1       0       3       0         53       16       7       76       0         17       3       4       24       0         30       4       0       34       0         7       2       0       9       0	

Excludes 31 Non-Practising LGN's.
 There were no LGN's employed in nursing with unknown employment status.
 There were no LGN's in the not employed in nursing categories of "Employed in Other Field" and "Not Employed".

Table 4

Practising Licensed Graduate Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Type of Employer

December 1998

Health Region	Hospital	Rehabilitation/ Convalescent Centre		Long Term Care/ Nursing Home	Home Care/ Community Health Agency/ Health Centre <sup>3</sup>	Physician's Office/ Family Practice Unit	Other <sup>4</sup>	Total
1 East Kootenay	0	0	0	0	0	0	0	0
2 West Kootenay - Boundary	7	0	0	3	0	1	0	11
3 North Okanagan	0	0	0	0	0	0	0	0
4 South Okanagan - Similkameen	0	0	2	1	0	0	1	4
5 Thompson	0	0	0	0	0	0	0	0
6 Fraser Valley	2	0	0	3	0	0	2	7
7 South Fraser Valley	2	0	1	23	0	0	1	27
8 Simon Fraser	4	0	4	11	0	0	0	19
9 Coast Garibaldi	0	0	1	0	0	0	0	1
10 Central Vancouver Island	1	0	2	2	0	0	0	5
11 Upper Island/Central Coast	1	0	0	2	0	1	0	4
12 Cariboo	1	0	0	0	0	0	0	1
13 North West	1	0	2	1	0	0	0	4
14 Peace Liard	2	0	1	0	0	0	0	3
15 Northern Interior	0	0	0	2	0	1	0	3
16 Vancouver	4	5	10	55	1	1	0	76
17 Burnaby	0	0	2	21	0	0	1	24
18 North Shore	2	0	3	28	0	0	1	34
19 Richmond	0	0	0	8	0	1	0	9
20 Capital	1	0	2	11	1	0	0	15
OTAL	28	5	30	171	2	5	6	247

<sup>&</sup>lt;sup>1</sup> Excludes 31 Non-Practising LGN's.

<sup>&</sup>lt;sup>2</sup> Excludes 2 LGN's who are not employed in nursing and provided no other information on their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 1 LGN who indicated "Home Care Agency" as his/her type of employer and 1 who indicated "Community Health Agency/Health Centre".

<sup>&</sup>lt;sup>4</sup> Includes 1 LGN who indicated "Self-employed/Private Practice" as his/her type of employer, 1 who indicated "Private Nursing Agency/Private Duty", 2 who indicated "Association/Government", and 2 who indicated "Other".

Table 5

Practising Licensed Graduate Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Primary Area of Responsibility

December 1998

Health Region	Critical Care <sup>3</sup>	Acute Care <sup>4</sup>	Psychiatric/ Mental Health	Rehabilitation	Geriatrics/ Long Term Care	Community Care <sup>5</sup>	Other Patient Care	Other <sup>6</sup>	Total
1 East Kootenay	0	0	0	0	0	0	0	0	0
2 West Kootenay - Boundary	1	5	1	0	4	0	0	0	11
3 North Okanagan	0	0	0	0	0	0	0	0	0
4 South Okanagan - Similkameen	0	0	1	0	2	0	1	0	4
5 Thompson	0	0	0	0	0	0	0	0	0
6 Fraser Valley	1	1	1	0	3	0	1	0	7
7 South Fraser Valley	1	1	2	0	22	0	1	0	27
8 Simon Fraser	2	0	2	0	14	0	0	1	19
9 Coast Garibaldi	0	0	0	0	1	0	0	0	1
10 Central Vancouver Island	1	0	0	0	4	0	0	0	5
11 Upper Island/Central Coast	0	0	1	0	1	0	2	0	4
12 Cariboo	0	0	0	0	1	0	0	0	1
13 North West	0	0	0	0	4	0	0	0	4
14 Peace Liard	1	1	0	0	1	0	0	0	3
15 Northern Interior	0	0	0	0	2	0	1	0	3
16 Vancouver	0	4	5	4	59	2	1	1	76
17 Burnaby	0	0	0	0	23	0	1	0	24
18 North Shore	0	0	2	1	31	0	0	0	34
19 Richmond	0	0	0	0	8	0	1	0	9
20 Capital	0	1	0	1	12	0	0	1	15
OTAL	7	13	15	6	192	2	9	3	247

<sup>&</sup>lt;sup>1</sup> Excludes 31 Non-Practising LGN's.

<sup>&</sup>lt;sup>2</sup> Excludes 2 LGN's who are not employed in nursing and provided no other information on their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 1 LGN who indicated "Critical Care" as his/her primary area of responsibility, 1 who indicated "P/A Recovery Room", 4 who indicated "Operating Room" and 1 who indicated "Emergency".

<sup>&</sup>lt;sup>4</sup> Includes 6 LGN's who indicated "Medical/Surgical" as their primary area of responsibility, 2 who indicated "Maternal/Newborn", 1 who indicated "Paediatrics", 3 who indicated "Several Clinical Areas" and 1 who indicated "Oncology".

<sup>&</sup>lt;sup>5</sup> Includes 1 LGN who indicated "Community Health" as his/her primary area of responsibility and 1 who indicated "Home Care".

<sup>&</sup>lt;sup>6</sup> Includes 2 LGN's who indicated "Occupational Health" as their primary area of responsibility and 1 who indicated "Teaching - Patients/Clients".

Table 6 Practising Licensed Graduate Nurses Employed in Nursing<sup>1,2</sup> in British Columbia by Health Region by Position December 1998

Health Region	Chief Nursing Officer/Director/ Assistant/ Associate Director <sup>3</sup>	Supervisor/ Coordinator	Head Nurse/ Unit Manager	Staff Nurse/ Home Care/ Community Nurse	Other/ Unknown <sup>4</sup>	Total
1 East Kootenay	0	0	0	0	0	0
2 West Kootenay - Boundary	0	2	1	7	1	11
3 North Okanagan	0	0	0	0	0	0
4 South Okanagan - Similkameer	n 1	1	0	1	1	4
5 Thompson	0	0	0	0	0	0
6 Fraser Valley	0	2	1	3	1	7
7 South Fraser Valley	0	1	1	19	6	27
8 Simon Fraser	0	1	0	16	2	19
9 Coast Garibaldi	0	0	0	0	1	1
10 Central Vancouver Island	0	0	0	5	0	5
11 Upper Island/Central Coast	0	0	1	2	1	4
12 Cariboo	0	0	0	1	0	1
13 North West	0	0	0	3	1	4
14 Peace Liard	0	0	0	2	1	3
15 Northern Interior	0	0	0	1	2	3
16 Vancouver	1	0	2	68	5	76
17 Burnaby	0	0	0	22	2	24
18 North Shore	0	0	2	30	2	34
19 Richmond	0	0	0	8	1	9
20 Capital	0	3	0	10	2	15
OTAL	2	10	8	198	29	247

<sup>&</sup>lt;sup>1</sup> Excludes 31 Non-Practising LGN's.

<sup>&</sup>lt;sup>2</sup> Excludes 2 LGN's who are not employed in nursing and provided no other information on their employment status.
<sup>3</sup> Includes 2 LGN's who indicated "Chief Nursing Officer/Director" as their position.

<sup>&</sup>lt;sup>4</sup> Includes 3 LGNs who indicated "Office/Occupational/Industrial Nurse" as their position, 23 who indicated "Other" and 3 who did not indicate their 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, R.S.B.C. 1996, Chapter 336;<sup>2</sup>

administered by the Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** Registered Psychiatric Nurses Association of British Columbia (RPNABC).

Registered members of the RPNABC have use of the title *nurse*, and exclusive

use of the titles Registered Psychiatric Nurse and R.P.N.

**Dates of Record:** October 1997 and December 1998.

**Source of Data:** Registered Psychiatric Nurses Association of British Columbia (RPNABC).

## **Preparation and Updating:**

The tables were prepared from data maintained by the RPNABC and include registered psychiatric nurses (RPN's) 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 October 1997 and December 1998, employment address was available for 92% and 89% of practising RPN's respectively. Home address is used for the remaining, as well as for RPN's with non-practising status. A table on employment status has not been included in this chapter because the RPNABC considers all practising RPN's to be employed in nursing.

In 1998, 349 practising and 107 non-practising RPN's held dual registration with the Registered Nurses Association of British Columbia (RNABC) and the RPNABC. The numbers for 1997 were 337 practising and 109 non-practising nurses. Dual registrants are included in both the RN and RPN tables.

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.

<sup>&</sup>lt;sup>2</sup> Please note that legislation is in process, as of December 1998, to designate psychiatric nursing under the *Health Professions Act, R.S.B.C. Chapter 183* and to repeal the *Nurses (Registered Psychiatric) Act.* Provisions in the legislation provide that the Board, committees, bylaws and rules made under the *Nurses (Registered Psychiatric) Act* will continue to operate under the *Health Professions Act.* 

## **Definition of Terms:**

## 1. Registration Status

Tables 1a and 1b report the number and number per 10,000 population of RPN's in British Columbia by their registration status. Table 1c shows the average annual rates of change in these numbers. 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 RPN's, 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 for practising RPN's, as reported on the RPNABC registration renewal form, is shown in Table 3. The categories used are:

- (a) Psychiatric Hospital;
- (b) Mentally Handicapped Hospital/School;
- (c) Long Term Care/Intermediate Care;
- (d) Corrections;
- (e) Forensics;
- (f) Adolescent/Child Psychiatry;
- (g) General Hospital, Psychiatry;
- (h) General Hospital, Medical;
- (i) Substance Abuse/Detox;

- (j) Community Mental Health Team;
- (k) Boarding Home/Group Home/Specialised Residential Care;
- (1) Educational Institution;
- (m) Geriatric Unit Assessment/Discharge;
- (n) Community Health Agency;
- (o) Self-Employed;
- (p) Other;
- (q) Unknown.

Some of these categories represent groupings of facility types when the number of respondents is 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 RPN's, as indicated on their RPNABC registration renewal form, is reported in Table 4. The categories used are:

- (a) Adult Psychiatry;
  - (i) Acute
  - (ii) Chronic
- (b) Child/Adolescent Psychiatry;
- (c) Mentally Handicapped;
- (d) Psychogeriatrics;
- (e) Geriatrics;
- (f) Corrections:
- (g) Forensics;
- (h) Substance Abuse;

- (i) Rehab/Vocational;
- (i) Education:
- (k) Counselling;
- (l) Administration;
- (m) General Nursing;
- (n) Research;
- (o) Owner/Person in Charge;
- (p) Other;
- (q) Unknown.

## 5. Employment Position

Employment position for practising RPN's, as reported on the RPNABC registration renewal form, is shown in Table 5. The categories used are:

- (a) General Staff Nurse;
- (b) Assistant Head Nurse;
- (c) Community Nurse;
- (d) Head Nurse/Team Leader;
- (e) Supervisor/Coordinator;
- (f) Director;
- (g) Clinical Specialist;
- (h) Instructor;

- (i) Inservice/Staff Development;
- (j) Consultant;
- (k) Owner;
- (1) Counsellor;
- (m) Administrator/Manager;
- (n) Other;
- (o) Unknown.

Some of these categories represent groupings of employment positions when the number of respondents is small. When this is done, a footnote is used to list specific responses for each category.

## 6. Analysis of Change

Table 6 illustrates sources of change which affected the supply of practising RPN's from October 1997 to December 1998.

*New registrants* include RPN's who were practising members in British Columbia as of December 1998 and who registered with the RPNABC *for the first time* subsequent to October 1997. 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 RPN's with British Columbia addresses who were not practising members in October 1997, but were practising members in the province in December 1998, and whose date of initial registration was before October 1997. Also included as reactivations are RPN's who reported out-of-province addresses in October 1997, but who reported British Columbia addresses in December 1998.

Attrition describes practising RPN's who were included in the October 1997 RPN supply, but who, because of death, retirement, out-of-province relocation or non-renewal of practising registration, were not included in the December 1998 supply.

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

Table 1a

Registered Psychiatric Nurses in British Columbia
by Health Region by Registration Status
October 1997 and December 1998

	Prac	tising	Non-Pr	actising	T	otal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	13	16	1	2	14	18
2 West Kootenay - Boundary	20	18	3	4	23	22
3 North Okanagan	65	63	9	13	74	76
4 South Okanagan - Similkameen	88	88	14	11	102	99
5 Thompson	44	40	15	12	59	52
6 Fraser Valley	121	120	20	16	141	136
7 South Fraser Valley	174	187	84	70	258	257
8 Simon Fraser	870	850	91	75	961	925
9 Coast Garibaldi	21	24	5	5	26	29
10 Central Vancouver Island	55	58	12	12	67	70
11 Upper Island/Central Coast	21	23	12	11	33	34
12 Cariboo	24	24	3	0	27	24
13 North West	22	23	5	5	27	28
14 Peace Liard	18	21	3	2	21	23
15 Northern Interior	27	27	4	4	31	31
16 Vancouver	261	265	23	23	284	288
17 Burnaby	165	156	18	12	183	168
18 North Shore	52	54	13	13	65	67
19 Richmond	24	23	4	2	28	25
20 Capital	125	120	16	19	141	139
OTAL	2,210	2,200	355	311	2,565	2,511

Table 1b
Registered Psychiatric Nurses in British Columbia
per 10,000 Population by Health Region by Registration Status
October 1997 and December 1998

	Prac	tising	Non-Pr	actising	Total		
Health Region	1997	1998	1997	1998	1997	1998	
1 East Kootenay	1.63	1.99	0.13	0.25	1.76	2.24	
2 West Kootenay - Boundary	2.46	2.20	0.37	0.49	2.82	2.68	
3 North Okanagan	5.62	5.38	0.78	1.11	6.40	6.49	
4 South Okanagan - Similkameen	3.93	3.87	0.62	0.48	4.55	4.36	
5 Thompson	3.33	2.99	1.14	0.90	4.47	3.88	
6 Fraser Valley	5.17	5.01	0.86	0.67	6.03	5.68	
7 South Fraser Valley	3.16	3.32	1.53	1.24	4.69	4.57	
8 Simon Fraser	28.39	27.01	2.97	2.38	31.36	29.40	
9 Coast Garibaldi	2.79	3.07	0.66	0.64	3.45	3.71	
10 Central Vancouver Island	2.32	2.40	0.51	0.50	2.82	2.90	
11 Upper Island/Central Coast	1.75	1.89	1.00	0.90	2.75	2.80	
12 Cariboo	3.21	3.16	0.40	0.00	3.61	3.16	
13 North West	2.42	2.52	0.55	0.55	2.98	3.07	
14 Peace Liard	2.76	3.18	0.46	0.30	3.22	3.49	
15 Northern Interior	2.07	2.05	0.31	0.30	2.38	2.35	
16 Vancouver	4.73	4.73	0.42	0.41	5.15	5.14	
17 Burnaby	8.80	8.19	0.96	0.63	9.76	8.82	
18 North Shore	2.94	3.03	0.74	0.73	3.68	3.76	
19 Richmond	1.53	1.43	0.25	0.12	1.78	1.56	
20 Capital	3.76	3.59	0.48	0.57	4.25	4.15	
OTAL	5.64	5.52	0.91	0.78	6.54	6.30	

Table 1c Average Annual Rate of Change<sup>1</sup>: Registered Psychiatric Nurses in British Columbia by Health Region by Registration Status October 1997 to December 1998

	Pract	ising	Non-Pr	actising	Total		
Health Region	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	19.48	18.53	*	*	24.04	23.05	
2 West Kootenay - Boundary	-8.64	-9.15	*	*	-3.74	-4.28	
3 North Okanagan	-2.64	-3.72	*	*	2.31	1.18	
4 South Okanagan - Similkameen	0.00	-1.14	-18.67	-19.60	-2.53	-3.64	
5 Thompson	-7.84	-9.03	-17.41	-18.47	-10.26	-11.41	
6 Fraser Valley	-0.71	-2.74	-17.41	-19.10	-3.05	-5.03	
7 South Fraser Valley	6.37	4.33	-14.47	-16.11	-0.33	-2.24	
8 Simon Fraser	-1.97	-4.16	-15.27	-17.17	-3.22	-5.38	
9 Coast Garibaldi	12.13	8.47	*	*	9.81	6.23	
10 Central Vancouver Island	4.66	3.27	0.00	-1.33	3.83	2.45	
11 Upper Island/Central Coast	8.11	6.93	-7.19	-8.20	2.59	1.47	
12 Cariboo	0.00	-1.22	*	*	-9.60	-10.70	
13 North West	3.88	3.51	*	*	3.17	2.79	
14 Peace Liard	14.13	12.93	*	*	8.11	6.98	
15 Northern Interior	0.00	-1.06	*	*	0.00	-1.06	
16 Vancouver	1.31	-0.01	0.00	-1.30	1.21	-0.11	
17 Burnaby	-4.69	-5.96	-29.36	-30.30	-7.07	-8.31	
18 North Shore	3.29	2.58	0.00	-0.68	2.63	1.93	
19 Richmond	-3.58	-5.43	*	*	-9.26	-11.00	
20 Capital	-3.44	-4.07	15.87	15.11	-1.22	-1.87	
OTAL	-0.39	-1.79	-10.72	-11.98	-1.81	-3.19	

<sup>&</sup>lt;sup>1</sup> A 14 month rate of change has been adjusted to an average annual figure.
<sup>2</sup> Rate of change (in percent) in the number.

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

<sup>\*</sup> 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<sup>1</sup>
December 1998

	<	25	25	-34	35	-44	45	-54	55-	-64	65	+	Age Un	known	Sul	ototal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	0	3	1	6	1	4	0	2	0	0	0	1	2	16	18
2 West Kootenay - Boundary	0	0	0	1	0	4	3	8	1	4	0	1	0	0	4	18	22
3 North Okanagan	0	0	0	3	0	16	6	29	7	13	1	0	0	1	14	62	76
4 South Okanagan - Similkameen	0	1	3	9	10	20	6	28	0	17	0	2	1	2	20	79	99
5 Thompson	0	0	0	4	1	8	2	22	7	6	0	1	1	0	11	41	52
6 Fraser Valley	0	0	3	8	7	23	16	38	12	22	3	0	1	3	42	94	136
7 South Fraser Valley	0	4	4	44	9	49	13	84	13	24	1	7	1	4	41	216	257
8 Simon Fraser	2	11	26	129	44	139	108	252	75	118	2	4	4	11	261	664	925
9 Coast Garibaldi	0	0	0	5	3	14	1	6	0	0	0	0	0	0	4	25	29
10 Central Vancouver Island	0	0	0	6	4	21	4	26	2	7	0	0	0	0	10	60	70
11 Upper Island/Central Coast	0	0	0	3	0	15	2	11	1	0	0	0	1	1	4	30	34
12 Cariboo	0	0	0	1	1	8	1	6	3	3	0	0	1	0	6	18	24
13 North West	0	0	0	5	0	4	2	14	1	1	0	0	0	1	3	25	28
14 Peace Liard	0	0	1	6	4	4	3	2	2	0	0	0	0	1	10	13	23
15 Northern Interior	0	0	1	5	3	3	0	16	0	2	0	0	0	1	4	27	31
16 Vancouver	0	6	6	61	21	78	24	57	10	16	1	2	1	5	63	225	288
17 Burnaby	0	3	4	32	9	39	16	39	9	8	0	1	2	6	40	128	168
18 North Shore	0	1	2	17	3	16	2	16	1	6	0	1	0	2	8	59	67
19 Richmond	0	1	0	7	0	6	0	7	1	2	0	0	0	1	1	24	25
20 Capital	0	0	1	9	6	28	19	48	10	16	0	1	0	1	36	103	139
TOTAL	2	27	51	358	126	501	229	713	155	267	8	20	13	41	584	1,927	2,511

<sup>&</sup>lt;sup>1</sup> There are no RPN's with missing sex information.

Table 3 Practising Registered Psychiatric Nurses<sup>1</sup> in British Columbia by Health Region by Type of Facility December 1998

### Mentally

Health Region	Psychiatric Hospital	Handicapped Hospital/ School	LTC/ Intermediate Care	Corrections	Forensics	Adolescent/ Child Psychiatry <sup>2</sup>	General Hospital Psychiatry	General Hospital Medical	Substance Abuse/ Detox
1 East Kootenay	0	0	4	0	0	0	5	2	0
2 West Kootenay - Boundary	0	0	6	0	0	0	5	0	0
3 North Okanagan	1	0	16	0	0	0	8	3	1
4 South Okanagan - Similkameen	2	0	17	0	0	0	36	0	1
5 Thompson	0	3	7	0	1	0	5	1	3
6 Fraser Valley	4	0	10	27	5	0	15	3	1
7 South Fraser Valley	5	1	22	1	1	2	44	3	1
8 Simon Fraser	423	25	37	4	128	2	43	15	11
9 Coast Garibaldi	0	0	4	0	0	0	7	1	0
10 Central Vancouver Island	0	0	8	0	1	0	10	0	2
11 Upper Island/Central Coast	0	0	1	0	0	1	9	0	0
12 Cariboo	0	1	2	0	0	0	2	1	0
13 North West	0	0	4	0	1	0	4	0	1
14 Peace Liard	1	0	3	0	0	0	13	0	0
15 Northern Interior	0	0	0	1	2	1	8	1	0
16 Vancouver	4	2	31	6	8	3	45	7	19
17 Burnaby	18	0	16	7	17	47	0	2	2
18 North Shore	1	1	6	0	0	0	21	3	1
19 Richmond	0	0	4	0	0	0	12	1	0
20 Capital	14	2	37	0	1	0	21	1	1
TOTAL	473	35	235	46	165	56	313	44	44

... continued

Excludes 311 Non-Practising RPN's.
 Includes 55 RPN's who indicated "Adolescent Psychiatry" as their type of facility and 1 RPN who indicated "Child Psychiatry".

## Table 3 (continued) Practising Registered Psychiatric Nurses<sup>1</sup> in British Columbia by Health Region by Type of Facility December 1998

		Boarding/		Geriatric					
Health Region	Community Mental Health Team	Group Home/ Specialized Res. Care	Educational Institution	Unit- Assessment/ Discharge	Community Health Agency	Self Employed	Other <sup>2</sup>	Unknown	Total
1 East Kootenay	2	1	0	0	1	0	1	0	16
2 West Kootenay - Boundary	0	2.	0	1	1	3	0	0	18
3 North Okanagan	8	18	0	0	4	3	1	0	63
4 South Okanagan - Similkameen	11	12	1	0	3	3	2	0	88
5 Thompson	6	7	0	0	1	3	2.	1	40
6 Fraser Valley	21	20	1	0	7	2	1	3	120
7 South Fraser Valley	35	38	6	1	7	6	9	5	187
8 Simon Fraser	45	43	18	11	12	5	12	16	850
9 Coast Garibaldi	4	2	1	0	2	0	0	3	24
10 Central Vancouver Island	13	8	1	0	6	3	5	1	58
11 Upper Island/Central Coast	5	2	1	1	2	0	0	1	23
12 Cariboo	8	5	0	0	3	1	1	0	24
13 North West	4	1	1	0	4	1	0	2	23
14 Peace Liard	1	0	0	0	1	0	1	1	21
15 Northern Interior	4	2	0	0	3	1	2	2	27
16 Vancouver	62	32	1	10	11	2	17	5	265
17 Burnaby	26	4	0	1	4	1	4	7	156
18 North Shore	6	9	0	1	0	1	1	3	54
19 Richmond	0	5	0	1	0	0	0	0	23
20 Capital	13	16	1	0	2	3	7	1	120
ГОТАL	274	227	32	27	74	38	66	51	2,200

 $<sup>^{1}</sup>$  Excludes 311 Non-Practising RPN's.  $^{2}$  Includes 6 RPN's who indicated "Physicians Office/Medical Clinic" as their type of facility and 60 RPN's who indicated "Other".

Table 4
Practising Registered Psychiatric Nurses<sup>1</sup> in British Columbia
by Health Region by Primary Area of Responsibility
December 1998

	Adult P	sychiatry	Child/ Adolescent	Mentally	Psycho-				Substance	Rehab/
Health Region	Acute	Chronic	Psychiatry	Handicapped	-	Geriatrics	Corrections	Forensics	Abuse	Vocational
1 East Kootenay	6	2	1	0	0	4	0	0	0	0
2 West Kootenay - Boundary	5	2	0	0	1	5	0	0	0	0
3 North Okanagan	10	8	3	9	6	13	0	0	0	0
4 South Okanagan - Similkameen	38	13	1	2	9	8	0	0	1	0
5 Thompson	6	2	1	9	1	6	0	2	2	0
6 Fraser Valley	24	21	4	5	3	11	27	3	1	2
7 South Fraser Valley	62	33	2	13	7	21	1	1	2	3
8 Simon Fraser	165	203	5	31	115	54	6	122	11	5
9 Coast Garibaldi	8	5	0	1	2	2	0	0	0	0
10 Central Vancouver Island	17	6	0	3	4	8	0	1	1	1
11 Upper Island/Central Coast	7	4	1	1	3	0	0	0	0	0
12 Cariboo	7	5	1	0	0	2	0	0	0	0
13 North West	5	2	0	2	0	4	0	1	1	0
14 Peace Liard	14	0	0	0	1	2	0	0	0	0
15 Northern Interior	6	5	1	0	0	0	1	3	0	0
16 Vancouver	58	46	4	4	20	36	5	8	14	6
17 Burnaby	32	10	35	1	3	14	7	21	1	2
18 North Shore	22	4	2	2	4	5	0	0	1	1
19 Richmond	11	1	0	0	1	4	0	0	0	1
20 Capital	32	13	1	14	4	30	0	2	1	0
TOTAL	535	385	62	97	184	229	47	164	36	21

... continued

<sup>&</sup>lt;sup>1</sup> Excludes 311 Non-Practising RPN's.

# Table 4 (continued) Practising Registered Psychiatric Nurses<sup>1</sup> in British Columbia by Health Region by Primary Area of Responsibility December 1998

Health Region	Education	Counselling	Admin- istration	General Nursing	Research	Owner/ Person in Charge	Other	Unknown	Total
1 East Kootenay	0	2	0	1	0	0	0	0	16
2 West Kootenay - Boundary	0	1	0	1	0	3	0	0	18
3 North Okanagan	2	2	2	2	0	6	0	0	63
4 South Okanagan - Similkameen	2	4	1	3	0	3	2	1	88
5 Thompson	0	4	3	1	0	1	1	1	40
6 Fraser Valley	0	1	0	5	0	5	5	3	120
7 South Fraser Valley	4	4	5	9	0	5	10	5	187
8 Simon Fraser	22	14	17	26	6	2	26	20	850
9 Coast Garibaldi	0	1	2	0	0	0	0	3	24
10 Central Vancouver Island	1	5	5	0	0	3	2	1	58
11 Upper Island/Central Coast	0	4	0	1	0	0	1	1	23
12 Cariboo	1	5	2	0	0	1	0	0	24
13 North West	0	5	1	0	0	0	0	2	23
14 Peace Liard	0	1	0	1	0	0	1	1	21
15 Northern Interior	0	3	1	1	0	2	1	3	27
16 Vancouver	1	13	8	12	3	10	12	5	265
17 Burnaby	1	7	7	3	1	1	4	6	156
18 North Shore	1	1	2	2	0	3	1	3	54
19 Richmond	1	0	0	1	0	1	1	1	23
20 Capital	1	4	6	2	0	4	4	2	120
OTAL	37	81	62	71	10	50	71	58	2,200

<sup>&</sup>lt;sup>1</sup> Excludes 311 Non-Practising RPN's.

Table 5 Practising Registered Psychiatric Nurses<sup>1</sup> in British Columbia by Health Region by Employment Position December 1998

Health Region	General Staff Nurse	Assistant Head Nurse	Community Nurse	Head Nurse/ Team Leader	Supervisor/ Coordinator	Director <sup>2</sup>	Clinical Specialist	Instructor
1 East Kootenay	9	0	3	0	0	1	0	0
2 West Kootenay - Boundary	9	0	1	0	4	0	1	0
3 North Okanagan	21	1	7	2	2	2	1	0
4 South Okanagan - Similkameen	57	0	10	3	5	3	1	0
5 Thompson	13	1	4	3	3	2	2	0
6 Fraser Valley	58	3	17	4	12	4	4	0
7 South Fraser Valley	98	0	36	2	5	6	1	4
8 Simon Fraser	584	59	50	33	35	4	5	17
9 Coast Garibaldi	10	0	5	2	2	0	0	0
10 Central Vancouver Island	19	0	13	0	6	3	1	1
11 Upper Island/Central Coast	9	0	4	2	2	0	1	0
12 Cariboo	5	2	7	1	2	2	0	0
13 North West	7	0	5	1	4	0	0	0
14 Peace Liard	16	1	1	0	1	0	0	0
15 Northern Interior	6	0	6	1	2	1	0	0
16 Vancouver	109	10	78	10	11	6	2	0
17 Burnaby	68	30	21	5	12	2	0	0
18 North Shore	31	1	5	5	2	2	0	0
19 Richmond	14	0	0	2	0	1	1	0
20 Capital	69	3	13	5	4	4	0	0
OTAL	1,212	111	286	81	114	43	20	22

... continued

Excludes 311 Non-Practising RPN's.
 Includes 40 RPN's who indicated "Director" as their employment position and 3 RPN's who indicated "Assistant/Associate Director".

# Table 5 (continued) Practising Registered Psychiatric Nurses<sup>1</sup> in British Columbia by Health Region by Employment Position December 1998

Staff Develop- ment	Consultant	Owner	Counsellor	Admin- istrator/ Manager	Other	Unknown	Total
0	0	1	2	0	0	0	16
0	0	2	0	1	0	0	18
1	0	8	4	7	7	0	63
0	0	1	2	2	4	0	88
0	1	2	2	5	1	1	40
0	1	2	2	5	5	3	120
1	3	6	6	6	8	5	187
3	4	1	10	15	11	19	850
0	0	0	0	1	1	3	24
0	2	0	4	7	1	1	58
0	0	0	1	1	2	1	23
0	1	3	0	1	0	0	24
0	0	1	2	1	0	2	23
0	0	0	1	0	0	1	21
0	1	0	5	1	1	3	27
2	3	2	4	11	12	5	265
2	1	0	3	3	3	6	156
0	0	0	2	3	0	3	54
0	0	0	0	3	1	1	23
1	0	1	3	10	5	2	120
_	Develop- ment  0 0 1	Development         Consultant           0         0           0         0           1         0           0         0           0         1           0         1           1         3           3         4           0         0           0         0           0         0           0         1           0         0           0         1           2         3           2         1           0         0           0         0	Development         Consultant         Owner           0         0         1           0         0         2           1         0         8           0         0         1           0         1         2           0         1         2           1         3         6           3         4         1           0         0         0           0         2         0           0         0         0           0         1         3           0         0         1           0         0         0           0         1         0           0         1         0           0         1         0           2         3         2           2         1         0           0         0         0           0         0         0	Development         Consultant         Owner         Counsellor           0         0         1         2           0         0         2         0           1         0         8         4           0         0         1         2           0         1         2         2           0         1         2         2           1         3         6         6           3         4         1         10           0         0         0         0           0         0         0         0           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         1           0         0         0         3	Development         Consultant         Owner         Counsellor         Manager           0         0         1         2         0           0         0         2         0         1           1         0         8         4         7           0         0         1         2         2           0         1         2         2         5           0         1         2         2         5           1         3         6         6         6         6           3         4         1         10         15           0         0         0         0         1         1           0         0         0         0         1         1           0         0         0         0         1         1           0         0         0         1         1         1           0         0         0         1         1         0           0         0         1         2         1         0           0         0         1         2         1         0           0	Development         Consultant         Owner         Counsellor         Manager         Other           0         0         1         2         0         0           0         0         2         0         1         0           1         0         8         4         7         7           0         0         1         2         2         4           0         1         2         2         5         1           0         1         2         2         5         1           0         1         2         2         5         5           1         3         6         6         6         8         8           3         4         1         10         15         11           0         0         0         0         1         1           0         0         0         0         1         1           0         0         0         1         1         2           0         0         0         1         1         0           0         0         1         2         1         0<	Development         Consultant         Owner         Counsellor         Manager         Other         Unknown           0         0         1         2         0         0         0           0         0         2         0         1         0         0           1         0         8         4         7         7         0           0         0         1         2         2         4         0           0         1         2         2         5         1         1           0         1         2         2         5         5         3           1         3         6         6         6         8         5           3         4         1         10         15         11         19           0         0         0         0         1         1         1         1           0         0         0         0         1         1         1         1           0         0         0         0         1         1         1         1           0         0         0         1         1

<sup>&</sup>lt;sup>1</sup> Excludes 311 Non-Practising RPN's.

Table 6
Analysis of Change in the Number of Practising Registered Psychiatric Nurses<sup>1</sup>
in British Columbia by Health Region
October 1997 to December 1998

			New Registra	nts <sup>2</sup> by Place	of Graduation		_		Net Intra-	
Health Region	October 1997	B.C.	Other Canada	Other Country	Unknown	Subtotal	Reactivation <sup>3</sup>	Attrition <sup>4</sup>	provincial Migration	Decembe 1998
1 East Kootenay	13	1	2	0	0	3	0	0	0	16
2 West Kootenay - Boundary	20	0	0	0	0	0	1	1	-2	18
3 North Okanagan	65	0	0	0	0	0	1	5	2	63
4 South Okanagan - Similkameen	88	0	0	0	0	0	3	4	1	88
5 Thompson	44	0	0	0	0	0	2	5	-1	40
6 Fraser Valley	121	0	0	0	0	0	8	6	-3	120
7 South Fraser Valley	174	3	1	1	0	5	13	5	0	187
8 Simon Fraser	870	11	0	0	1	12	16	48	0	850
9 Coast Garibaldi	21	0	1	0	0	1	3	2	1	24
10 Central Vancouver Island	55	0	0	0	0	0	4	1	0	58
11 Upper Island/Central Coast	21	0	1	0	0	1	3	2	0	23
12 Cariboo	24	0	0	0	0	0	1	3	2	24
13 North West	22	0	0	0	0	0	2	2	1	23
14 Peace Liard	18	0	3	0	1	4	1	1	-1	21
15 Northern Interior	27	0	0	0	0	0	1	2	1	27
16 Vancouver	261	5	0	0	0	5	11	15	3	265
17 Burnaby	165	3	0	0	0	3	6	14	-4	156
18 North Shore	52	2	0	0	0	2	4	3	-1	54
19 Richmond	24	1	0	0	0	1	0	1	-1	23
20 Capital	125	0	1	0	0	1	2	10	2	120
OTAL	2,210	26	9	1	2	38	82	130	0	2,200

<sup>&</sup>lt;sup>1</sup> Excludes 311 Non-Practising RPN's.

<sup>&</sup>lt;sup>2</sup> RPN's who reported B.C. addresses and were practising registrants in December 1998 and whose date of initial registration was after October 1997.

RPN's who reported B.C. addresses and were practising registrants in December 1998 but not in October 1997 and who were registered for the first time before October 1997.

<sup>&</sup>lt;sup>4</sup> RPN's who reported B.C. addresses and were practising registrants in October 1997 but not in December 1998.

## IV. NUTRITION AND 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.

**Dates of Record:** December 1997 and December 1998.

**Source of Data:** British Columbia Dietitians' and Nutritionists' Association (BCDNA).

## **Preparation and Updating:**

The tables are derived from the membership database of the BCDNA and include registered dietitians and nutritionists (RDN's) who reported a British Columbia address at the date of record. The data in the tables are presented based on employment address when employment in dietetics/nutrition is reported and when employment address is available. In 1997 and 1998, employment address was available for 94% and 96% of RDN's employed in dietetics/nutrition. Home address was used for the remainder, as well as for RDN's who were not employed in dietetics/nutrition.

## **Definition of Terms:**

## 1. Registered Dietitians and Nutritionists

Table 1 reports the number of *registered* dietitians and nutritionists (RDN's), the number of RDN's per 10,000 population, and the average annual rates of change in these figures. As noted in ROLLCALL 97, the BCDNA changed its membership categories in 1997, eliminating the former *non-practising* category entirely, and replacing the former *practising* category with a *registered* category.

## 2. Age and Sex

Table 2 reports age and sex information for registered dietitians and nutritionists as derived from the BCDNA membership database. Age information in this table is grouped according to adaptations of standard age categories developed and used by Statistics Canada.

<sup>&</sup>lt;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.

## 3. Employment Status

Table 3 displays employment status of members of the BCDNA as reported on their annual registration renewal form using the following categories:

- (a) Employed in dietetics/nutrition;
  - (i) Full-time
  - (ii) Part-time
  - (iii) Casual
  - (iv) Temporary
  - (v) On leave
  - (vi) Unknown
- (b) Employed in other field;
- (c) Not employed (includes unemployed, retired/resigned and student);
- (d) Unknown.

## 4. Principal Employer

Table 4 shows type of principal employer for members of the BCDNA 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) Gov't/Community Health Agency;
- (j) Voluntary/Non-Profit Agency;
- (k) Education/University/College;
- (l) Business/Industry;
- (m) Self Employed.

## 5. Principal Area of Responsibility

Table 5 reports principal area of responsibility for members of the BCDNA employed in nutrition/dietetics, as indicated on the BCDNA registration form. 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.

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 Employment Position

Principal employment position is reported annually on the BCDNA registration form. Table 6 shows this information for members of the BCDNA employed in nutrition/dietetics. The following categories are used:

- (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) Consultant;
- (i) Sales Representative;
- (j) Other.

Some of these categories represent groupings of employment positions 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 supply of registered dietitians and nutritionists from December 1997 to December 1998.

*New registrants* include RDN's who were members of the BCDNA as of December 1998 and who registered with the BCDNA *for the first time* subsequent to December 1997. They are reported in the table according to their place of graduation (i.e., British Columbia, Other Canada, Other Country or Unknown). Excluded from the table are new members who reported out-of-province addresses.

*Reactivations* represent RDN's in British Columbia who were not members of the BCDNA in December 1997, but were members in the province in December 1998, and whose date of initial registration was before December 1997. Also included as reactivations are RDN's who reported out-of-province addresses in December 1997, but who reported British Columbia addresses in December 1998.

Attrition describes RDN's who were members of the BCDNA and were included in the December 1997 supply, but who, because of death, retirement, out-of-province relocation or non-renewal of membership, were not included in the December 1998 supply.

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

Table 1 Registered Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia by Health Region December 1997 and December 1998

	Num	aber		er per	0	Annual
Health Region	1997	1998	1997	opualtion 1998	Number <sup>2</sup>	Change Ratio
1 East Kootenay	15	17	1.88	2.12	13.33	12.28
2 West Kootenay - Boundary	19	20	2.33	2.44	5.26	4.58
3 North Okanagan	15	18	1.30	1.54	20.00	18.45
4 South Okanagan - Similkameen	35	38	1.56	1.67	8.57	7.12
5 Thompson	22	22	1.67	1.64	0.00	-1.49
6 Fraser Valley	23	23	0.98	0.96	0.00	-2.38
7 South Fraser Valley	69	69	1.25	1.23	0.00	-2.23
8 Simon Fraser	69	76	2.25	2.42	10.14	7.28
9 Coast Garibaldi	6	6	0.80	0.77	*	*
10 Central Vancouver Island	35	37	1.47	1.53	5.71	4.08
11 Upper Island/Central Coast	12	13	1.00	1.07	8.33	6.95
12 Cariboo	10	9	1.34	1.19	-10.00	-11.28
13 North West	14	13	1.54	1.43	-7.14	-7.54
14 Peace Liard	4	4	0.61	0.61	*	*
15 Northern Interior	14	15	1.07	1.14	7.14	5.82
16 Vancouver	237	247	4.30	4.41	4.22	2.63
17 Burnaby	37	39	1.97	2.05	5.41	3.77
18 North Shore	39	39	2.21	2.19	0.00	-0.79
19 Richmond	19	14	1.21	0.87	-26.32	-27.96
20 Capital	88	87	2.65	2.60	-1.14	-1.89
OTAL	782	806	1.99	2.02	3.07	1.38

<sup>&</sup>lt;sup>1</sup> Membership in the 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 Registered Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia by Health Region by Age and Sex<sup>2</sup> December 1998

	<	25	2	5-34	3	5-44	4:	5-54	55	-64	65	+	Age Ur	ıknown	Sul	btotal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	0	7	0	4	0	3	0	3	0	0	0	0	0	17	17
2 West Kootenay - Boundary	0	0	1	7	1	4	0	5	0	2	0	0	0	0	2	18	20
3 North Okanagan	0	0	1	4	1	9	0	2	0	1	0	0	0	0	2	16	18
4 South Okanagan - Similkameen	0	0	0	15	0	15	1	6	0	1	0	0	0	0	1	37	38
5 Thompson	0	0	0	5	0	13	0	3	0	1	0	0	0	0	0	22	22
6 Fraser Valley	0	1	0	7	0	10	0	3	0	2	0	0	0	0	0	23	23
7 South Fraser Valley	0	1	0	20	0	27	0	14	0	4	0	0	0	3	0	69	69
8 Simon Fraser	0	1	0	28	2	22	0	13	0	6	0	1	0	3	2	74	76
9 Coast Garibaldi	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	6	6
10 Central Vancouver Island	0	0	0	8	0	14	0	12	0	2	0	0	0	1	0	37	37
11 Upper Island/Central Coast	0	0	0	2	0	6	0	4	0	1	0	0	0	0	0	13	13
12 Cariboo	0	0	0	5	0	2	0	1	0	0	0	0	0	1	0	9	9
13 North West	0	0	0	6	0	4	0	3	0	0	0	0	0	0	0	13	13
14 Peace Liard	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	4	4
15 Northern Interior	0	0	0	6	0	3	0	5	0	0	0	0	0	1	0	15	15
16 Vancouver	0	4	2	81	2	89	0	53	0	6	0	0	0	10	4	243	247
17 Burnaby	1	0	0	20	0	11	0	2	0	2	0	0	1	2	2	37	39
18 North Shore	0	1	0	9	0	9	0	14	0	3	0	0	0	3	0	39	39
19 Richmond	0	1	0	4	0	5	0	3	0	0	0	0	0	1	0	14	14
20 Capital	0	2	0	12	1	34	0	28	0	5	0	1	1	3	2	85	87
OTAL	1	11	4	248	7	285	1	178	0	39	0	2	2	28	15	791	806

 $<sup>^{1}</sup>$  Membership in the BCDNA is voluntary.  $^{2}$  There are no RDN's with missing sex information.

Table 3
Registered Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia
by Health Region by Employment Status
December 1998

			Employe	d in Dietetics/	Nutrition			Employed			
Health Region	Full-Time	Part-Time	Casual	Temporary	On Leave	Unknown	Subtotal	in Other Field	Not Employed	Unknown	Total
1 East Kootenay	8	5	0	0	0	0	13	1	2	1	17
2 West Kootenay - Boundary	4	12	2	0	0	0	18	1	1	0	20
3 North Okanagan	7	8	0	0	1	0	16	1	1	0	18
4 South Okanagan - Similkameen	12	18	2	1	0	0	33	2	3	0	38
5 Thompson	7	12	0	1	1	0	21	0	1	0	22
6 Fraser Valley	9	12	0	0	0	0	21	1	1	0	23
7 South Fraser Valley	27	23	3	2	3	1	59	5	5	0	69
8 Simon Fraser	36	22	4	0	1	1	64	2	10	0	76
9 Coast Garibaldi	3	3	0	0	0	0	6	0	0	0	$\epsilon$
10 Central Vancouver Island	12	22	2	0	0	0	36	0	1	0	37
11 Upper Island/Central Coast	4	8	0	0	0	0	12	0	0	1	13
12 Cariboo	2	4	1	0	0	0	7	0	2	0	9
13 North West	5	4	2	0	1	0	12	0	1	0	13
14 Peace Liard	1	2	0	0	0	0	3	0	1	0	4
15 Northern Interior	6	7	0	0	0	0	13	0	2	0	15
16 Vancouver	120	70	13	4	6	0	213	12	22	0	247
17 Burnaby	20	10	0	2	1	0	33	1	5	0	39
18 North Shore	10	20	3	0	0	0	33	1	5	0	39
19 Richmond	5	5	2	0	0	0	12	0	1	1	14
20 Capital	45	21	7	2	1	1	77	3	5	2	87
OTAL	343	288	41	12	15	3	702	30	69	5	806

<sup>&</sup>lt;sup>1</sup> Membership in the BCDNA is voluntary.

Table 4 Registered Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> Employed in Nutrition/Dietetics<sup>2</sup> in British Columbia by Health Region by Principal Employer<sup>3</sup> December 1998

	General/ Acute	Extended	Acute/ Extended	Rehabil-			Continuing/	Other Health	Government/ Community	Voluntary/	Education/			
Health Region	Care Facility	Care Facility	Care Facility	itation Facility	Paediatric Facility	Psychiatric Facility	LTC Facility	Care Facility	Health Agency	Non-Profit Agency	University/ College	Business/ Industry	Self Employed	Total
1 East Kootenay	3	0	4	0	0	0	1	2	2	0	0	0	1	13
2 West Kootenay - Boundary	2	0	6	0	0	0	4	0	3	1	0	0	2	18
3 North Okanagan	4	0	4	0	0	0	2	1	4	0	0	0	1	16
4 South Okanagan - Similkameen	13	5	5	0	0	0	3	3	3	0	0	0	1	33
5 Thompson	10	2	2	0	0	0	2	0	5	0	0	0	0	21
6 Fraser Valley	10	0	3	0	0	1	2	1	2	1	0	1	0	21
7 South Fraser Valley	11	1	15	0	0	0	10	0	9	1	1	4	7	59
8 Simon Fraser	23	1	9	0	0	6	11	2	6	0	0	4	2	64
9 Coast Garibaldi	0	0	3	0	0	0	1	0	1	0	0	0	1	6
10 Central Vancouver Island	8	0	6	0	0	0	7	1	7	1	0	1	5	36
11 Upper Island/Central Coast	2	0	3	0	0	0	3	1	1	0	0	0	2	12
12 Cariboo	0	0	3	0	0	0	0	0	2	1	0	0	1	7
13 North West	4	0	3	0	0	0	1	0	1	3	0	0	0	12
14 Peace Liard	1	0	0	0	0	0	0	0	2	0	0	0	0	3
15 Northern Interior	5	0	4	0	0	0	1	0	2	1	0	0	0	13
16 Vancouver	70	8	20	4	20	0	19	13	20	10	12	8	9	213
17 Burnaby	5	2	7	1	0	0	8	0	3	4	0	1	2	33
18 North Shore	8	2	5	0	0	0	6	1	4	0	1	2	4	33
19 Richmond	5	2	2	1	0	0	0	0	1	0	0	0	1	12
20 Capital	22	3	10	2	2	1	11	5	14	0	0	0	7	77
TOTAL	206	26	114	8	22	8	92	30	92	23	14	21	46	702

<sup>&</sup>lt;sup>1</sup> Membership in the BCDNA is voluntary.
<sup>2</sup> Excludes 30 RDN's who are employed in other fields, 69 who are not employed and 5 who did not indicate their employment status.

<sup>&</sup>lt;sup>3</sup> There are no RDN's with missing employer information.

Table 5
Registered 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 1998

	Administrativ			Community/				~		
Health Region	Food Service	Administrative/ Clinical	Clinical/ Therapeutic	Public Health	Private Consultation	Outpatient/ Counselling	Education/ Research <sup>3</sup>	Sales/ Marketing	Other	Total
1 East Kootenay	2	4	2	2	1	2	0	0	0	13
2 West Kootenay - Boundary	1	5	4	5	0	3	0	0	0	18
3 North Okanagan	0	1	4	2	4	4	0	0	1	16
4 South Okanagan - Similkameer	2	5	15	4	1	5	0	0	1	33
5 Thompson	4	4	6	5	0	2	0	0	0	21
6 Fraser Valley	3	5	7	3	0	3	0	0	0	21
7 South Fraser Valley	7	11	22	7	5	5	1	0	1	59
8 Simon Fraser	9	9	29	4	2	6	0	4	1	64
9 Coast Garibaldi	1	3	1	1	0	0	0	0	0	6
10 Central Vancouver Island	4	4	14	4	5	4	1	0	0	36
11 Upper Island/Central Coast	2	1	4	0	1	3	1	0	0	12
12 Cariboo	0	1	0	2	1	2	1	0	0	7
13 North West	2	1	0	3	0	5	1	0	0	12
14 Peace Liard	0	1	0	2	0	0	0	0	0	3
15 Northern Interior	1	1	6	1	0	4	0	0	0	13
16 Vancouver	18	21	96	25	6	25	16	3	3	213
17 Burnaby	4	8	9	4	1	3	3	0	1	33
18 North Shore	2	4	14	3	5	2	1	1	1	33
19 Richmond	2	1	5	1	0	2	1	0	0	12
20 Capital	8	9	36	11	7	5	0	1	0	77
TOTAL	72	99	274	89	39	85	26	9	9	702

<sup>&</sup>lt;sup>1</sup> Membership in the BCDNA is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 30 RDN's who are employed in other fields, 69 who are not employed and 5 who did not indicate their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 18 RDN's who indicated "Education" as their principal area of responsibility and 8 who indicated "Research".

Table 6
Registered Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> Employed in Nutrition/Dietetics<sup>2</sup> in British Columbia by Health Region by Principal Employment Position

December 1998

Health Region	Staff Dietitian/ Nutritionist	Senior Dietitian/ Nutritionist	Sole Charge	Manager/ Co-ordinator	Department Head/ Director	Assistant Department Head/Director/ Manager	Instructor/ Faculty Position <sup>3</sup>	Consultant	Sales Representative	Other	Total
1 East Kootenay	5	1	4	0	2	0	0	0	0	1	13
2 West Kootenay - Boundary	6	2	3	0	2	0	0	5	0	0	18
3 North Okanagan	5	2	2	3	1	0	0	2	0	1	16
4 South Okanagan - Similkameen	17	3	6	1	1	1	0	3	0	1	33
5 Thompson	11	2	1	1	5	0	0	1	0	0	21
6 Fraser Valley	12	1	1	0	5	1	0	1	0	0	21
7 South Fraser Valley	27	4	0	7	8	1	0	12	0	0	59
8 Simon Fraser	37	3	6	8	3	2	0	3	2	0	64
9 Coast Garibaldi	2	1	0	0	2	0	0	1	0	0	6
10 Central Vancouver Island	14	1	5	4	3	1	0	8	0	0	36
11 Upper Island/Central Coast	3	1	2	3	1	0	0	2	0	0	12
12 Cariboo	2	0	4	0	0	0	0	1	0	0	7
13 North West	2	2	2	4	1	0	0	1	0	0	12
14 Peace Liard	2	0	1	0	0	0	0	0	0	0	3
15 Northern Interior	7	0	3	1	0	0	0	2	0	0	13
16 Vancouver	120	11	7	22	16	2	10	22	2	1	213
17 Burnaby	15	2	6	4	2	0	0	4	0	0	33
18 North Shore	12	3	1	4	0	0	1	10	1	1	33
19 Richmond	7	0	1	2	0	0	0	2	0	0	12
20 Capital	41	4	5	14	4	0	0	7	1	1	77
OTAL	347	43	60	78	56	8	11	87	6	6	702

<sup>&</sup>lt;sup>1</sup> Membership in the BCDNA is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 30 RDN's who are employed in other fields, 69 who are not employed and 5 who did not indicate their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 5 RDN's who indicated "Researcher" as their principal position.

Table 7

Analysis of Change in the Number of Registered Dietitians and Nutritionists (BCDNA Members)<sup>1</sup> in British Columbia by Health Region

December 1997 to December 1998

Health Region	December 1997	New Registrants <sup>2,3</sup> by Place of Graduation						Net Intra-	
		B.C.	Other Canada	Other Country	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	December 1998
1 East Kootenay	15	0	0	1	1	0	0	1	17
2 West Kootenay - Boundary	19	0	1	0	1	0	0	0	20
3 North Okanagan	15	0	2	1	3	0	0	0	18
4 South Okanagan - Similkameen	35	1	2	0	3	0	2	2	38
5 Thompson	22	1	0	0	1	0	0	-1	22
6 Fraser Valley	23	0	0	1	1	0	1	0	23
7 South Fraser Valley	69	2	1	0	3	3	5	-1	69
8 Simon Fraser	69	3	3	0	6	0	0	1	76
9 Coast Garibaldi	6	0	0	0	0	0	1	1	6
10 Central Vancouver Island	35	0	1	0	1	2	2	1	37
11 Upper Island/Central Coast	12	0	0	0	0	0	0	1	13
12 Cariboo	10	0	1	0	1	0	0	-2	9
13 North West	14	1	0	0	1	0	1	-1	13
14 Peace Liard	4	0	1	0	1	0	1	0	4
15 Northern Interior	14	0	0	0	0	0	1	2	15
16 Vancouver	237	6	9	4	19	2	14	3	247
17 Burnaby	37	2	3	1	6	0	1	-3	39
18 North Shore	39	3	1	0	4	0	3	-1	39
19 Richmond	19	0	0	0	0	0	3	-2	14
20 Capital	88	1	5	0	6	0	6	-1	87
TOTAL	782	20	30	8	58	7	41	0	806

<sup>&</sup>lt;sup>1</sup> Membership in the BCDNA is voluntary.

<sup>&</sup>lt;sup>2</sup> There are no new registrant RDN's with unknown place of graduation.

<sup>&</sup>lt;sup>3</sup> RDN's who reported B.C. addresses and were practising members in December 1998 and whose date of initial registration was after December 1997.

<sup>&</sup>lt;sup>4</sup> RDN's who reported B.C. addresses and were practising members in December 1998 but not in December 1997 and who were registered for the first time before December 1997.

<sup>&</sup>lt;sup>5</sup> RDN's who reported B.C. addresses and were practising members in December 1997 but not in December 1998.

## V. PSYCHOLOGICAL/ SOCIAL 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, R.S.B.C. 1996, Chapter 381; administered by the Ministry

of Health and Ministry Responsible for Seniors.

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. Members of the College of Psychologists of British Columbia have exclusive use of the titles: "*registered psychologist* or *psychologist* or any affix, prefix or abbreviation of the title [i.e., derivative of '*psych*'] as an

occupational designation" used to secure fee for service.<sup>2</sup>

**Dates of Record:** December 1997 and December 1998.

**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 1997 and 1998, 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.

Adapted from National Occupational Classification 1992, Major Group 41, No. 4151, Ottawa: Employment and Immigration Canada.

<sup>&</sup>lt;sup>2</sup> Psychologists Act, R.S.B.C. 1996, Chapter 381, Section 26. Queen's Printer, Victoria, British Columbia, Canada.

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

## 1. Registration Status

Psychologists can register with the CPBC with either *practising* or *non-practising* status. Members with non-practising status may not offer psychological services to the general public, but may be employed by such institutions as School Boards or Universities. Tables 1a and 1b show the number and number per 10,000 population of psychologists by registration status, and Table 1c shows the average annual rates of change in these numbers.

## 2. Age and Sex

Age and sex information for 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 practising psychologists in British Columbia is shown in Table 3. The categories used are:

(a) Employed in psychology;

(c) Not employed;

(b) Employed in other field;

(d) Unknown.

## 4. Primary Work Setting

The primary work setting of practising psychologists employed in psychology in British Columbia is reported in Table 4. The categories shown in the table are:

(a) Educational Facility;

(i) primary/secondary

(ii) post-secondary

(b) Psychiatric Hospital;

(c) General Hospital;

(d) Rehabilitation Facility;

(e) Mental Health Clinic;

(f) Government;

(g) Private Practice;

(h) Consulting Firm;

(i) Correction Facility;

(i) Other;

(k) Unknown.

Some of the categories represent groupings of primary work settings. When this is done, a footnote is used to list the specific responses for each category.

### 5. Main Psychological Activity

The main psychological activity of practising psychologists employed in British Columbia, as reported on the annual CPBC registration form, is reported in Table 5. The categories used are as follows:

(a) Direct Service;

(d) Teaching;

(b) Consulting;

(e) Research;

(c) Administration;

(f) Unknown.

## 6. Analysis of Change

Table 6 illustrates the sources of change which affected the supply of psychologists from December 1997 to December 1998.

*New registrants* include psychologists who were registered with the CPBC in December 1998 and who registered with the CPBC *for the first time* subsequent to December 1997. 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 1997, but were registered in the province in December 1998, and whose date of initial registration was before December 1997. Also included as reactivations are psychologists who reported out-of-province addresses in December 1997, but who reported British Columbia addresses in December 1998.

Attrition describes psychologists who were included in the December 1997 supply but who, because of death, retirement, suspension, out-of-province relocation or non-renewal of registration were not included in the December 1998 supply.

*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.

Table 1a
Psychologists in British Columbia
by Health Region by Registration Status
December 1997 and December 1998

	Prac	tising	Non-Pr	actising	To	tal
Health Region	1997	1998	1997	1998	1997	1998
1 East Kootenay	6	5	2	3	8	8
2 West Kootenay - Boundary	10	8	1	3	11	11
3 North Okanagan	8	9	0	1	8	10
4 South Okanagan - Similkameen	23	22	2	2	25	24
5 Thompson	11	11	0	0	11	11
6 Fraser Valley	27	26	1	1	28	27
7 South Fraser Valley	64	68	3	6	67	74
8 Simon Fraser	48	52	4	2	52	54
9 Coast Garibaldi	8	9	0	0	8	9
10 Central Vancouver Island	32	32	1	1	33	33
11 Upper Island/Central Coast	15	13	1	1	16	14
12 Cariboo	4	5	0	0	4	5
13 North West	7	5	0	0	7	5
14 Peace Liard	3	2	0	0	3	2
15 Northern Interior	10	11	2	2	12	13
16 Vancouver	278	289	26	27	304	316
17 Burnaby	47	50	1	2	48	52
18 North Shore	43	42	10	9	53	51
19 Richmond	34	36	1	1	35	37
20 Capital	141	152	12	13	153	165
OTAL	819	847	67	74	886	921

Table 1b
Psychologists in British Columbia
per 10,000 Population by Health Region by Registration Status
December 1997 and December 1998

	Prac	tising	Non-Pr	actising	Total		
Health Region	1997	1998	1997	1998	1997	1998	
1 East Kootenay	0.75	0.62	0.25	0.37	1.00	1.00	
2 West Kootenay - Boundary	1.23	0.98	0.12	0.37	1.35	1.34	
3 North Okanagan	0.69	0.77	0.00	0.09	0.69	0.85	
4 South Okanagan - Similkameen	1.03	0.97	0.09	0.09	1.12	1.06	
5 Thompson	0.83	0.82	0.00	0.00	0.83	0.82	
6 Fraser Valley	1.15	1.09	0.04	0.04	1.20	1.13	
7 South Fraser Valley	1.16	1.21	0.05	0.11	1.22	1.31	
8 Simon Fraser	1.57	1.65	0.13	0.06	1.70	1.72	
9 Coast Garibaldi	1.06	1.15	0.00	0.00	1.06	1.15	
10 Central Vancouver Island	1.35	1.33	0.04	0.04	1.39	1.37	
11 Upper Island/Central Coast	1.25	1.07	0.08	0.08	1.33	1.15	
12 Cariboo	0.53	0.66	0.00	0.00	0.53	0.66	
13 North West	0.77	0.55	0.00	0.00	0.77	0.55	
14 Peace Liard	0.46	0.30	0.00	0.00	0.46	0.30	
15 Northern Interior	0.77	0.83	0.15	0.15	0.92	0.99	
16 Vancouver	5.04	5.16	0.47	0.48	5.51	5.64	
17 Burnaby	2.51	2.63	0.05	0.11	2.56	2.73	
18 North Shore	2.43	2.36	0.57	0.51	3.00	2.86	
19 Richmond	2.16	2.24	0.06	0.06	2.23	2.30	
20 Capital	4.25	4.54	0.36	0.39	4.61	4.93	
OTAL	2.09	2.12	0.17	0.19	2.26	2.31	

Table 1c Average Annual Rate of Change: Psychologists in British Columbia by Health Region by Registration Status December 1997 to December 1998

	Prac	tising	Non-Pr	actising	Total		
Health Region	Number <sup>1</sup>	Ratio <sup>2</sup>	Number <sup>1</sup>	Ratio <sup>2</sup>	Number <sup>1</sup>	Ratio	
1 East Kootenay	*	*	*	*	*	*	
2 West Kootenay - Boundary	-20.00	-20.52	*	*	0.00	-0.65	
3 North Okanagan	*	*	*	*	*	*	
4 South Okanagan - Similkameen	-4.35	-5.62	*	*	-4.00	-5.28	
5 Thompson	0.00	-1.49	*	*	0.00	-1.49	
6 Fraser Valley	-3.70	-6.00	*	*	-3.57	-5.87	
7 South Fraser Valley	6.25	3.88	*	*	10.45	7.98	
8 Simon Fraser	8.33	5.52	*	*	3.85	1.14	
9 Coast Garibaldi	*	*	*	*	*	*	
10 Central Vancouver Island	0.00	-1.55	*	*	0.00	-1.55	
11 Upper Island/Central Coast	-13.33	-14.44	*	*	-12.50	-13.61	
12 Cariboo	*	*	*	*	*	*	
13 North West	*	*	*	*	*	*	
14 Peace Liard	*	*	*	*	*	*	
15 Northern Interior	10.00	8.64	*	*	8.33	7.00	
16 Vancouver	3.96	2.38	3.85	2.27	3.95	2.37	
17 Burnaby	6.38	4.73	*	*	8.33	6.65	
18 North Shore	-2.33	-3.10	-10.00	-10.72	-3.77	-4.54	
19 Richmond	5.88	3.52	*	*	5.71	3.35	
20 Capital	7.80	6.98	8.33	7.50	7.84	7.02	
OTAL	3.42	1.72	10.45	8.63	3.95	2.24	

 $<sup>^1</sup>$  Rate of change (in percent) in the number.  $^2$  Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2 Psychologists<sup>1</sup> in British Columbia by Health Region by Age and Sex<sup>2</sup> December 1998

	25	-34	35	-44	45	5-54	55	-64	65	i +	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	0	0	2	1	3	1	1	0	6	2	8
2 West Kootenay - Boundary	0	0	0	0	4	5	1	1	0	0	5	6	11
3 North Okanagan	0	0	0	1	3	1	2	2	1	0	6	4	10
4 South Okanagan - Similkameen	0	0	2	3	8	3	5	1	2	0	17	7	24
5 Thompson	0	0	3	0	3	2	3	0	0	0	9	2	11
6 Fraser Valley	1	3	3	3	8	3	4	2	0	0	16	11	27
7 South Fraser Valley	2	2	8	9	16	12	18	2	4	1	48	26	74
8 Simon Fraser	1	2	6	9	16	12	5	0	1	2	29	25	54
9 Coast Garibaldi	0	0	1	0	2	2	2	0	2	0	7	2	9
10 Central Vancouver Island	1	0	2	4	9	9	3	3	2	0	17	16	33
11 Upper Island/Central Coast	0	0	1	1	3	2	4	3	0	0	8	6	14
12 Cariboo	0	0	0	0	1	1	1	2	0	0	2	3	5
13 North West	0	0	0	0	2	1	2	0	0	0	4	1	5
14 Peace Liard	0	0	0	0	1	0	1	0	0	0	2	0	2
15 Northern Interior	0	1	1	2	5	3	1	0	0	0	7	6	13
16 Vancouver	2	11	31	42	53	87	35	39	10	6	131	185	316
17 Burnaby	0	3	8	10	6	8	8	7	2	0	24	28	52
18 North Shore	0	0	5	1	13	11	12	5	3	1	33	18	51
19 Richmond	1	1	3	5	10	10	4	2	1	0	19	18	37
20 Capital	0	1	3	19	35	42	31	22	4	8	73	92	165
OTAL	8	24	77	109	200	215	145	92	33	18	463	458	921

 <sup>&</sup>lt;sup>1</sup> Includes Practising and Non-Practising psychologists.
 <sup>2</sup> There are no psychologists under the age of 25 and no psychologists with missing age or sex information.

Table 3
Practising Psychologists<sup>1</sup> in British Columbia
by Health Region by Employment Status
December 1998

Health Region	Employed in Psychology	Employed in Other Field	Not Employed	Unknown	Total
1 East Kootenay	4	1	0	0	5
2 West Kootenay - Boundary	8	0	0	0	8
3 North Okanagan	9	0	0	0	9
4 South Okanagan - Similkameen	22	0	0	0	22
5 Thompson	11	0	0	0	11
6 Fraser Valley	26	0	0	0	26
7 South Fraser Valley	66	0	1	1	68
8 Simon Fraser	50	1	0	1	52
9 Coast Garibaldi	8	0	1	0	9
10 Central Vancouver Island	32	0	0	0	32
11 Upper Island/Central Coast	12	0	1	0	13
12 Cariboo	5	0	0	0	5
13 North West	5	0	0	0	5
14 Peace Liard	2	0	0	0	2
15 Northern Interior	10	0	0	1	11
16 Vancouver	280	7	0	2	289
17 Burnaby	49	1	0	0	50
18 North Shore	38	2	1	1	42
19 Richmond	36	0	0	0	36
20 Capital	144	5	1	2	152
OTAL	817	17	5	8	847

<sup>&</sup>lt;sup>1</sup> Excludes 74 psychologists with Non-Practising status.

Table 4

Practising Psychologists Employed in Psychology<sup>1,2</sup> in British Columbia
by Health Region by Primary Work Setting

December 1998

	Education	nal Facility				Mental							
Health Region	Primary/ Secondary	Post- Secondary	Psychiatric Hospital	General Hospital	Rehab. Facility	Health Clinic	Govern- ment <sup>3</sup>	Private Practice	Consulting Firm	Correction Facility	Other <sup>4</sup>	Unknown	Total
1 East Kootenay	0	0	0	0	0	1	0	3	0	0	0	0	4
2 West Kootenay - Boundary	1	0	0	0	0	4	0	1	0	0	2	0	8
3 North Okanagan	0	0	0	0	0	0	0	7	0	0	2	0	9
4 South Okanagan - Similkameen	3	2	1	1	1	2	0	11	0	0	1	0	22
5 Thompson	1	1	0	1	0	1	1	4	0	0	2	0	11
6 Fraser Valley	2	2	2	0	1	4	2	1	1	10	0	1	26
7 South Fraser Valley	7	5	0	1	4	11	4	21	1	3	8	1	66
8 Simon Fraser	4	6	11	4	1	4	0	17	1	1	1	0	50
9 Coast Garibaldi	1	0	0	0	0	2	0	3	0	0	2	0	8
10 Central Vancouver Island	2	4	0	1	1	3	2	17	0	1	1	0	32
11 Upper Island/Central Coast	1	3	0	0	0	3	0	4	0	0	1	0	12
12 Cariboo	0	0	0	0	0	1	2	2	0	0	0	0	5
13 North West	1	0	0	1	0	1	0	1	1	0	0	0	5
14 Peace Liard	1	0	0	0	0	0	0	0	0	0	1	0	2
15 Northern Interior	0	5	0	1	1	0	1	2	0	0	0	0	10
16 Vancouver	15	31	3	44	23	5	7	102	15	3	31	1	280
17 Burnaby	4	17	1	0	0	7	7	6	1	1	4	1	49
18 North Shore	3	4	1	1	0	5	3	15	0	2	2	2	38
19 Richmond	3	1	0	1	11	1	3	9	0	0	5	2	36
20 Capital	8	24	8	2	5	14	12	50	5	2	12	2	144
TOTAL	57	105	27	58	48	69	44	276	25	23	75	10	817

Excludes 74 psychologists with Non-Practising status.

<sup>&</sup>lt;sup>2</sup> Excludes 17 psychologists who are employed in other fields, 5 who are not employed and 8 who did not indicate their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 7 psychologists who indicated "Federal Government" as their primary work setting, 34 who indicated "Provincial Government" and 3 who indicated "Municipal Government".

Includes 10 psychologists who indicated "Child Development Centre" as their primary work setting, 5 who indicated "Addiction Treatment Centre", 17 who indicated "Industrial/Commercial Firm", 16 who indicated "Social Agency" and 27 who indicated "Other".

Table 5 Practising Psychologists Employed in Psychology<sup>1,2</sup> in British Columbia by Health Region by Main Psychological Activity December 1998

Health Region	Direct Service	Consulting	Admin- istration	Teaching	Research	Unknown	Total
1 East Kootenay	4	0	0	0	0	0	4
2 West Kootenay - Boundary	7	0	1	0	0	0	8
3 North Okanagan	8	1	0	0	0	0	9
4 South Okanagan - Similkameen	18	3	0	1	0	0	22
5 Thompson	8	2	0	1	0	0	11
6 Fraser Valley	19	5	0	2	0	0	26
7 South Fraser Valley	54	3	5	4	0	0	66
8 Simon Fraser	36	5	2	5	2	0	50
9 Coast Garibaldi	6	2	0	0	0	0	8
10 Central Vancouver Island	24	3	1	4	0	0	32
11 Upper Island/Central Coast	10	1	0	1	0	0	12
12 Cariboo	5	0	0	0	0	0	5
13 North West	4	0	0	1	0	0	5
14 Peace Liard	1	0	1	0	0	0	2
15 Northern Interior	5	1	1	3	0	0	10
16 Vancouver	217	27	10	10	15	1	280
17 Burnaby	33	5	1	6	4	0	49
18 North Shore	31	4	0	2	1	0	38
19 Richmond	25	8	2	1	0	0	36
20 Capital	107	14	5	12	5	1	144
TOTAL	622	84	29	53	27	2	817

<sup>&</sup>lt;sup>1</sup> Excludes 74 psychologists with Non-Practising status.
<sup>2</sup> Excludes 17 psychologists who are employed in other fields, 5 who are not employed and 8 who did not indicate their employment status.

Table 6
Analysis of Change in the Number of Psychologists<sup>1</sup> in British Columbia by Health Region
December 1997 to December 1998

		New F	Registrants <sup>2,3</sup> b			Net Intra-			
Health Region	December 1997	B.C.	Other Canada	Other Country	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	Decembe 1998
1 East Kootenay	8	0	0	0	0	0	0	0	8
2 West Kootenay - Boundary	11	0	0	0	0	0	0	0	11
3 North Okanagan	8	1	0	0	1	0	0	1	10
4 South Okanagan - Similkameen	25	0	0	0	0	0	0	-1	24
5 Thompson	11	0	1	0	1	0	0	-1	11
6 Fraser Valley	28	0	0	1	1	0	1	-1	27
7 South Fraser Valley	67	4	2	1	7	1	3	2	74
8 Simon Fraser	52	3	1	4	8	0	0	-6	54
9 Coast Garibaldi	8	0	0	0	0	0	0	1	9
10 Central Vancouver Island	33	0	3	0	3	0	2	-1	33
11 Upper Island/Central Coast	16	0	0	0	0	0	1	-1	14
12 Cariboo	4	1	0	0	1	0	0	0	5
13 North West	7	0	0	0	0	0	0	-2	5
14 Peace Liard	3	0	0	0	0	0	1	0	2
15 Northern Interior	12	0	1	1	2	0	2	1	13
16 Vancouver	304	8	2	10	20	3	14	3	316
17 Burnaby	48	3	0	0	3	3	1	-1	52
18 North Shore	53	1	1	1	3	0	7	2	51
19 Richmond	35	1	0	1	2	0	1	1	37
20 Capital	153	7	3	1	11	1	3	3	165
OTAL	886	29	14	20	63	8	36	0	921

<sup>&</sup>lt;sup>1</sup>Includes Practising and Non-Practising psychologists.

<sup>&</sup>lt;sup>2</sup> Psychologists who reported B.C. addresses and were registered in December 1998 and whose date of initial registration was after December 1997.

There are no new registrant psychologists with unknown place of graduation.

<sup>&</sup>lt;sup>4</sup> Psychologists who reported B.C. addresses and were registered in December 1998 but not in December 1997 and who registered for the first time before December 1997.

<sup>&</sup>lt;sup>5</sup> Psychologists who reported B.C. addresses and were registered in December 1997 but not in December 1998.

# VI. REHABILITATION SERVICES

#### MASSAGE THERAPISTS

**Definition:** A massage therapist

...provides assessment, treatment and prevention of soft tissue and joint disorders, dysfunction or injury using treatment methods which include (but are not limited to) manual techniques, hydrotherapy, light therapy, electrical modalities, therapeutic exercise and patient education to rehabilitate, relieve pain and promote overall health.<sup>1</sup>

Governing Statute: Health Professions Act, R.S.B.C. 1996, Chapter 183; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** College of Massage Therapists of British Columbia (CMTBC). It is necessary

to be registered with the CMTBC in order to practise as a massage therapist in this province. Registered Massage Therapists have exclusive use of the titles: *massage therapist, registered massage therapist, massage practitioner*, and

registered massage practitioner.

**Date of Record:** December 1997 and December 1998.

**Source of Data:** College of Massage Therapists of British Columbia (CMTBC).

## **Preparation and Updating:**

The tables, prepared from registration data maintained by the CMTBC, reflect 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 registration status is *full registrant*, when employment in massage therapy is reported, and when employment address is available. In 1997 and 1998, employment address was available for 94% and 95% of full registrant massage therapists employed in massage therapy, respectively. Home address is used for the remainder, as well as for those who are not employed in massage therapy, and for MT's with inactive registration status.

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

#### 1. Registration Status

Full registrants are massage therapists who have passed registration examinations and are qualified to practise in massage therapy in British Columbia. Inactive registrants are members of the CMTBC who are not currently practising massage therapy in British Columbia. Prior to 1995, inactive registrants were not required to renew their registration annually so the count of their numbers was not necessarily accurate, and past ROLLCALL tables did not therefore include inactive registrants. As of 1995, the CMTBC requires inactive registrants to renew their registration each year, so accurate data on inactive registrants are now available and are presented in the tables this year.

•

<sup>&</sup>lt;sup>1</sup> Adapted from information provided by the College of Massage Therapists of British Columbia.

Tables 1a and 1b report number and number per 10,000 population of MT's by their registration status for 1997 and 1998. Table 1c shows the average annual rates of change in these numbers.

## 2. Age and Sex

Age and sex information for massage therapists who are full or inactive registrants of the CMTBC is presented 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 for full registrant MT's is reported in Table 3. This information is derived from the CMTBC registration renewal form. The following categories are used:

- (a) Employed in Massage Therapy;
  - (i) Permanent Full-Time
  - (ii) Permanent Part-Time
  - (iii) Casual/Locum
  - (iv) Unknown

- (b) Employed in Other Field;
- (c) Not Employed;
- (d) Employment Status Unknown.

## 4. Principal Employing Institution

Table 4 displays type of principal employing institution as reported by full registrant MT's employed in massage therapy on the CMTBC registration renewal form. The categories shown in the table are:

(a) Private Practice/Solo;

(b) Private Practice/Group or Clinic;

(c) Fitness Centre/Private Club/

Hotel/Spa/Resort;

(d) Office/Clinic;

(e) Educational Institution;

(f) Other;

(g) Unknown.

Some categories represent groupings of principal employers where numbers are small. When this is done, a footnote appears in Table 4 to define how many MT's reported in each specific category.

## 5. Principal Type of Position

Principal type of position for full registrant MT's is reported in Table 5. This information is derived from the CMTBC registration renewal form. Only the first position is reported where more than one was indicated. The categories shown in the table are:

(a) Staff Therapist;

(b) Sole Charge;

(c) Director/Assistant Director;

(d) Owner/Partner-Private Practice;

(e) Associate-Private Practice;

(f) Instructor/Education;

(g) Other;

(h) Unknown.

Some categories represent groupings of principal type of position where numbers are small. When this is done, a footnote appears in Table 5 to define how many MT's reported in each specific category.

#### 6. Patient/Non-Patient Care Activities

The information reported by Tables 6 and 7 on full registrant MT's are separated to distinguish between patient and non-patient care activities. This information was derived from separate questions on the registration renewal form.

The range of patient care activities listed in Table 6 are:

- (a) Not Applicable;
- (b) Palliative Care;
- (c) Prevention/Health Promotion;
- (d) Sports Medicine;
- (e) Short-Term Rehabilitation;
- (f) Long-Term Rehabilitation;
- (g) Stress Management;
- (h) Relaxation Therapy;
- (i) General;
- (j) Other;
- (k) Unknown.

The range of non-patient care activities listed in Table 7 are:

- (a) Not Applicable;
- (b) Administration;
- (c) Teaching;
- (d) Consulting;
- (e) Research;
- (f) Other;
- (g) Unknown.

Some categories in Table 7 represent groupings of non-patient care activities where numbers are small. When this is done, a footnote appears in the table to define how many MT's reported in each specific category.

### 7. Analysis of Change

Table 8 reports sources of change from December 1997 to December 1998 which affected the supply of full registrant MT's.

*New registrants* include massage therapists who were full registrants in the CMTBC as of December 1998 and who registered in the CMTBC *for the first time* subsequent to December 1997. 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 CMTBC in December 1997, but were full registrants in December 1998, and whose date of initial registration was before December 1997. Also included as reactivations are massage therapists who were full registrants and reported out-of-province addresses in December 1997, but who reported British Columbia addresses in December 1998.

Attrition describes massage therapists who were full registrants in the CMTBC and were included in the December 1997 supply, but who, because of death, retirement, out-of-province relocation, or non-renewal of full registration, were not included in the December 1998 supply.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of massage therapists who were full registrants in the CMTBC among different Health Regions. The net migration total is therefore zero.

Table 1a

Massage Therapists<sup>1</sup> in British Columbia
by Health Region by Registration Status
December 1997 and December 1998

	I	Full	Inac	ctive	Total		
Health Region	1997	1998	1997	1998	1997	1998	
1 East Kootenay	21	22	0	0	21	22	
2 West Kootenay - Boundary	38	41	6	4	44	45	
3 North Okanagan	44	47	1	2	45	49	
4 South Okanagan - Similkameen	68	74	3	1	71	75	
5 Thompson	31	32	0	1	31	33	
6 Fraser Valley	35	39	1	2	36	41	
7 South Fraser Valley	104	111	5	5	109	116	
8 Simon Fraser	72	81	1	2	73	83	
9 Coast Garibaldi	49	56	0	3	49	59	
10 Central Vancouver Island	55	61	3	4	58	65	
11 Upper Island/Central Coast	35	37	1	2	36	39	
12 Cariboo	13	12	0	0	13	12	
13 North West	12	11	1	2	13	13	
14 Peace Liard	6	5	0	1	6	6	
15 Northern Interior	9	12	1	0	10	12	
16 Vancouver	310	308	7	13	317	321	
17 Burnaby	39	47	1	2	40	49	
18 North Shore	87	85	6	7	93	92	
19 Richmond	25	35	0	0	25	35	
20 Capital	132	140	9	7	141	147	
OTAL	1,185	1,256	46	58	1,231	1,314	

<sup>&</sup>lt;sup>1</sup> MT's with Inactive registration status are included in this table this year. Previous editions of *ROLLCALL* included only Full registrants. Please see the text for details.

Table 1b
Massage Therapists<sup>1</sup> in British Columbia
per 10,000 Population by Health Region by Registration Status
December 1997 and December 1998

Total	To	tive	Inac	ıll	Fu	
1998	1997	1998	1997	1998	1997	Health Region
2.74	2.64	0.00	0.00	2.74	2.64	1 East Kootenay
5.49	5.40	0.49	0.74	5.00	4.67	2 West Kootenay - Boundary
4.18	3.89	0.17	0.09	4.01	3.81	3 North Okanagan
3.30	3.17	0.04	0.13	3.26	3.03	4 South Okanagan - Similkameen
2.46	2.35	0.07	0.00	2.39	2.35	5 Thompson
1.71	1.54	0.08	0.04	1.63	1.50	6 Fraser Valley
2.06	1.98	0.09	0.09	1.97	1.89	7 South Fraser Valley
2.64	2.38	0.06	0.03	2.57	2.35	8 Simon Fraser
7.54	6.51	0.38	0.00	7.16	6.51	9 Coast Garibaldi
2.69	2.44	0.17	0.13	2.53	2.32	10 Central Vancouver Island
3.21	3.00	0.16	0.08	3.04	2.91	11 Upper Island/Central Coast
1.58	1.74	0.00	0.00	1.58	1.74	12 Cariboo
1.43	1.43	0.22	0.11	1.21	1.32	13 North West
0.91	0.92	0.15	0.00	0.76	0.92	14 Peace Liard
0.91	0.77	0.00	0.08	0.91	0.69	15 Northern Interior
5.73	5.75	0.23	0.13	5.50	5.62	16 Vancouver
2.57	2.13	0.11	0.05	2.47	2.08	17 Burnaby
5.17	5.26	0.39	0.34	4.77	4.92	18 North Shore
2.18	1.59	0.00	0.00	2.18	1.59	19 Richmond
4.39	4.25	0.21	0.27	4.18	3.98	20 Capital
	3.14	0.21	0.27	3.15	3.98	OTAL

<sup>&</sup>lt;sup>1</sup> MT's with Inactive registration status are included in this table this year. Previous editions of *ROLLCALL* included only Full registrants. Please see the text for details.

Table 1c

Average Annual Rate of Change: Massage Therapists<sup>1</sup> in British Columbia by Health Region by Registration Status

December 1997 to December 1998

	Fu	ıll	Ina	ctive	Total		
Health Region	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	4.76	3.79	*	*	4.76	3.79	
2 West Kootenay - Boundary	7.89	7.19	*	*	2.27	1.61	
3 North Okanagan	6.82	5.44	*	*	8.89	7.48	
4 South Okanagan - Similkameen	8.82	7.37	*	*	5.63	4.23	
5 Thompson	3.23	1.68	*	*	6.45	4.86	
6 Fraser Valley	11.43	8.77	*	*	13.89	11.17	
7 South Fraser Valley	6.73	4.35	*	*	6.42	4.05	
8 Simon Fraser	12.50	9.57	*	*	13.70	10.74	
9 Coast Garibaldi	14.29	9.95	*	*	20.41	15.84	
10 Central Vancouver Island	10.91	9.19	*	*	12.07	10.33	
11 Upper Island/Central Coast	5.71	4.37	*	*	8.33	6.95	
12 Cariboo	-7.69	-9.00	*	*	-7.69	-9.00	
13 North West	-8.33	-8.72	*	*	0.00	-0.42	
14 Peace Liard	*	*	*	*	*	*	
15 Northern Interior	*	*	*	*	20.00	18.52	
16 Vancouver	-0.65	-2.16	*	*	1.26	-0.28	
17 Burnaby	20.51	18.64	*	*	22.50	20.60	
18 North Shore	-2.30	-3.08	*	*	-1.08	-1.86	
19 Richmond	40.00	36.87	*	*	40.00	36.87	
20 Capital	6.06	5.25	*	*	4.26	3.46	
OTAL	5.99	4.25	26.09	24.02	6.74	4.99	

<sup>&</sup>lt;sup>1</sup> MT's with Inactive registration status are included in this table this year. Previous editions of *ROLLCALL* included only Full registrants. Please see the text for details.

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

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

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2
Massage Therapists<sup>1</sup> in British Columbia
by Health Region by Age and Sex<sup>2</sup>
December 1998

	<	25	25	-34	35	-44	45-	-54	55-	64	65	+	Age Un	known	Sub	total	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	<u>F</u>	M	F	Total
1 East Kootenay	0	2	0	4	2	10	3	0	0	1	0	0	0	0	5	17	22
2 West Kootenay - Boundary	0	0	7	10	7	10	2	5	2	0	1	0	0	1	19	26	45
3 North Okanagan	0	0	3	15	5	15	4	6	0	1	0	0	0	0	12	37	49
4 South Okanagan - Similkameen	2	1	7	15	11	17	7	11	2	1	1	0	0	0	30	45	75
5 Thompson	0	2	2	14	2	5	1	3	0	3	1	0	0	0	6	27	33
6 Fraser Valley	0	2	4	9	4	9	5	5	1	1	1	0	0	0	15	26	41
7 South Fraser Valley	2	4	21	26	9	36	4	12	1	1	0	0	0	0	37	79	116
8 Simon Fraser	0	4	17	31	4	10	3	10	0	2	0	1	1	0	25	58	83
9 Coast Garibaldi	1	0	6	16	6	21	3	5	0	1	0	0	0	0	16	43	59
10 Central Vancouver Island	0	0	4	16	7	20	4	14	0	0	0	0	0	0	15	50	65
11 Upper Island/Central Coast	0	0	1	10	3	12	0	10	0	3	0	0	0	0	4	35	39
12 Cariboo	0	0	0	5	2	2	0	2	0	1	0	0	0	0	2	10	12
13 North West	0	0	0	6	0	2	1	3	0	0	0	1	0	0	1	12	13
14 Peace Liard	0	1	1	1	0	1	0	1	0	1	0	0	0	0	1	5	6
15 Northern Interior	0	0	1	3	2	1	1	4	0	0	0	0	0	0	4	8	12
16 Vancouver	1	5	30	103	38	71	14	48	2	6	2	0	0	1	87	234	321
17 Burnaby	2	3	8	12	6	8	3	5	1	1	0	0	0	0	20	29	49
18 North Shore	0	3	6	28	7	30	3	11	1	3	0	0	0	0	17	75	92
19 Richmond	0	3	7	10	5	3	4	2	0	1	0	0	0	0	16	19	35
20 Capital	0	2	5	29	11	41	12	37	6	0	2	0	1	1	37	110	147
TOTAL	8	32	130	363	131	324	74	194	16	27	8	2	2	3	369	945	1,314

<sup>&</sup>lt;sup>1</sup> Includes Full and Inactive registrants. Previous editions of *ROLLCALL* included only Full registrants. Please see the text for details.

<sup>&</sup>lt;sup>2</sup> There are no MT's with missing sex information.

Table 3

Massage Therapists (Full Registrants)<sup>1</sup> in British Columbia by Health Region by Employment Status

December 1998

		Employed a	s a Massag	ge Therapist		_		Employment	
Health Region	Permanent Full-Time	Permanent Part-Time	Casual/ Locum	Unknown	Subtotal	Employed in Other Field		Status Unknown	Tota
1 East Kootenay	9	10	1	1	21	0	0	1	22
2 West Kootenay - Boundary	12	22	0	1	35	2	0	4	41
3 North Okanagan	15	24	0	1	40	0	0	7	47
4 South Okanagan - Similkameen	37	24	1	2	64	1	0	9	74
5 Thompson	9	15	1	1	26	0	1	5	32
6 Fraser Valley	17	14	0	2	33	0	0	6	39
7 South Fraser Valley	49	37	1	8	95	0	1	15	111
8 Simon Fraser	33	28	0	0	61	0	1	19	81
9 Coast Garibaldi	20	20	1	4	45	2	1	8	56
10 Central Vancouver Island	20	23	0	7	50	0	0	11	61
11 Upper Island/Central Coast	9	21	0	2	32	2	1	2	37
12 Cariboo	3	8	0	1	12	0	0	0	12
13 North West	3	7	0	0	10	0	0	1	11
14 Peace Liard	3	2	0	0	5	0	0	0	4
15 Northern Interior	7	2	0	0	9	1	1	1	12
16 Vancouver	106	110	8	11	235	6	6	61	308
17 Burnaby	21	16	0	1	38	0	0	9	47
18 North Shore	27	36	3	3	69	3	1	12	85
19 Richmond	11	15	0	0	26	1	1	7	35
20 Capital	49	63	2	5	119	1	1	19	140
OTAL	460	497	18	50	1,025	19	15	197	1,256

<sup>&</sup>lt;sup>1</sup> Excludes 58 Inactive registrants.

Table 4

Massage Therapists (Full Registrants)<sup>1</sup> Employed in Massage Therapy<sup>2</sup> in British Columbia by Health Region by Principal Employing Institution

December 1998

Health Region	Private Practice/ Solo	Private Practice/ Group or Clinic	Fitness Centre/ Private Club/ Hotel/Spa/ Resort <sup>3</sup>	Office/ Clinic <sup>4</sup>	Educational Institution	Other <sup>5</sup>	Unknown	Total
1 East Kootenay	14	5	1	1	0	0	0	21
2 West Kootenay - Boundary	19	12	0	2	0	0	2	35
3 North Okanagan	17	15	0	3	3	0	2	40
4 South Okanagan - Similkameen	33	24	0	3	0	1	3	64
5 Thompson	11	11	3	0	0	0	1	26
6 Fraser Valley	19	7	2	0	0	1	4	33
7 South Fraser Valley	27	48	1	9	1	2	7	95
8 Simon Fraser	10	44	1	3	0	2	1	61
9 Coast Garibaldi	17	16	8	1	0	0	3	45
10 Central Vancouver Island	24	19	0	2	0	1	4	50
11 Upper Island/Central Coast	14	15	0	0	0	1	2	32
12 Cariboo	9	2	0	1	0	0	0	12
13 North West	9	0	0	0	0	1	0	10
14 Peace Liard	3	2	0	0	0	0	0	5
15 Northern Interior	8	1	0	0	0	0	0	9
16 Vancouver	54	131	8	11	8	6	17	235
17 Burnaby	4	30	0	1	0	1	2	38
18 North Shore	19	38	3	3	0	1	5	69
19 Richmond	4	18	1	0	0	1	2	26
20 Capital	59	44	3	5	1	2	5	119
OTAL	374	482	31	45	13	20	60	1,025

Excludes 58 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 19 MT's who are employed in other fields, 15 who are not employed and 197 who did not indicate their employment status.

<sup>&</sup>lt;sup>5</sup> Includes 7 MT's who indicated "Fitness Centre/Private Club" as their principal employer and 24 who indicated "Hotel/Spa/Resort".

<sup>&</sup>lt;sup>4</sup> Includes 2 MT's who indicated "Sports Medicine Clinic" as their principal employer, 40 who indicated "Chiropractic Office", 2 who indicated "Naturopathic Office" and 1 who indicated "Pain Clinic".

<sup>&</sup>lt;sup>5</sup> Includes 1 MT who indicated "General Hospital" as his/her principal employer, 1 who indicated "Community Health Agency", 2 who indicated "Long Term Care", 1 who indicated "Industry/Retail" and 15 who indicated "Other".

Table 5

Massage Therapists (Full Registrants)<sup>1</sup> Employed in Massage Therapy<sup>2</sup> in British Columbia by Health Region by Principal Type of Position<sup>3</sup>

December 1998

Health Region	Staff Therapist	Sole Charge	Director/ Assistant Director <sup>4</sup>	Owner/ Partner- Private Practice	Associate- Private Practice	Instructor/ Education	Other <sup>5</sup>	Unknown	Total
1 East Kootenay	1	5	0	14	1	0	0	0	21
2 West Kootenay - Boundary	2	15	0	11	5	0	0	2	35
3 North Okanagan	4	9	0	15	5	3	1	3	40
4 South Okanagan - Similkameen	7	18	0	26	7	1	2	3	64
5 Thompson	3	4	1	11	6	0	0	1	26
6 Fraser Valley	3	7	0	18	1	0	0	4	33
7 South Fraser Valley	7	14	0	45	17	1	4	7	95
8 Simon Fraser	9	4	0	24	21	0	2	1	61
9 Coast Garibaldi	9	6	2	16	7	0	2	3	45
10 Central Vancouver Island	4	9	0	23	7	0	1	6	50
11 Upper Island/Central Coast	2	6	0	13	8	0	0	3	32
12 Cariboo	0	4	0	5	3	0	0	0	12
13 North West	0	7	0	2	0	0	1	0	10
14 Peace Liard	1	1	0	3	0	0	0	0	5
15 Northern Interior	0	5	0	4	0	0	0	0	9
16 Vancouver	52	25	4	62	61	6	5	20	235
17 Burnaby	4	6	0	15	9	0	0	4	38
18 North Shore	18	8	0	23	13	0	2	5	69
19 Richmond	3	3	0	10	9	0	0	1	26
20 Capital	10	29	0	61	8	1	2	8	119
OTAL	139	185	7	401	188	12	22	71	1,025

<sup>&</sup>lt;sup>1</sup> Excludes 58 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 19 MT's who are employed in other fields, 15 who are not employed and 197 who did not indicate their employment status.

<sup>&</sup>lt;sup>5</sup> Please note the category "Program Coordinator" is not shown in the table as there were no MT's who indicated this category in 1998.

<sup>&</sup>lt;sup>4</sup> Includes 6 MT's who indicated "Director" as their principal employment position and 1 who indicated "Assistant Director".

<sup>&</sup>lt;sup>5</sup> Includes 6 MT's who indicated "Consultant" as their principal employment position and 16 who indicated "Other".

Table 6
Massage Therapists (Full Registrants)<sup>1</sup> Employed in Massage Therapy<sup>2</sup> in British Columbia by Health Region by Principal Patient Care Activity

December 1998

Long-term Rehab.

			Prevention/		Cl4 4	(	,					
	Not	Palliative	Health	Sports		(eg. arthritis/ chronic back		Relaxation				
Health Region	Applicable	Care	Promotion	-	(eg. post-MVA				General	Other	Unknown	Total
1 East Kootenay	1	0	2	0	4	6	0	0	7	1	0	21
2 West Kootenay - Boundary	0	1	2	1	3	7	1	0	19	0	1	35
3 North Okanagan	2	0	5	0	8	1	1	0	20	3	0	40
4 South Okanagan - Similkameen	1	1	5	0	13	13	1	0	25	2	3	64
5 Thompson	0	0	2	0	9	3	0	0	11	1	0	26
6 Fraser Valley	0	0	1	0	7	4	0	0	16	2	3	33
7 South Fraser Valley	2	0	6	2	28	23	1	0	28	1	4	95
8 Simon Fraser	1	0	6	0	21	5	0	1	26	1	0	61
9 Coast Garibaldi	1	0	8	0	8	5	1	5	11	3	3	45
10 Central Vancouver Island	0	0	4	0	9	12	1	1	17	3	3	50
11 Upper Island/Central Coast	0	0	0	0	3	9	0	0	17	1	2	32
12 Cariboo	0	0	1	0	2	2	0	0	7	0	0	12
13 North West	0	0	2	0	2	1	0	0	5	0	0	10
14 Peace Liard	0	0	0	0	1	0	0	0	4	0	0	5
15 Northern Interior	0	0	1	0	3	0	0	0	5	0	0	9
16 Vancouver	3	0	14	4	65	41	4	3	74	11	16	235
17 Burnaby	0	0	4	0	15	4	0	0	11	2	2	38
18 North Shore	1	0	13	0	8	11	0	1	28	4	3	69
19 Richmond	1	0	4	0	8	3	0	0	8	1	1	26
20 Capital	0	1	8	2	26	22	0	1	54	4	1	119
OTAL	13	3	88	9	243	172	10	12	393	40	42	1,025

<sup>&</sup>lt;sup>1</sup> Excludes 58 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 19 MT's who are employed in other fields, 15 who are not employed and 197 who did not indicate their employment status.

Table 7

Massage Therapists (Full Registrants)<sup>1</sup> Employed in Massage Therapy<sup>2</sup> in British Columbia by Health Region by Principal Non-Patient Care Activity

December 1998

Health Region	Not Applicable	Admin- istration	Teaching	Consulting	Research	Other <sup>3</sup>	Unknown	Total
1 East Kootenay	9	4	3	2	0	1	2	21
2 West Kootenay - Boundary	25	5	2	0	1	1	1	35
3 North Okanagan	20	7	8	1	1	1	2	40
4 South Okanagan - Similkameen	38	16	3	0	2	1	4	64
5 Thompson	12	9	2	0	1	1	1	26
6 Fraser Valley	16	10	2	0	0	1	4	33
7 South Fraser Valley	44	38	4	0	2	1	6	95
8 Simon Fraser	38	16	4	0	0	0	3	61
9 Coast Garibaldi	25	12	1	0	0	2	5	45
10 Central Vancouver Island	27	12	5	0	0	0	6	50
11 Upper Island/Central Coast	12	11	3	0	0	1	5	32
12 Cariboo	6	4	0	1	0	0	1	12
13 North West	6	3	1	0	0	0	0	10
14 Peace Liard	3	1	0	0	0	1	0	5
15 Northern Interior	4	3	2	0	0	0	0	9
16 Vancouver	121	70	12	5	2	5	20	235
17 Burnaby	19	11	3	1	0	0	4	38
18 North Shore	39	18	3	2	0	1	6	69
19 Richmond	14	7	1	0	0	1	3	26
20 Capital	58	29	13	2	2	8	7	119
OTAL	536	286	72	14	11	26	80	1,025

<sup>&</sup>lt;sup>1</sup> Excludes 58 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 19 MT's who are employed in other fields, 15 who are not employed and 197 who did not indicate their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 2 MT's who indicated "Sales" as their principal non-patient care activity and 24 who indicated "Other".

Table 8 Analysis of Change in the Number of Massage Therapists (Full Registrants)<sup>1</sup> in British Columbia by Health Region December 1997 to December 1998

		New I	Registrants <sup>2,3</sup> b	y Place of Grad	luation			Net Intra-		
Health Region	December 1997	B.C.	Other Canada	Unknown	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	December 1998	
1 East Kootenay	21	0	0	0	0	0	0	1	22	
2 West Kootenay - Boundary	38	1	1	0	2	2	2	1	41	
3 North Okanagan	44	5	0	0	5	1	1	-2	47	
4 South Okanagan - Similkameen	68	7	0	0	7	2	4	1	74	
5 Thompson	31	2	1	0	3	0	2	0	32	
6 Fraser Valley	35	4	0	0	4	0	0	0	39	
7 South Fraser Valley	104	5	1	1	7	3	7	4	111	
8 Simon Fraser	72	11	2	0	13	1	5	0	81	
9 Coast Garibaldi	49	4	1	0	5	1	4	5	56	
10 Central Vancouver Island	55	3	1	0	4	1	2	3	61	
11 Upper Island/Central Coast	35	1	1	0	2	2	2	0	37	
12 Cariboo	13	0	0	0	0	0	0	-1	12	
13 North West	12	0	0	0	0	0	1	0	11	
14 Peace Liard	6	0	0	0	0	0	1	0	5	
15 Northern Interior	9	1	0	0	1	1	0	1	12	
16 Vancouver	310	32	1	0	33	6	21	-20	308	
17 Burnaby	39	4	0	0	4	1	2	5	47	
18 North Shore	87	3	3	0	6	1	5	-4	85	
19 Richmond	25	6	0	0	6	1	0	3	35	
20 Capital	132	5	2	0	7	2	4	3	140	
TOTAL	1,185	94	14	1	109	25	63	0	1,256	

<sup>&</sup>lt;sup>1</sup> Excludes 58 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> MT's who reported B.C. addresses and were full registrants in December 1998 and whose date of initial registration was after December 1997.

There are no new registrant MT's with "Other Country" as their place of graduation in 1998.

MT's who reported B.C. addresses and were full registrants in December 1998 but not in December 1997 and who were registered for the first time before December 1997.

<sup>&</sup>lt;sup>5</sup> MT's who reported B.C. addresses and were full registrants in December 1997 but not in December 1998.

#### 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.1

**Governing Statute:** None.

Governing Body: None. Compulsory registration and/or licensure do not exist.<sup>2</sup> Membership in

the British Columbia Society of Occupational Therapists (BCSOT) is

voluntary. However, registered members of the BCSOT have exclusive use of the titles:  $Registered\ Occupational\ Therapist,\ (BC)$  and  $Registered\ OT$ , (BC). Occupational therapists who have graduated from a dual program in occupational therapy and physiotherapy may be registered with the College of

Physical Therapists of British Columbia.

**Dates of Record:** March 1998 and December 1998.

**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 (OT's) who are also registered with the College of Physical Therapists of British Columbia (CPTBC) are included in

Adapted from National Occupational Classification 1992, Major Group 31, No. 3143, Ottawa: Employment and Immigration Canada.

Occupational therapists are in the process of becoming a regulated profession with compulsory registration; the *Occupational Therapists Regulation* (B.C. Regulation 1500/98) designated occupational therapy as a health profession under the *Health Professions Act, R.S.B.C. 1996, Chapter 183* and established the College of Occupational Therapists to regulate occupational therapy in British Columbia on December 9, 1998.

<sup>&</sup>lt;sup>3</sup> Members of the new College of Occupational Therapists will have exclusive use of the title "occupational therapist".

both the occupational therapy and physical therapy sections of *ROLLCALL UPDATE 98*. The exact number of personnel who are both members of the BCSOT and registered with the CPTBC is not known, 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 *registered* or *provisional*, when employment in occupational therapy is reported, and when employment address is available. In March 1998 and December 1998, employment address was available for 90% and 96% of registered or provisional OT's employed in occupational therapy, respectively. Home address is used for the remainder, as well as for OT's with registered or provisional status who are not employed in occupational therapy, and for OT's with non-practising membership status.

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

## 1. Membership Status

OT's may hold a practising membership in the BCSOT and be registered as *full-time*, *part-time* or *provisional* members, or hold a *non-practising* membership in the BCSOT. OT's 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 OT's who were members of the BCSOT at the dates of record using the following membership categories:

(a) Registered - Full-Time;

(c) Provisional;

(b) Registered - Part-Time;

(d) Non-Practising.

Table 1b reports the number of OT's per 10,000 population by their membership status. Average annual rates of change are shown in Table 1c.

#### 2. Age and Sex

Age and sex information for OT's 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.

The number of BCSOT members with unknown age has increased substantially since 1995, and will continue to do so, as the BCSOT no longer collects birthdate information from its members. Most of the members with unknown age are new members to the BCSOT.

### 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;

(b) Employed in Other Field;

- (i) Full-Time
- (ii) Part-Time
- (iii) Casual/Locum
- (iv) Unknown

- (c) Not Employed;
- (d) On Leave;
- (e) Other/Unknown.

## 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 categories shown in the table are:

- (a) Acute Care Hospital;
- (b) Paediatric Hospital;
- (c) Rehabilitation Hospital;
- (d) Psychiatric Hospital;
- (e) Long Term Care;
- (f) Public Community Health Agency;

- (g) Children's Treatment/Outpatient Centre;
- (h) Workers' Compensation Board;
- (i) Voluntary/Non-Profit Agency;
- (j) School Board/University/College;
- (k) Private Practice;
- (1) Other.

Some categories represent groupings of principal employers where numbers are small. When this is done, a footnote appears in Table 4 to define how many OT's reported in each specific category. Where possible, the small number of members who reported "Other" for their principal employer on their BCSOT registration form have been assigned by the HHRU to one of the categories above, based on their written response under "Other".

## 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 categories shown in the table are:

- (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/Teaching;
- (j) Home Care;
- (k) Vocational Rehabilitation;
- (1) Other/Unknown.

Some categories represent groupings of principal area of service where numbers are small. When this is done, a footnote appears in Table 5 to define how many OT's reported in each specific category. Where possible, a large number of members who reported "Other" for their principal area of service on their BCSOT registration form have been assigned by the HHRU to one of the categories above, based on their written response under "Other".

# 6. Principal Position

Table 6 shows type of principal position, as reported by registered and provisional BCSOT members employed in occupational therapy. The categories shown in the table are:

- (a) Staff Therapist;
- (b) Senior Therapist;
- (c) Sole Charge;
- (d) Dept. Head/Assistant Dept. Head;
- (e) Clinical Coordinator;

- (f) Program Coordinator/Director;
- (g) Faculty Position/Researcher;
- (h) Consultant;
- (h) Clinical Specialist;
- (i) Other.

Some categories represent groupings of principal position where numbers are small. When this is done, a footnote appears in Table 6 to define how many OT's reported in each specific category. Where

possible, a small number of members who reported "Other" for their principal position on their BCSOT registration form have been assigned by the HHRU to one of the categories above, based on their written response under "Other".

# 7. Analysis of Change

Table 7 illustrates sources of change which affected the supply of OT's who were registered or provisional members of the BCSOT from March 1998 to December 1998.

*New registrants* include OT's who were registered or provisional members of the BCSOT as of December 1998 and who registered with the BCSOT *for the first time* subsequent to March 1998. 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 OT's who were neither registered nor provisional members of the BCSOT in March 1998, but who were registered or provisional members in the province in December 1998, and whose date of initial registration was before March 1998. Also included as reactivations are registered or provisional members of the BCSOT who reported out-of-province addresses in March 1998, but who reported British Columbia addresses in December 1998.

Attrition describes OT's who were registered or provisional members of the BCSOT who were included in the March 1998 supply of OT's, but who, because of death, retirement, out-of-province relocation, or non-renewal of registered or provisional membership, were not included in the December 1998 supply.

*Net Intraprovincial Migration* describes the net effect of intraprovincial migration; it records the flow of OT's who were registered or provisional members of the BCSOT among different Health Regions. The net migration total is therefore zero.

Table 1a
Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia
by Health Region by Membership Status
March 1998 and December 1998

Registered **Full-Time** Part-Time **Provisional** Non-Practising Subtotal **Total Health Region** Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 1 East Kootenay 2 West Kootenay - Boundary 3 North Okanagan 4 South Okanagan - Similkameen 5 Thompson 6 Fraser Valley 7 South Fraser Valley 8 Simon Fraser 9 Coast Garibaldi 10 Central Vancouver Island 11 Upper Island/Central Coast 12 Cariboo 13 North West 14 Peace Liard 15 Northern Interior 16 Vancouver 17 Burnaby 18 North Shore 19 Richmond 20 Capital **TOTAL** 

<sup>&</sup>lt;sup>1</sup> Membership in the BCSOT is voluntary.

Table 1b Occupational Therapists (BCSOT Members)<sup>1</sup> in British Columbia per 10,000 Population by Health Region by Membership Status March 1998 and December 1998

Registered **Provisional** Total **Full-Time Part-Time** Subtotal Non-Practising **Health Region** Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 Mar-98 Dec-98 0.38 0.37 0.00 0.25 1 East Kootenay 0.75 0.87 0.00 1.13 1.24 0.13 1.26 1.49 2 West Kootenay - Boundary 0.73 0.37 0.24 0.00 0.00 0.98 0.98 0.37 0.37 1.34 0.61 1.35 0.43 0.78 1.04 1.02 3 North Okanagan 0.35 0.51 0.43 0.00 0.00 0.94 0.26 0.09 4 South Okanagan - Similkameen 2.50 2.29 0.54 0.62 0.00 0.04 3.03 2.95 0.04 0.09 3.08 3.04 5 Thompson 1.06 1.19 0.38 0.45 0.00 0.00 1.44 1.64 0.15 0.07 1.59 1.72 6 Fraser Valley 0.43 0.25 0.26 0.46 0.00 0.04 0.68 0.75 0.04 0.00 0.73 0.75 7 South Fraser Valley 0.73 0.85 0.40 0.30 0.02 0.02 1.17 0.11 0.07 1.25 1.24 1.14 8 Simon Fraser 1.57 1.46 0.42 0.32 0.03 0.03 2.02 1.81 0.00 0.00 2.02 1.81 9 Coast Garibaldi 0.53 0.51 0.13 0.26 0.00 0.00 0.66 0.77 0.13 0.00 0.80 0.77 10 Central Vancouver Island 1.18 1.41 0.63 0.50 0.04 0.00 1.85 1.91 0.00 0.04 1.85 1.95 0.75 0.90 0.50 0.58 0.08 1.48 0.08 11 Upper Island/Central Coast 0.00 1.33 0.08 1.42 1.56 12 Cariboo 0.53 0.40 0.27 0.80 0.53 0.80 0.13 0.00 0.00 0.00 0.13 0.66 13 North West 1.10 0.99 0.22 0.11 0.11 0.00 1.43 1.10 0.22 0.11 1.65 1.21 14 Peace Liard 0.31 0.61 0.15 0.15 0.00 0.00 0.46 0.76 0.00 0.00 0.46 0.76 15 Northern Interior 0.61 0.38 0.92 0.91 0.00 0.46 0.31 0.00 0.08 0.000.92 0.91 16 Vancouver 3.75 3.73 1.02 0.93 0.13 0.16 4.90 4.82 0.29 0.14 5.19 4.97 17 Burnaby 1.71 1.94 0.43 0.47 0.00 0.00 2.13 2.42 0.16 0.11 2.29 2.52 18 North Shore 0.79 1.46 0.74 0.34 0.06 0.00 1.58 1.80 0.17 0.22 1.75 2.02 19 Richmond 2.67 2.68 0.51 0.50 0.13 0.06 3.31 0.13 0.12 3.44 3.36 3.24 20 Capital 1.72 2.24 0.81 0.69 0.06 0.06 2.59 2.99 0.18 0.15 2.77 3.14

0.04

0.04

2.11

2.16

0.13

0.10

2.24

2.25

1.52

1.64

0.55

0.48

**TOTAL** 

Membership in the BCSOT is voluntary.

Table 1c

Average Annual Rate of Change<sup>1</sup>: Occupational Therapists (BCSOT Members)<sup>2</sup> in British Columbia by Health Region by Membership Status

March 1998 to December 1998

		Reg	istered		_							
	Full-	Time	Part-	Time	Provis	ional	Subt	total	Non-Pr	actising	Total	
Health Region	Number <sup>3</sup>	Ratio <sup>4</sup>										
1 East Kootenay	*	*	*	*	*	*	*	*	*	*	24.46	23.07
2 West Kootenay - Boundary	*	*	*	*	*	*	*	*	*	*	0.00	-0.78
3 North Okanagan	*	*	*	*	*	*	*	*	*	*	0.00	-1.55
4 South Okanagan - Similkameen	-8.51	-9.97	20.32	18.40	*	*	-1.76	-3.33	*	*	0.00	-1.60
5 Thompson	17.38	15.28	*	*	*	*	19.23	17.10	*	*	11.53	9.54
6 Fraser Valley	*	*	-45.83	-47.37	*	*	15.18	11.89	*	*	7.10	4.04
7 South Fraser Valley	24.46	21.13	-26.61	-28.57	*	*	5.74	2.91	*	*	1.74	-0.98
8 Simon Fraser	-4.98	-7.94	-27.01	-29.28	*	*	-9.60	-12.41	*	*	-9.60	-12.41
9 Coast Garibaldi	*	*	*	*	*	*	*	*	*	*	*	*
10 Central Vancouver Island	26.24	23.89	-23.49	-24.91	*	*	5.48	3.52	*	*	8.24	6.23
11 Upper Island/Central Coast	*	*	*	*	*	*	15.18	13.42	*	*	14.28	12.53
12 Cariboo	*	*	*	*	*	*	*	*	*	*	*	*
13 North West	-11.88	-12.32	*	*	*	*	-27.01	-27.38	*	*	-31.08	-31.43
14 Peace Liard	*	*	*	*	*	*	*	*	*	*	*	*
15 Northern Interior	*	*	*	*	*	*	0.00	-1.48	*	*	0.00	-1.48
16 Vancouver	1.16	-0.68	-8.51	-10.18	*	*	0.00	-1.82	-56.47	-57.27	-3.35	-5.11
17 Burnaby	19.03	16.82	*	*	*	*	18.26	16.06	*	*	14.11	11.99
18 North Shore	110.19	108.19	-60.46	-60.84	*	*	17.38	16.26	*	*	19.65	18.51
19 Richmond	2.86	0.11	*	*	*	*	0.00	-2.68	*	*	0.00	-2.68
20 Capital	39.00	37.73	-17.50	-18.26	*	*	19.84	18.74	*	*	17.19	16.11
OTAL	11.58	9.39	-14.26	-15.95	0.00	-1.97	4.50	2.45	-29.75	-31.13	2.46	0.44

 $<sup>^{1}</sup>$  A 10 month rate of change has been adjusted to an average annual figure.

<sup>&</sup>lt;sup>2</sup> Membership in the BCSOT is voluntary.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2 Occupational Therapists  $(BCSOT\ Members)^1$  in British Columbia by Health Region by Age and Sex<sup>2</sup> December 1998

	<	25	2	5-34	3.	5-44	4	5-54	55	5-64	65	5 +	Age U	nknown	Su	btotal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	0	0	0	4	0	4	0	2	0	0	0	0	0	2	0	12	12
2 West Kootenay - Boundary	0	0	1	0	0	6	1	1	0	0	0	0	0	2	2	9	11
3 North Okanagan	0	0	0	2	0	6	0	2	0	1	0	0	0	1	0	12	12
4 South Okanagan - Similkameen	0	0	1	13	0	21	1	12	0	4	0	0	1	16	3	66	69
5 Thompson	0	0	1	7	0	6	1	7	0	1	0	0	0	0	2	21	23
6 Fraser Valley	0	0	0	2	1	6	0	3	0	0	0	0	0	6	1	17	18
7 South Fraser Valley	0	1	0	11	1	23	0	18	0	2	1	0	0	13	2	68	70
8 Simon Fraser	0	0	1	10	5	16	0	10	0	6	0	0	1	8	7	50	57
9 Coast Garibaldi	0	0	0	0	0	3	0	2	0	0	0	0	0	1	0	6	6
10 Central Vancouver Island	0	0	0	8	1	15	0	14	0	2	0	0	0	7	1	46	47
11 Upper Island/Central Coast	0	0	0	2	0	3	0	9	0	1	0	0	0	4	0	19	19
12 Cariboo	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	5	5
13 North West	0	0	0	4	0	2	0	4	0	0	0	0	0	1	0	11	11
14 Peace Liard	0	0	0	2	1	0	0	0	0	0	0	0	0	2	1	4	5
15 Northern Interior	0	0	0	4	0	2	1	2	0	0	0	0	0	3	1	11	12
16 Vancouver	0	1	6	68	9	73	0	48	0	19	0	0	0	54	15	263	278
17 Burnaby	0	0	1	10	3	15	0	8	0	4	0	0	0	7	4	44	48
18 North Shore	0	0	0	6	0	14	0	7	0	4	0	1	0	4	0	36	36
19 Richmond	0	0	3	20	2	10	1	3	0	3	0	0	0	12	6	48	54
20 Capital	0	0	2	15	3	32	2	24	0	8	0	0	0	19	7	98	105
TOTAL	0	2	16	191	26	259	7	176	0	55	1	1	2	162	52	846	898

 $<sup>^{\</sup>rm 1}$  Membership in the BCSOT is voluntary.  $^{\rm 2}$  There are no OT's with missing sex information.

Table 3 Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1,2</sup> in British Columbia by Health Region by Employment Status December 1998

		Employed in	Casual/	iai Therapy		Employed in	Not	On	Other/	
Health Region	Full-Time	Part-Time	Locum	Unknown	Subtotal		Employed	Leave	Unknown <sup>4</sup>	Total
1 East Kootenay	6	3	0	0	9	0	0	1	0	10
2 West Kootenay - Boundary	4	3	1	0	8	0	0	0	0	8
3 North Okanagan	6	4	1	0	11	0	0	0	0	11
4 South Okanagan - Similkameen	37	25	4	0	66	0	0	0	1	67
5 Thompson	10	10	2	0	22	0	0	0	0	22
6 Fraser Valley	7	10	0	0	17	0	0	0	1	18
7 South Fraser Valley	37	21	4	0	62	0	1	2	1	66
8 Simon Fraser	35	18	2	1	56	0	0	0	1	57
9 Coast Garibaldi	3	3	0	0	6	0	0	0	0	6
10 Central Vancouver Island	26	14	3	0	43	0	0	2	1	46
11 Upper Island/Central Coast	9	8	0	0	17	0	1	0	0	18
12 Cariboo	3	1	0	0	4	0	0	0	0	4
13 North West	7	2	0	0	9	0	0	0	1	10
14 Peace Liard	4	1	0	0	5	0	0	0	0	5
15 Northern Interior	6	5	0	0	11	0	1	0	0	12
16 Vancouver	174	61	17	1	253	2	3	4	8	270
17 Burnaby	31	9	2	0	42	1	1	1	1	46
18 North Shore	15	12	2	0	29	0	0	0	3	32
19 Richmond	39	10	0	0	49	1	0	1	1	52
20 Capital	51	33	9	1	94	1	1	2	2	100
OTAL	510	253	47	3	813	5	8	13	21	860

<sup>&</sup>lt;sup>1</sup> Membership in the BCSOT is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 38 Non-Practising members.

Includes 23 OT's employed in combined occupational therapy/physical therapy.
 Includes 17 OT's who indicated "Other" as their employment status and 4 who did not supply this information.

Table 4

Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1,2</sup> Employed in Occupational Therapy<sup>3</sup> in British Columbia by Health Region by Principal Employer<sup>4</sup>

December 1998

		Hosp	pital Rehabil-		Long Term	Public Community Health	Childrens Treatment/ Outpatient	Workers' Comp- ensation	Voluntary/	School Board/ University/	Private		
Health Region	Acute	Paediatric	itation	Psychiatric	Care <sup>5</sup>	Agency <sup>6</sup>	Centre	Board	Agency	College <sup>7</sup>	Practice Practice	Other <sup>8</sup>	Total
1 East Kootenay	2	0	0	0	0	4	0	0	0	0	3	0	9
2 West Kootenay - Boundary	2	0	0	0	0	0	2	0	0	1	3	0	8
3 North Okanagan	5	0	0	0	0	2	1	0	0	0	3	0	11
4 South Okanagan - Similkameen	23	1	2	0	5	5	1	0	0	1	28	0	66
5 Thompson	7	0	0	0	2	5	4	0	0	0	4	0	22
6 Fraser Valley	3	0	0	0	3	4	0	0	0	0	7	0	17
7 South Fraser Valley	28	0	0	0	7	4	7	0	1	4	11	0	62
8 Simon Fraser	25	1	0	9	6	5	1	0	0	0	7	2	56
9 Coast Garibaldi	2	0	0	0	0	1	0	0	0	0	3	0	6
10 Central Vancouver Island	19	0	0	0	4	2	8	0	1	1	8	0	43
11 Upper Island/Central Coast	5	0	0	0	2	3	0	0	1	0	6	0	17
12 Cariboo	0	0	0	0	0	1	2	0	0	1	0	0	4
13 North West	2	0	0	0	0	0	1	0	1	0	4	1	9
14 Peace Liard	0	0	0	0	1	0	2	0	0	0	2	0	5
15 Northern Interior	2	0	0	0	0	2	0	0	0	3	4	0	11
16 Vancouver	69	12	47	2	20	35	4	4	10	5	45	0	253
17 Burnaby	10	0	0	0	7	8	0	0	5	0	11	1	42
18 North Shore	12	0	0	0	3	8	0	0	0	0	5	1	29
19 Richmond	10	0	1	0	2	4	0	24	1	1	5	1	49
20 Capital	16	1	11	1	16	20	7	0	3	1	16	2	94
TOTAL	242	15	61	12	78	113	40	28	23	18	175	8	813

<sup>&</sup>lt;sup>1</sup> Membership in the BCSOT is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 38 Non-Practising members.

<sup>&</sup>lt;sup>3</sup> Excludes 5 OT's who are employed in another field, 8 who are not employed, 13 who are on leave of absence and 21 who indicated "Other/Unknown" for their employment status.

<sup>&</sup>lt;sup>4</sup> A small number of OTs who reported "Other" for their principal employer on their BCSOT registration form have been assigned by the HHRU to an appropriate principal employer in the table where possible. See text.

<sup>5</sup> Includes 50 OT's who indicated "Extended Care Hospital" as their principal employer, 8 who indicated "Intermediate Care Facility", 19 who indicated "Personal/Home Care" and 1 who indicated "Centre for Mentally Handicapped".

<sup>&</sup>lt;sup>6</sup>Includes 3 OT's who indicated "Adult Day Care" as their principal employer.

<sup>&</sup>lt;sup>7</sup> Includes 13 OT's who indicated "School Board" as their principal employer and 5 who indicated "University/College".

<sup>&</sup>lt;sup>8</sup> Includes 2 OT's who indicated "Insurance Corporation" as their principal employer, 2 who indicated "Retail Business", and 4 who indicated "Other".

Table 5
Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1,2</sup> Employed in Occupational Therapy<sup>3</sup> in British Columbia by Health Region by Principal Area of Service<sup>4</sup>
December 1998

	Acute	Extended									Vocational		
Health Region	Care Inpatient	Care Inpatient	Psyc Inpatient	hiatry Outpatient		oilitation Outpatient	General Outpatient	Admin- istration	Research/ Teaching <sup>5</sup>	Home Care	Rehabil- itation	Other/ Unknown <sup>6</sup>	Total
1 East Kootenay	1	0	0	0	0	4	1	0	0	2	0	1	9
2 West Kootenay - Boundary	1	0	0	0	0	1	3	0	0	1	1	1	8
3 North Okanagan	4	0	0	0	1	1	2	0	0	1	2	0	11
4 South Okanagan - Similkameen	7	4	1	2	10	18	1	2	0	9	10	2	66
5 Thompson	2	2	1	2	1	3	2	1	0	5	2	1	22
6 Fraser Valley	0	2	2	3	0	2	1	0	0	2	1	4	17
7 South Fraser Valley	10	6	3	3	1	9	7	4	1	9	6	3	62
8 Simon Fraser	11	7	10	4	4	2	2	3	1	5	3	4	56
9 Coast Garibaldi	1	1	0	0	0	2	1	0	0	0	0	1	6
10 Central Vancouver Island	5	4	1	1	4	11	7	2	0	2	5	1	43
11 Upper Island/Central Coast	3	1	0	2	0	3	3	0	0	4	1	0	17
12 Cariboo	0	0	0	0	0	2	1	0	0	1	0	0	4
13 North West	0	1	0	0	0	2	2	1	0	0	3	0	9
14 Peace Liard	0	1	0	0	0	2	1	0	0	0	1	0	5
15 Northern Interior	0	0	0	0	0	1	2	1	0	2	4	1	11
16 Vancouver	47	14	7	17	41	30	22	9	9	25	29	3	253
17 Burnaby	8	5	0	8	2	2	1	0	0	5	8	3	42
18 North Shore	2	4	1	3	3	2	2	1	0	9	1	1	29
19 Richmond	3	1	3	3	0	10	3	0	0	4	20	2	49
20 Capital	11	9	2	4	14	15	6	0	0	14	10	9	94
TOTAL	116	62	31	52	81	122	70	24	11	100	107	37	813

<sup>&</sup>lt;sup>1</sup> Membership in the BCSOT is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 38 Non-Practising members.

<sup>&</sup>lt;sup>3</sup> Excludes 5 OTs who are employed in another field, 8 who are not employed, 13 who are on leave of absence and 21 who indicated "Other/Unknown" for their employment status.

<sup>&</sup>lt;sup>4</sup> A large number of OT's who reported "Other" for their principal area of service on their BCSOT registration form have been assigned by the HHRU to an appropriate principal area of service in the table where possible. See text.

<sup>&</sup>lt;sup>5</sup> Includes 2 OT's who indicated "Research" as their principal area of service and 9 who indicated "Teaching".

<sup>&</sup>lt;sup>6</sup> Includes 33 OT's who indicated "Other" as their principal area of service and 4 who did not supply this information.

Table 6
Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1,2</sup> Employed in Occupational Therapy<sup>3</sup> in British Columbia by Health Region by Principal Position<sup>4</sup>
December 1998

Health Region	Staff Therapist	Senior Therapist	Sole Charge	Dept. Head/ Assistant Dept. Head <sup>5</sup>	Clinical Coordinator	Program Coordinator/ Director	Faculty Position/ Researcher <sup>6</sup>	Consultant	Clinical Specialist	Other	Total
1 East Kootenay	2	1	3	0	0	0	0	2	0	1	9
2 West Kootenay - Boundary	1	0	3	1	0	0	0	3	0	0	8
3 North Okanagan	3	2	2	1	1	1	0	1	0	0	11
4 South Okanagan - Similkameen	27	7	4	3	0	3	0	22	0	0	66
5 Thompson	11	1	2	2	0	1	0	4	1	0	22
6 Fraser Valley	6	1	3	0	0	0	0	3	0	4	17
7 South Fraser Valley	37	0	3	4	0	1	1	15	0	1	62
8 Simon Fraser	29	10	6	4	1	0	0	6	0	0	56
9 Coast Garibaldi	0	0	4	0	0	0	0	2	0	0	6
10 Central Vancouver Island	22	4	7	3	0	1	0	5	0	1	43
11 Upper Island/Central Coast	4	1	4	2	0	1	0	4	0	1	17
12 Cariboo	1	1	2	0	0	0	0	0	0	0	4
13 North West	2	0	2	1	0	1	0	2	0	1	9
14 Peace Liard	1	0	2	0	1	1	0	0	0	0	5
15 Northern Interior	4	1	0	1	0	2	0	3	0	0	11
16 Vancouver	148	21	11	9	2	9	5	36	6	6	253
17 Burnaby	17	6	2	2	0	3	0	11	0	1	42
18 North Shore	16	5	2	1	0	0	0	5	0	0	29
19 Richmond	42	2	1	0	0	0	0	3	0	1	49
20 Capital	67	6	3	2	2	3	0	8	0	3	94
OTAL	440	69	66	36	7	27	6	135	7	20	813

<sup>&</sup>lt;sup>1</sup> Membership in the BCSOT is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 38 Non-Practising members.

Excludes 5 OT's who are employed in another field, 8 who are not employed, 13 who are on leave of absence and 21 who indicated "Other/Unknown" for their employment status.

<sup>&</sup>lt;sup>4</sup> A small number of OT's who reported "Other" for their principal position on their BCSOT registration form have been assigned by the HHRU to an appropriate principal position in the table where possible. See text.

<sup>&</sup>lt;sup>5</sup> Includes 35 OT's who indicated "Department Head" as their principal position and 1 who indicated "Assistant Department Head".

<sup>&</sup>lt;sup>6</sup> Includes 6 OT's who indicated "Faculty Position" as their principal position.

Table 7

Analysis of Change in the Number of Registered and Provisional Occupational Therapists (BCSOT Members)<sup>1,2</sup>
in British Columbia by Health Region

March 1998 to December 1998

			New Registra	nts <sup>3</sup> by Place	of Graduation				Net Intra-	
Health Region	March 1998	B.C.	Other Canada	Other Country	Unknown	Subtotal	Reactivation <sup>4</sup>	Attrition <sup>5</sup>	provincial Migration	December 1998
1 East Kootenay	9	0	0	0	0	0	1	0	0	10
2 West Kootenay - Boundary	8	0	0	0	0	0	2	2	0	8
3 North Okanagan	9	0	0	0	0	0	2	0	0	11
4 South Okanagan - Similkameen	68	0	1	0	1	2	4	6	-1	67
5 Thompson	19	0	0	0	0	0	3	2	2	22
6 Fraser Valley	16	0	3	0	0	3	0	1	0	18
7 South Fraser Valley	63	1	0	1	0	2	5	5	1	66
8 Simon Fraser	62	0	1	1	1	3	4	7	-5	57
9 Coast Garibaldi	5	0	0	0	0	0	1	0	0	6
10 Central Vancouver Island	44	0	3	0	0	3	4	3	-2	46
11 Upper Island/Central Coast	16	0	1	0	0	1	3	2	0	18
12 Cariboo	6	0	0	0	0	0	0	2	0	4
13 North West	13	0	1	0	0	1	1	5	0	10
14 Peace Liard	3	0	0	1	0	1	0	0	1	5
15 Northern Interior	12	0	0	1	0	1	0	1	0	12
16 Vancouver	270	3	8	4	0	15	35	43	-7	270
17 Burnaby	40	1	0	0	0	1	3	1	3	46
18 North Shore	28	0	0	1	0	1	2	3	4	32
19 Richmond	52	1	0	0	0	1	8	9	0	52
20 Capital	86	0	3	1	0	4	13	7	4	100
TOTAL	829	6	21	10	2	39	91	99	0	860

<sup>&</sup>lt;sup>1</sup> Membership in the BCSOT is voluntary.

<sup>&</sup>lt;sup>2</sup> Excludes 51 Non-Practising members in March 1998 and 38 Non-Practising members in December 1998.

<sup>&</sup>lt;sup>3</sup> OT's who reported B.C. addresses and were registered or provisional members in December 1998 and whose date of initial registration was after March 1998.

<sup>&</sup>lt;sup>4</sup> OT's who reported B.C. addresses and were registered or provisional members in December 1998 but not in March 1998 and who were registered for the first time before March 1998.

<sup>&</sup>lt;sup>5</sup> OT's who reported B.C. addresses and were practising or provisional members in March 1998 but not in December 1998.

### PHYSICAL THERAPISTS

**Definition:** A physical therapist (formerly 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 aging processes to restore and/or achieve optimal function.

Physical therapists 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, 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 caregivers 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: Health Professions Act, R.S.B.C. 1996, Chapter 183; administered by the

Ministry of Health and Ministry Responsible for Seniors.

**Governing Body:** College of Physical Therapists of BC (CPTBC). In order to practice as a

physical therapist in British Columbia, it is necessary to be registered by the CPTBC. Registered Physical Therapists have exclusive use of the titles: *physical therapist, registered physical therapist, physiotherapist,* and

registered physiotherapist.

**Dates of Record:** April 1998 and March 1999.

**Source of Data:** College of Physical Therapists of British Columbia (CPTBC).

# **Preparation and Updating:**

The tables, prepared from registration data maintained by the CPTBC, include physical therapists (PT's) who reported a British Columbia address at the date of record. PT's who also hold membership

Adapted from National Occupational Classification 1992, Major Group 31, No. 3142, Ottawa: Employment and Immigration Canada.

in the British Columbia Society of Occupational Therapists (BCSOT) are included in both the physical therapy and occupational therapy sections of *ROLLCALL UPDATE 98*. The exact number of personnel who are both registered with the CPTBC and members of the BCSOT is not known so the extent of double-counting of personnel in these two groups cannot be determined.

The data in the tables are presented based on employment address when the registration status is *full* or *limited*, when employment in physical therapy is reported, and when employment address is available. In 1998 and 1999, employment address was available for 95% and 98% of full or limited PT's employed in physical therapy, respectively. Home address is used for the remainder, as well as for PT's with full or limited status who are not employed in physical therapy, and for PT's with inactive registration status.

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

# 1. Registration Status

A physical therapist may be a *full*, *limited* or *inactive* registrant of the CPTBC. A PT may work as a limited (formerly temporary) registrant until all qualifications for membership are met. PT's with inactive registration status are included in these tables as these registrants are now required to pay a fee and register each year. Remedial gymnasts may also register as members of the CPTBC but are not included in the tables. The numbers of PT's in each registration category, numbers per 10,000 population, and average annual rates of change in these numbers are shown in Tables 1a, 1b and 1c respectively.

### 2. Age and Sex

Age and sex information for physical therapists who are full, limited or inactive registrants of the CPTBC 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 CPTBC registration renewal form for full and limited registrant PT's is reported in Table 3. The following categories are used:

- (a) Employed in Physical Therapy;
  - (i) Full-time
  - (ii) Part-time
  - (iii) Casual
  - (iv) Status unknown
- (b) On Leave:
- (c) Employed in Other Field;
- (d) Not Employed;
- (e) Unknown.

Please note that the category of "employed in physical therapy - casual" was new in 1998.

### 4. Principal Employing Institution

Table 4 displays principal employing institution for full and limited registrant PT's employed in physical therapy as reported on the CPTBC registration renewal form. The categories shown in the table are:

- (a) General/Extended Care Hospital;
- (b) Rehabilitation Hospital/Facility;
- (c) Long Term Care;
- (d) Workers' Compensation Board;
- (e) Community Health Centre;
- (f) Homecare Program;
- (g) Arthritis Society;

- (h) Paediatric Hospital/Facility;
- (k) Private Practice;
- (1) Government/Official Agency;
- (m) School Board;
- (n) University/College;
- (o) Other;
- (p) Unknown.

Some categories represent groupings of employers 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 for full and limited registrants employed in physical therapy as reported on the CPTBC registration renewal form is shown in Table 5. The categories shown in the table are:

- (a) Cardiology;
- (b) Neurology;
- (c) Orthopaedics;
- (c) Respirology;
- (e) Rheumatology;
- (f) Sports Medicine;
- (g) Gerontology;

- (h) General;
- (i) Administration;
- (j) Teaching;
- (k) Consulting;
- (l) Other;
- (m) Unknown.

Some categories represent groupings of employment activities 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 CPTBC registration renewal form by full and limited registrants employed in physical therapy is reported in Table 6. The categories shown in the table are:

- (a) Staff Therapist;
- (b) Sole Charge;
- (c) Program Co-ordinator;
- (d) Senior Therapist;
- (e) Director;
- (f) Assistant Director;

- (g) Consultant;
- (h) Owner/Partner Private Practice;
- (i) Associate Private Practice;
- (i) Other;
- (k) Unknown.

Some of these categories represent groupings of employment positions 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 supply of PT's who were full or limited registrants from April 1998 to March 1999.

*New registrants* include PT's who were full or limited registrants as of March 1999 and who registered with the College of Physical Therapists of British Columbia (CPTBC) *for the first time* subsequent to April 1998. 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 PT's who were neither full nor limited registrants of the CPTBC in April 1998, but were full or limited registrants in March 1999, and whose date of initial registration was before April 1998. Also included as reactivations are full and limited registrants of the CPTBC who reported out-of-province addresses in April 1998, but who reported British Columbia addresses in March 1999.

Attrition describes PT's who were full or limited registrants of the CPTBC and were included in the April 1998 PT supply, but who, because of death, retirement, out-of-province relocation or non-renewal of active registration with the CPTBC were not included in the March 1999 supply.

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

Table 1a
Physical Therapists in British Columbia
by Health Region by Registration Status
April 1998 and March 1999

	H	Full	Lim	ited	Su	btotal	Ina	ctive	Т	otal
Health Region	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999
1 East Kootenay	34	39	0	0	34	39	2	2	36	41
2 West Kootenay - Boundary	50	51	0	0	50	51	6	5	56	56
3 North Okanagan	71	69	0	2	71	71	4	5	75	76
4 South Okanagan - Similkameen	140	134	2	4	142	138	10	8	152	146
5 Thompson	55	54	0	0	55	54	5	6	60	60
6 Fraser Valley	72	70	2	4	74	74	5	4	79	78
7 South Fraser Valley	171	179	2	12	173	191	15	17	188	208
8 Simon Fraser	149	151	2	10	151	161	5	7	156	168
9 Coast Garibaldi	48	51	1	2	49	53	5	5	54	58
10 Central Vancouver Island	105	105	1	2	106	107	11	10	117	117
11 Upper Island/Central Coast	50	51	1	2	51	53	6	8	57	61
12 Cariboo	27	28	0	0	27	28	1	1	28	29
13 North West	30	28	0	1	30	29	1	3	31	32
14 Peace Liard	19	18	3	3	22	21	5	5	27	26
15 Northern Interior	41	44	1	2	42	46	7	7	49	53
16 Vancouver	516	505	5	18	521	523	45	47	566	570
17 Burnaby	77	73	2	4	79	77	2	5	81	82
18 North Shore	119	121	5	6	124	127	16	13	140	140
19 Richmond	100	99	0	3	100	102	5	6	105	108
20 Capital	254	248	1	8	255	256	21	29	276	285
)TAL	2,128	2,118	28	83	2,156	2,201	177	193	2,333	2,394

Table 1b
Physical Therapists in British Columbia
per 10,000 Population by Health Region by Registration Status
April 1998 and March 1999

	Fu	all	Lin	nited	Sub	total	Ina	ctive	Te	otal
Health Region	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999
1 East Kootenay	4.27	4.85	0.00	0.00	4.27	4.85	0.25	0.25	4.52	5.10
2 West Kootenay - Boundary	6.14	6.22	0.00	0.00	6.14	6.22	0.74	0.61	6.88	6.83
3 North Okanagan	6.14	5.89	0.00	0.17	6.14	6.06	0.35	0.43	6.49	6.49
4 South Okanagan - Similkameen	6.25	5.90	0.09	0.18	6.34	6.08	0.45	0.35	6.78	6.43
5 Thompson	4.17	4.03	0.00	0.00	4.17	4.03	0.38	0.45	4.55	4.48
6 Fraser Valley	3.08	2.92	0.09	0.17	3.16	3.09	0.21	0.17	3.38	3.26
7 South Fraser Valley	3.11	3.18	0.04	0.21	3.14	3.39	0.27	0.30	3.42	3.70
8 Simon Fraser	4.86	4.80	0.07	0.32	4.93	5.12	0.16	0.22	5.09	5.34
9 Coast Garibaldi	6.38	6.52	0.13	0.26	6.51	6.77	0.66	0.64	7.17	7.41
10 Central Vancouver Island	4.42	4.35	0.04	0.08	4.46	4.44	0.46	0.41	4.93	4.85
11 Upper Island/Central Coast	4.16	4.19	0.08	0.16	4.25	4.36	0.50	0.66	4.75	5.02
12 Cariboo	3.61	3.69	0.00	0.00	3.61	3.69	0.13	0.13	3.74	3.82
13 North West	3.31	3.07	0.00	0.11	3.31	3.18	0.11	0.33	3.42	3.51
14 Peace Liard	2.92	2.73	0.46	0.45	3.38	3.18	0.77	0.76	4.14	3.94
15 Northern Interior	3.15	3.34	0.08	0.15	3.22	3.49	0.54	0.53	3.76	4.02
16 Vancouver	9.36	9.02	0.09	0.32	9.45	9.34	0.82	0.84	10.27	10.18
17 Burnaby	4.11	3.83	0.11	0.21	4.22	4.04	0.11	0.26	4.32	4.31
18 North Shore	6.73	6.79	0.28	0.34	7.02	7.13	0.91	0.73	7.92	7.86
19 Richmond	6.37	6.16	0.00	0.19	6.37	6.35	0.32	0.37	6.69	6.72
20 Capital	7.65	7.41	0.03	0.24	7.68	7.65	0.63	0.87	8.31	8.52
ГОТАL	5.43	5.31	0.07	0.21	5.50	5.52	0.45	0.48	5.95	6.00

Table 1c Average Annual Rate of Change<sup>1</sup>: Physical Therapists in British Columbia by Health Region by Registration Status **April 1998 to March 1999** 

	F	ull	Lir	nited	Sub	total	Ina	ctive	To	tal
Health Region	Number <sup>2</sup>	Ratio <sup>3</sup>								
1 East Kootenay	17.90	16.59	*	*	17.90	16.59	*	*	16.89	15.59
2 West Kootenay - Boundary	2.40	1.60	*	*	2.40	1.60	*	*	0.00	-0.78
3 North Okanagan	-3.37	-4.87	*	*	0.00	-1.55	*	*	1.60	0.03
4 South Okanagan - Similkameen	-5.12	-6.64	*	*	-3.37	-4.91	-23.49	-24.71	-4.72	-6.24
5 Thompson	-2.18	-3.93	*	*	-2.18	-3.93	*	*	0.00	-1.79
6 Fraser Valley	-3.32	-6.08	*	*	0.00	-2.85	*	*	-1.52	-4.33
7 South Fraser Valley	5.64	2.82	*	*	12.61	9.60	16.21	13.10	12.90	9.88
8 Simon Fraser	1.61	-1.55	*	*	8.00	4.64	*	*	9.30	5.90
9 Coast Garibaldi	7.55	2.67	*	*	9.87	4.90	*	*	8.95	4.02
10 Central Vancouver Island	0.00	-1.86	*	*	1.13	-0.74	-10.81	-12.46	0.00	-1.86
11 Upper Island/Central Coast	2.40	0.84	*	*	4.72	3.13	*	*	8.48	6.82
12 Cariboo	4.46	2.69	*	*	4.46	2.69	*	*	4.30	2.53
13 North West	-7.95	-8.41	*	*	-3.99	-4.47	*	*	3.88	3.36
14 Peace Liard	-6.28	-7.66	*	*	-5.43	-6.82	*	*	-4.43	-5.83
15 Northern Interior	8.84	7.24	*	*	11.53	9.89	*	*	9.87	8.25
16 Vancouver	-2.55	-4.33	*	*	0.46	-1.37	5.36	3.44	0.85	-0.99
17 Burnaby	-6.20	-7.94	*	*	-3.03	-4.83	*	*	1.48	-0.40
18 North Shore	2.02	1.05	*	*	2.91	1.93	-22.06	-22.80	0.00	-0.95
19 Richmond	-1.20	-3.84	*	*	2.40	-0.34	*	*	3.44	0.67
20 Capital	-2.83	-3.72	*	*	0.47	-0.45	47.30	45.95	3.93	2.97
OTAL	-0.56	-2.52	268.39	261.14	2.51	0.49	10.94	8.76	3.15	1.12

 $<sup>^1</sup>$  A10 month rate of change has been adjusted to an average annual figure.  $^2$  Rate of change (in percent) in the number.

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

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

Table 2
Physical Therapists<sup>1</sup> in British Columbia
by Health Region by Age and Sex
March 1999

	<	25	25	-34	35	-44	45	-54	55-	64	65	+	Age Un	known	Sul	ototal	Sex	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Unknown	Total
1 East Kootenay	0	0	2	12	2	9	2	7	1	5	0	0	0	1	7	34	0	41
2 West Kootenay - Boundary	0	1	3	5	2	20	3	14	0	6	0	1	0	1	8	48	0	56
3 North Okanagan	1	3	2	13	7	16	4	22	1	4	1	2	0	0	16	60	0	76
4 South Okanagan - Similkameen	0	1	8	23	12	51	7	32	1	8	2	0	0	1	30	116	0	146
5 Thompson	0	0	1	9	5	16	5	12	1	11	0	0	0	0	12	48	0	60
6 Fraser Valley	1	2	9	18	4	12	2	20	3	6	0	0	1	0	20	58	0	78
7 South Fraser Valley	0	2	19	36	14	52	7	49	5	13	1	1	2	5	48	158	2	208
8 Simon Fraser	0	6	11	33	9	55	3	31	3	12	0	4	1	0	27	141	0	168
9 Coast Garibaldi	0	0	4	19	0	15	1	14	1	2	0	2	0	0	6	52	0	58
10 Central Vancouver Island	0	0	5	15	6	30	2	42	4	10	1	0	0	2	18	99	0	117
11 Upper Island/Central Coast	0	1	4	8	2	13	3	24	1	4	0	0	0	1	10	51	0	61
12 Cariboo	1	0	1	3	2	10	0	10	0	1	0	1	0	0	4	25	0	29
13 North West	0	0	3	5	5	8	0	8	0	3	0	0	0	0	8	24	0	32
14 Peace Liard	0	1	2	6	2	5	0	5	0	4	0	0	0	1	4	22	0	26
15 Northern Interior	0	1	2	14	2	13	0	19	0	1	0	0	0	1	4	49	0	53
16 Vancouver	1	7	43	138	34	149	14	123	3	43	2	6	0	7	97	473	0	570
17 Burnaby	0	1	6	21	6	20	4	16	1	4	1	0	2	0	20	62	0	82
18 North Shore	0	2	7	26	5	35	3	31	0	28	0	2	0	1	15	125	0	140
19 Richmond	0	2	6	25	7	23	7	29	1	8	0	0	0	0	21	87	0	108
20 Capital	0	4	10	38	15	74	11	82	6	31	3	7	2	1	47	237	1	285
TOTAL	4	34	148	467	141	626	78	590	32	204	11	26	8	22	422	1,969	3	2,394

<sup>&</sup>lt;sup>1</sup> Includes Full, Limited and Inactive registrants.

Table 3
Physical Therapists<sup>1</sup> in British Columbia
by Health Region by Employment Status
March 1999

		Employe	d in Physica	l Therapy <sup>2</sup>			Employed in	Not		
Health Region	Full-Time	Part-Time	Casual	Unknown	Subtotal	On Leave	Other Field	Employed	Unknown	Tota
1 East Kootenay	17	16	2	0	35	1	1	1	1	39
2 West Kootenay - Boundary	18	25	3	2	48	0	0	1	2	51
3 North Okanagan	41	18	4	0	63	1	0	2	5	71
4 South Okanagan - Similkameen	75	41	7	1	124	2	0	6	6	138
5 Thompson	32	18	4	0	54	0	0	0	0	54
6 Fraser Valley	46	18	2	1	67	0	0	1	6	74
7 South Fraser Valley	117	41	9	3	170	1	2	5	13	191
8 Simon Fraser	82	45	13	2	142	0	1	3	15	16
9 Coast Garibaldi	30	14	2	2	48	2	0	1	2	53
10 Central Vancouver Island	53	32	9	3	97	2	0	1	7	10
11 Upper Island/Central Coast	22	22	1	0	45	0	1	0	7	53
12 Cariboo	12	11	1	0	24	1	0	1	2	28
13 North West	16	7	3	0	26	0	0	2	1	29
14 Peace Liard	10	3	1	0	14	0	1	1	5	2
15 Northern Interior	20	16	4	0	40	0	0	0	6	40
16 Vancouver	300	117	31	7	455	2	21	9	36	523
17 Burnaby	44	16	6	1	67	1	0	4	5	7
18 North Shore	48	47	8	4	107	0	4	5	11	12
19 Richmond	67	22	6	1	96	0	1	2	3	102
20 Capital	120	87	16	7	230	4	5	7	10	250
OTAL	1,170	616	132	34	1,952	17	37	52	143	2,201

<sup>&</sup>lt;sup>1</sup> Excludes 193 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Includes 44 PT's who reported employment in combined physical/occupational therapy.

Table 4 Physical Therapists Employed in Physical Therapy  $^{1,2}$  in British Columbia by Health Region by Principal Employing Institution **March 1999** 

Health Region	General/ Ext. Care Hospital	Rehab. Hospital/ Facility	Long Term Care	Workers' Compensation Board	Community Health Centre	Homecare Program	Arthritis Society	Paediatric Hospital/ Facility	Private Practice	School Board	University/ College	Other <sup>3</sup>	Unknown
1 East Kootenay	17	0	0	0	1	2	1	0	12	2	0	0	0
2 West Kootenay - Boundary	19	0	1	0	0	0	0	1	21	1	0	3	2
3 North Okanagan	27	0	2	0	3	0	0	3	23	0	0	2	3
4 South Okanagan - Similkameen	41	2	9	0	5	5	1	3	39	3	2	1	13
5 Thompson	22	1	2	0	0	3	0	2	18	0	0	1	5
6 Fraser Valley	18	0	1	0	0	3	0	3	36	1	1	2	2
7 South Fraser Valley	40	4	4	2	2	2	0	8	88	1	1	2	16
8 Simon Fraser	56	3	4	0	1	4	0	2	55	0	0	4	13
9 Coast Garibaldi	7	0	0	0	1	3	0	1	28	1	0	2	5
10 Central Vancouver Island	27	0	3	0	3	3	0	4	50	1	0	2	4
11 Upper Island/Central Coast	15	0	0	0	3	0	0	1	21	1	0	2	2
12 Cariboo	4	0	1	0	1	2	0	2	12	0	0	0	2
13 North West	11	1	0	0	1	0	0	1	11	0	0	1	0
14 Peace Liard	5	0	1	0	0	0	0	1	1	1	0	0	5
15 Northern Interior	13	1	0	0	3	2	0	5	14	1	0	0	1
16 Vancouver	126	52	8	6	8	18	8	39	134	0	6	11	39
17 Burnaby	16	0	2	0	1	8	0	1	33	0	2	0	4
18 North Shore	21	1	4	0	6	5	0	0	53	0	1	1	15
19 Richmond	17	3	3	34	0	7	0	0	22	0	0	1	9
20 Capital	47	20	14	0	5	16	4	14	81	0	3	6	20
OTAL	549	88	59	42	44	83	14	91	752	13	16	41	160

<sup>&</sup>lt;sup>1</sup> Excludes 193 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 17 PT's who are on leave, 37 who are employed in other fields, 52 who are not employed and 143 who did not indicate their employment status.
<sup>3</sup> Includes 2 PT's who indicated "Industry" as their principal employing institution, 4 who indicated "Other Visiting Agency", 4 who indicated "Psychiatric Hospital/Facility", 4 who indicated "Government/Official Agency" and 27 who indicated "Other".

Table 5
Physical Therapists Employed in Physical Therapy<sup>1,2</sup> in British Columbia by Health Region by Principal Employment Activity

March 1999

												Prevention/		
Health Region	Cardiology	Neurology	Ortho- paedics	Respirology	Rheum- atology	Sports Medicine	Geron- tology	General	Admin- istration	Teaching	Consulting	Health Promotion	Other <sup>3</sup>	Unknown
1 East Kootenay	0	1	16	0	0	0	3	11	2	0	0	0	0	2
2 West Kootenay - Boundary	0	3	28	0	0	0	2	14	0	0	0	0	0	1
3 North Okanagan	0	3	21	0	0	1	4	24	5	0	1	0	2	2
4 South Okanagan - Similkameen	0	16	42	2	3	3	13	32	3	2	2	1	2	3
5 Thompson	0	6	20	2	0	2	1	20	1	0	1	1	0	0
6 Fraser Valley	0	8	30	0	0	1	5	21	0	0	1	0	0	1
7 South Fraser Valley	1	11	88	3	3	1	13	35	5	2	0	1	2	5
8 Simon Fraser	2	9	68	7	1	1	14	31	4	0	1	0	1	3
9 Coast Garibaldi	0	1	17	0	0	7	2	18	0	0	1	0	1	1
10 Central Vancouver Island	0	3	39	0	1	0	3	39	3	1	3	0	1	4
11 Upper Island/Central Coast	0	1	19	0	0	1	2	16	0	0	2	1	0	3
12 Cariboo	0	2	7	0	0	0	1	11	1	0	0	0	0	2
13 North West	0	1	12	0	0	1	1	11	0	0	0	0	0	0
14 Peace Liard	0	0	4	0	0	0	1	8	0	0	0	0	0	1
15 Northern Interior	0	9	15	1	0	0	1	13	0	0	1	0	0	0
16 Vancouver	7	77	152	25	16	16	35	64	10	7	4	6	25	11
17 Burnaby	0	0	39	1	0	5	8	10	1	0	1	1	0	1
18 North Shore	1	11	49	2	2	7	11	13	1	2	0	1	3	4
19 Richmond	0	5	51	1	2	1	3	17	5	0	0	3	7	1
20 Capital	3	32	90	8	7	2	26	39	4	1	5	1	5	7
TOTAL	14	199	807	52	35	49	149	447	45	15	23	16	49	52

<sup>&</sup>lt;sup>1</sup> Excludes 193 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 17 PT's who are on leave, 37 who are employed in other fields, 52 who are not employed and 143 who did not indicate their employment status.

Includes 10 PT's who indicated "Amputees" as their principal patient care activity, 6 who indicated "Plastics", 5 who indicated "Palliative Care", 4 who indicated "Psychiatry/Mentally Handicapped", 4 who indicated "Burns", 11 who indicated "Obstetrics/Gynaecology", 1 who indicated "Research" and 8 who indicated "Other Non-Patient Care" as their principal activity.

Table 6
Physical Therapists Employed in Physical Therapy<sup>1,2</sup> in British Columbia by Health Region by Principal Type of Position
March 1999

Health Region	Staff Therapist	Sole Charge	Program Co-ordinator	Senior Therapist	Director/ Assistant Director <sup>3</sup>	Consultant	Owner/ Partner Private Practice	Associate- Private Practice	Other <sup>4</sup>	Unknown	Total
1 East Kootenay	12	5	0	0	4	2	7	4	1	0	35
2 West Kootenay - Boundary	16	8	0	1	3	2	8	9	0	1	48
3 North Okanagan	27	2	3	2	5	1	19	3	1	0	63
4 South Okanagan - Similkameen	55	7	1	6	4	5	22	18	5	1	124
5 Thompson	21	6	0	5	2	2	12	6	0	0	54
6 Fraser Valley	22	3	0	3	2	3	18	15	1	0	67
7 South Fraser Valley	67	9	0	5	4	4	30	45	4	2	170
8 Simon Fraser	64	4	1	10	5	2	26	25	3	2	142
9 Coast Garibaldi	12	5	1	0	1	2	14	12	1	0	48
10 Central Vancouver Island	36	8	0	6	1	2	29	10	1	4	97
11 Upper Island/Central Coast	16	6	0	1	2	3	10	6	1	0	45
12 Cariboo	6	6	0	0	1	1	9	0	1	0	24
13 North West	9	5	0	2	0	0	6	4	0	0	26
14 Peace Liard	5	3	0	2	1	1	2	0	0	0	14
15 Northern Interior	23	2	0	1	1	2	6	3	2	0	40
16 Vancouver	239	9	4	28	8	10	66	59	26	6	455
17 Burnaby	26	1	2	4	2	2	16	14	0	0	67
18 North Shore	41	3	0	6	3	1	30	18	2	3	107
19 Richmond	55	1	6	5	1	0	13	8	6	1	96
20 Capital	120	7	7	8	3	12	38	19	11	5	230
OTAL	872	100	25	95	53	57	381	278	66	25	1,952

<sup>&</sup>lt;sup>1</sup> Excludes 193 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> Excludes 17 PT's who are on leave, 37 who are employed in other fields, 52 who are not employed and 143 who did not indicate their employment status.

<sup>&</sup>lt;sup>3</sup> Includes 5 PT's who indicated "Assistant Director" as their principal type of position.

<sup>&</sup>lt;sup>4</sup> Includes 13 PT's who indicated "Clinical Instructor" as their principal type of position, 2 who indicated "Research Therapist" and 51 who indicated "Other".

Table 7 Analysis of Change in the Number of Physical Therapists<sup>1</sup> in British Columbia by Health Region **April 1998 to March 1999** 

			New Registra	nts <sup>2</sup> by Place			Net Intra-			
Health Region	April 1998	B.C.	Other Canada	Other Country	Unknown	Subtotal	Reactivation <sup>3</sup>	Attrition <sup>4</sup>	provincial Migration	March 1999
1 East Kootenay	34	0	2	0	0	2	0	0	3	39
2 West Kootenay - Boundary	50	0	1	0	0	1	1	2	1	51
3 North Okanagan	71	0	2	0	0	2	0	2	0	71
4 South Okanagan - Similkameen	142	1	3	0	0	4	4	4	-8	138
5 Thompson	55	0	0	0	0	0	0	4	3	54
6 Fraser Valley	74	3	2	0	0	5	1	2	-4	74
7 South Fraser Valley	173	5	9	0	0	14	2	9	11	191
8 Simon Fraser	151	7	4	1	0	12	5	8	1	161
9 Coast Garibaldi	49	0	1	0	0	1	1	1	3	53
10 Central Vancouver Island	106	0	2	1	0	3	5	3	-4	107
11 Upper Island/Central Coast	51	1	3	0	0	4	1	3	0	53
12 Cariboo	27	0	0	0	0	0	0	0	1	28
13 North West	30	1	0	0	0	1	1	3	0	29
14 Peace Liard	22	0	0	0	0	0	1	3	1	21
15 Northern Interior	42	0	3	0	0	3	2	2	1	46
16 Vancouver	521	6	10	4	0	20	10	20	-8	523
17 Burnaby	79	1	3	0	0	4	0	1	-5	77
18 North Shore	124	3	2	0	0	5	2	2	-2	127
19 Richmond	100	2	0	0	1	3	1	3	1	102
20 Capital	255	4	4	1	0	9	2	15	5	256
OTAL	2,156	34	51	7	1	93	39	87	0	2,201

<sup>&</sup>lt;sup>1</sup> Excludes 193 Inactive registrants.

<sup>&</sup>lt;sup>2</sup> PT's who reported B.C. addresses and were full or limited registrants in March 1999 and whose date of initial registration was after April 1998.

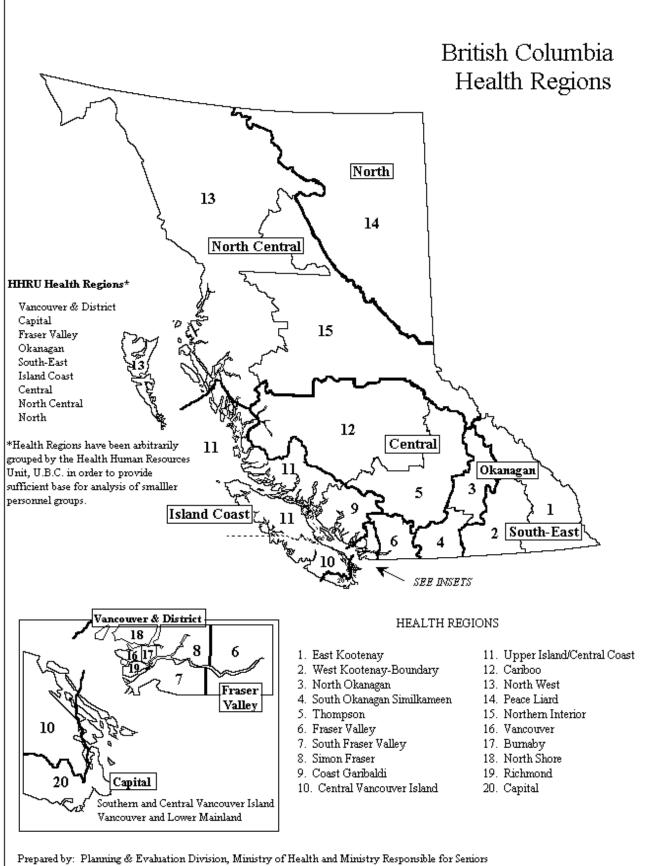
<sup>3</sup> PT's who reported B.C. addresses and were full or limited registrants in March 1999 but not in April 1998 and who were registered for the first time before April 1998.

<sup>&</sup>lt;sup>4</sup> PT's who reported B.C. addresses and were full or limited registrants in April 1998 but not in March 1999.

# **APPENDICES**

# APPENDIX A

# LOCAL HEALTH AREAS, BRITISH COLUMBIA HEALTH REGIONS AND HEALTH HUMAN RESOURCES UNIT HEALTH REGIONS



Prepared by: Planning & Evaluation Division, Ministry of Health and Ministry Responsible for Senion Boundary Source: B C STATS, Ministry of Finance and Corporate Relations

# Conversion Summary: HHRU Health Regions, B.C. Health Regions, and Local Health Areas

**HHRU Health Region B.C. Health Regions** Local Health Area(s) Vancouver & District 35 Langley 37 Delta 7 South Fraser Valley 36 Surrey 8 Simon Fraser 40 New Westminster 43 Coquitlam 42 Maple Ridge 16 Vancouver 39 Vancouver 17 Burnaby 41 Burnaby 18 North Shore 44 North Vancouver 45 West Vancouver 19 Richmond 38 Richmond 20 Capital 61 Greater Victoria Capital 63 Saanich 62 Sooke 64 Gulf Islands Fraser Valley 6 Fraser Valley 32 Hope 75 Mission 76 Agassiz - Harrison 33 Chilliwack 34 Abbotsford 19 Revelstoke 3 North Okanagan 22 Vernon Okanagan 20 Salmon Arm 78 Enderby 21 Armstrong-Spallumcheen 4 South Okanagan - Similkameen 17 Princeton 14 Southern Okanagan 15 Penticton 23 Central Okanagan 16 Keremeos 77 Summerland South-East 1 East Kootenay 1 Fernie 4 Windermere 2 Cranbrook 5 Creston 3 Kimberley 18 Golden 2 West Kootenay - Boundary 6 Kootenay Lake 11 Trail 7 Nelson 12 Grand Forks 9 Castlegar 13 Kettle Valley 10 Arrow Lakes Island Coast 9 Coast Garibaldi 46 Sunshine Coast 48 Howe Sound 47 Powell River 10 Central Vancouver Island 68 Nanaimo 65 Cowichan 66 Lake Cowichan 69 Oualicum 70 Alberni 67 Ladysmith 11 Upper Island/Central Coast 84 Vancouver Island West 71 Courtenay 72 Campbell River 85 Vancouver Island North 83 Central Coast Central 5 Thompson 24 Kamloops 30 South Cariboo 26 North Thompson 31 Merritt 29 Lillooet 28 Quesnel 12 Cariboo 25 100 Mile House 49 Bella Coola Valley 27 Cariboo - Chilcotin North Central 13 North West 80 Kitimat 50 Queen Charlotte 87 Stikine 51 Snow Country 52 Prince Rupert 88 Terrace 53 Upper Skeena 92 Nisga'a 54 Smithers 94 Telegraph Creek 15 Northern Interior 55 Burns Lake 57 Prince George 56 Nechako North 14 Peace Liard 59 Peace River South 81 Fort Nelson 60 Peace River North

Source: Boundary Conversion Steering Commitee, 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
1997 and 1998

Health Region	1997	1998	Percent Change
1 East Kootenay	79,610	80,355	0.94
2 West Kootenay-Boundary	81,432	81,967	0.66
3 North Okanagan	115,635	117,151	1.31
4 South Okanagan-Similkameen	224,114	227,143	1.35
5 Thompson	131,956	133,957	1.52
6 Fraser Valley	233,830	239,540	2.44
7 South Fraser Valley	550,229	562,799	2.28
8 Simon Fraser	306,475	314,660	2.67
9 Coast Garibaldi	75,268	78,233	3.94
10 Central Vancouver Island	237,487	241,223	1.57
11 Upper Island/Central Coast	120,079	121,628	1.29
12 Cariboo	74,778	75,854	1.44
13 North West	90,751	91,137	0.43
14 Peace Liard	65,159	65,966	1.24
15 Northern Interior	130,236	131,861	1.25
16 Vancouver	551,320	559,831	1.54
17 Burnaby	187,422	190,375	1.58
18 North Shore	176,692	178,107	0.80
19 Richmond	157,058	160,649	2.29
20 Capital	332,015	334,575	0.77
TOTAL	3,921,546	3,987,011	1.67

<sup>&</sup>lt;sup>1</sup> Source: B.C. Local Health Area Population Projections from the P.E.O.P.L.E. Projection Run # 23, supplied by the Population Section, BC STATS, BC Ministry of Finance and Corporate Relations.

Table 2
Population Estimates<sup>1</sup> in British Columbia
by Health Region by Age and Sex
1998

	<	25	25-	-34	35-	-44	45-	-54	55-	-64	65	+	Subt	otal	
Health Region	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
1 East Kootenay	13,909	13,074	4,868	4,966	6,927	6,862	6,007	5,553	3,964	3,762	4,939	5,524	40,614	39,741	80,355
2 West Kootenay/Boundary	13,426	12,608	4,539	4,686	6,816	7,065	6,353	5,820	4,103	4,020	5,731	6,800	40,968	40,999	81,967
3 North Okanagan	19,290	18,250	6,463	6,593	9,366	9,902	7,880	8,004	5,984	6,060	8,998	10,361	57,981	59,170	117,151
4 South Okanagan - Similkameen	33,861	32,892	13,363	13,901	17,239	18,175	14,325	14,810	11,143	11,951	20,766	24,717	110,697	116,446	227,143
5 Thompson	23,700	22,571	8,937	9,190	11,252	11,448	9,621	9,235	6,425	6,177	7,332	8,069	67,267	66,690	133,957
6 Fraser Valley	43,754	41,546	17,486	17,287	19,825	18,947	14,257	13,805	9,531	9,851	14,977	18,274	119,830	119,710	239,540
7 South Fraser Valley	99,664	95,540	41,560	42,270	47,920	48,307	38,596	38,458	23,573	22,985	28,129	35,797	279,442	283,357	562,799
8 Simon Fraser	52,911	50,262	25,936	26,318	30,556	30,336	22,133	21,111	12,290	12,143	12,851	17,813	156,677	157,983	314,660
9 Coast Garibaldi	13,033	12,384	6,247	5,869	6,931	6,721	5,725	5,070	3,451	3,211	4,521	5,070	39,908	38,325	78,233
10 Central Vancouver Island	38,790	37,239	14,105	14,850	19,441	20,175	17,093	16,592	11,943	11,979	18,151	20,865	119,523	121,700	241,223
11 Upper Island/Central Coast	21,350	20,474	7,957	8,080	11,083	11,049	9,180	8,455	5,864	5,211	6,195	6,730	61,629	59,999	121,628
12 Cariboo	14,405	13,682	5,112	5,267	6,656	6,472	5,706	5,154	3,570	3,119	3,382	3,329	38,831	37,023	75,854
13 North West	18,677	17,492	7,533	7,080	8,448	7,916	6,409	5,395	3,485	2,966	2,842	2,894	47,394	43,743	91,137
14 Peace Liard	13,568	12,993	5,598	5,380	6,251	5,637	3,992	3,647	2,430	2,099	2,146	2,225	33,985	31,981	65,966
15 Northern Interior	26,201	24,931	10,708	10,674	12,044	11,487	9,183	8,378	5,411	4,283	4,256	4,305	67,803	64,058	131,861
16 Vancouver	76,756	75,688	61,436	60,017	48,996	47,284	38,083	37,256	22,662	22,702	29,076	39,875	277,009	282,822	559,831
17 Burnaby	28,154	27,294	18,107	17,212	16,131	15,936	12,521	12,985	8,318	8,465	10,789	14,463	94,020	96,355	190,375
18 North Shore	26,535	25,737	11,222	12,074	14,818	16,282	13,846	14,623	8,785	8,928	10,695	14,562	85,901	92,206	178,107
19 Richmond	26,536	24,857	12,156	12,326	13,202	14,794	12,552	13,183	7,064	7,175	6,957	9,847	78,467	82,182	160,649
20 Capital	47,248	46,504	24,368	24,403	26,291	27,861	23,459	24,306	14,277	15,131	25,209	35,518	160,852	173,723	334,575
TOTAL	651,768	626,018	307,701	308,443	340,193	342,656	276,921	271,840	174,273	172,218	227,942	287,038	1,978,798	2,008,213	3,987,011

<sup>&</sup>lt;sup>1</sup> Source: B.C. Local Health Area Population Projections from the P.E.O.P.L.E. Projection Run # 23, supplied by the Population Section, BC STATS, BC Ministry of Finance and Corporate Relations.

# APPENDIX C

# HOSPITAL BED CAPACITY IN BRITISH COLUMBIA BY HEALTH REGION

Table 1a

Approved Hospital Bed Capacity<sup>1,2,3</sup> in British Columbia
by Health Region

March 1997

			Acute	Care					
					Paediatrics/		Ī	Rehabilitation	
Health Region	Med/Surg	ICU/CCU	Rehab Unit	Psychiatry	Maternity/NICU	Subtotal 4	Extended Care	Hospital	Total
1 East Kootenay	158	6	0	10	38	212	113	0	325
2 West Kootenay - Boundary	160	7	9	12	26	214	244	0	458
3 North Okanagan	199	10	0	13	47	269	305	0	574
4 South Okanagan - Similkameen	425	20	53	43	56	597	635	0	1,232
5 Thompson <sup>5</sup>	230	11	10	26	63	346	249	0	595
6 Fraser Valley	270	22	6	34	68	400	601	0	1,001
7 South Fraser Valley	553	25	10	67	93	748	801	0	1,549
8 Simon Fraser	472	30	15	44	104	665	607	0	1,272
9 Coast Garibaldi	69	8	0	5	21	103	145	0	248
10 Central Vancouver Island	314	21	25	43	75	478	448	0	926
11 Upper Island/Central Coast	147	9	0	18	38	212	196	0	408
12 Cariboo	79	8	0	0	30	117	101	0	218
13 North West	159	13	0	10	34	216	66	0	282
14 Peace Liard <sup>6</sup>	106	6	0	12	40	171	55	0	226
15 Northern Interior	175	10	15	30	65	295	86	0	381
16 Vancouver	1,317	162	17	184	377	2,057	1,594	242	3,893
17 Burnaby	179	12	0	0	25	216	472	0	688
18 North Shore	226	17	22	32	32	329	319	0	648
19 Richmond	156	10	0	14	30	210	216	0	426
20 Capital	642	41	93	103	113	992	1,375	0	2,367
TOTAL	6,036	448	275	700	1,375	8,847	8,628	242	17,717

<sup>&</sup>lt;sup>1</sup> Source: Information & Analysis Branch, Information Management Group, B.C. Ministry of Health & Ministry Responsible for Seniors.

<sup>&</sup>lt;sup>2</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

<sup>&</sup>lt;sup>3</sup> Data for March 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>&</sup>lt;sup>4</sup> These acute care subtotals are equivalent to the "Acute Care Beds" column in previous editions of *ROLLCALL*.

<sup>&</sup>lt;sup>5</sup> The acute care subtotal for this region in 1997 includes 6 all-purpose beds which do not appear in the breakdown of acute care beds. These all-purpose beds are also included in the total for the region in 1997.

The acute care subtotal for this region in 1997 includes 7 all-purpose beds which do not appear in the breakdown of acute care beds. These all-purpose beds are also included in the total for the region in 1997.

Table 1b
Approved Hospital Bed Capacity<sup>1,2,3</sup> in British Columbia
per 10,000 Population by Health Region
March 1997

			Acute	Care					
					Paediatrics/		I	Rehabilitation	
Health Region	Med/Surg	ICU/CCU	Rehab Unit	Psychiatry	Maternity/NICU	Subtotal 4	Extended Care	Hospital	Total
1 East Kootenay	19.85	0.75	0.00	1.26	4.77	26.63	14.19	0.00	40.82
2 West Kootenay - Boundary	19.65	0.86	1.11	1.47	3.19	26.28	29.96	0.00	56.24
3 North Okanagan	17.21	0.86	0.00	1.12	4.06	23.26	26.38	0.00	49.64
4 South Okanagan - Similkameen	18.96	0.89	2.36	1.92	2.50	26.64	28.33	0.00	54.97
5 Thompson	17.43	0.83	0.76	1.97	4.77	26.22	18.87	0.00	45.09
6 Fraser Valley	11.55	0.94	0.26	1.45	2.91	17.11	25.70	0.00	42.81
7 South Fraser Valley	10.05	0.45	0.18	1.22	1.69	13.59	14.56	0.00	28.15
8 Simon Fraser	15.40	0.98	0.49	1.44	3.39	21.70	19.81	0.00	41.50
9 Coast Garibaldi	9.17	1.06	0.00	0.66	2.79	13.68	19.26	0.00	32.95
10 Central Vancouver Island	13.22	0.88	1.05	1.81	3.16	20.13	18.86	0.00	38.99
11 Upper Island/Central Coast	12.24	0.75	0.00	1.50	3.16	17.66	16.32	0.00	33.98
12 Cariboo	10.56	1.07	0.00	0.00	4.01	15.65	13.51	0.00	29.15
13 North West	17.52	1.43	0.00	1.10	3.75	23.80	7.27	0.00	31.07
14 Peace Liard	16.27	0.92	0.00	1.84	6.14	26.24	8.44	0.00	34.68
15 Northern Interior	13.44	0.77	1.15	2.30	4.99	22.65	6.60	0.00	29.25
16 Vancouver	23.89	2.94	0.31	3.34	6.84	37.31	28.91	4.39	70.61
17 Burnaby	9.55	0.64	0.00	0.00	1.33	11.52	25.18	0.00	36.71
18 North Shore	12.79	0.96	1.25	1.81	1.81	18.62	18.05	0.00	36.67
19 Richmond	9.93	0.64	0.00	0.89	1.91	13.37	13.75	0.00	27.12
20 Capital	19.34	1.23	2.80	3.10	3.40	29.88	41.41	0.00	71.29
TOTAL	15.39	1.14	0.70	1.79	3.51	22.56	22.00	0.62	45.18

<sup>&</sup>lt;sup>1</sup> Source: Information & Analysis Branch, Information Management Group, B.C. Ministry of Health & Ministry Responsible for Seniors.

<sup>&</sup>lt;sup>2</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

<sup>&</sup>lt;sup>3</sup> Data for March 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>&</sup>lt;sup>4</sup> These acute care subtotals are equivalent to the "Acute Care Beds" column in previous editions of *ROLLCALL*.

# APPENDIX D

# COMMUNITY PHARMACIES IN BRITISH COLUMBIA BY HEALTH REGION

Table 1 Community Pharmacies<sup>1</sup> in British Columbia by Health Region April 1998 and December 1998

	Nun	nber		er per opulation	Average Rate of (	Annual Change <sup>2</sup>
Health Region	Apr-98	Dec-98	Apr-98	Dec-98	Number <sup>3</sup>	Ratio <sup>4</sup>
1 East Kootenay	13	15	1.63	1.87	21.02	19.53
2 West Kootenay - Boundary	21	22	2.58	2.68	6.40	5.47
3 North Okanagan	18	19	1.56	1.62	7.48	5.62
4 South Okanagan - Similkameen	43	43	1.92	1.89	0.00	-1.77
5 Thompson	22	23	1.67	1.72	6.11	4.00
6 Fraser Valley	40	42	1.71	1.75	6.72	3.34
7 South Fraser Valley	84	88	1.53	1.56	6.40	3.24
8 Simon Fraser	45	46	1.47	1.46	2.97	-0.58
9 Coast Garibaldi	18	18	2.39	2.30	0.00	-5.02
10 Central Vancouver Island	45	49	1.89	2.03	12.02	9.72
11 Upper Island/Central Coast	21	22	1.75	1.81	6.40	4.60
12 Cariboo	13	14	1.74	1.85	10.39	8.30
13 North West	15	16	1.65	1.76	8.99	8.37
14 Peace Liard	10	11	1.53	1.67	13.55	11.70
15 Northern Interior	23	23	1.77	1.74	0.00	-1.64
16 Vancouver	121	123	2.19	2.20	2.21	0.14
17 Burnaby	31	31	1.65	1.63	0.00	-2.06
18 North Shore	28	28	1.58	1.57	0.00	-1.06
19 Richmond	22	24	1.40	1.49	12.30	8.97
20 Capital	64	66	1.93	1.97	4.19	3.13
TOTAL	697	723	1.78	1.81	5.00	2.71

 $<sup>^1</sup>$  Includes retail pharmacies only. Hospital pharmacies are excluded. Source: College of Pharmacists of B.C.  $^2$  A 9 month rate of change has been adjusted to an average annual figure.

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

<sup>&</sup>lt;sup>4</sup> Rate of change (in percent) in the number per 10,000 population.

<sup>\*</sup> Indicates that the base for the rate of change is less than 10.

# Health Human Resources Unit Centre for Health Services and Policy Research The University of British Columbia #429 - 2194 Health Sciences Mall Vancouver, BC V6T 1Z3

Telephone: (604) 822-4810 Fax: (604) 822-5690 web site: www.chspr.ubc.ca/

Some of the early reports may not be available for distribution

HHRU 96:3

HHRU 99:1	Regional Health Human Resources Planning & Management: Policies, Issues And Information Requirement. January 1999. (A. Kazanjian, M. Herbert, L. Wood, S. Rahim-Jamal). ISBN 1-894966-98-7.
HHRU 98:4	Proceedings of the Second Trilateral Physician Workforce Conference, November 14-16, 1997, Vancouver. December 1998. (M.L. Barer, L. Wood). ISBN 1-894066-99-5.
HHRU 98:3	PLACE OF GRADUATION 97. A Status Report on Place of Graduation for Selected Health Personnel in the Province of British Columbia. August 1998. ISBN 1-896459-99-4. ISSN 1200-0701.
HHRU 98:2	INVENTORY 97. A Regional Analysis of Health Personnel in the Province of British Columbia. June 1998. ISBN 1-896459-98-6.
HHRU 98:1	ROLLCALL 97. A Status Report of Health Personnel in the Province of British Columbia. June 1998. ISBN 1-896459-97-8. ISSN 0707-3542.
HHRU 97:4	Common Problems, Different 'Solutions': Learning from International Approaches to Improving Medical Services Access for Underserved Populations. October 1997. (M.L. Barer, L. Wood). ISBN 1-896459-96-X. Also listed as Health Policy Research Unit Report HPRU 97:12D.
HHRU 97:3	INVENTORY UPDATE 96. A Regional Analysis of Health Personnel in the Province of British Columbia. July 1997. ISBN 1-896459-95-1. ISSN 1196-9911.
HHRU 97:2	ROLLCALL UPDATE 96. A Status Report of Selected Health Personnel in the Province of British Columbia. July 1997. ISBN 1-896459-94-3. ISSN 0828-9360.
HHRU 97:1	PLACE OF GRADUATION 95. A Status Report on Place of Graduation for Selected Health Personnel in the Province of British Columbia. April 1997. ISBN 1-896459-93-5. ISSN 1200-0701.
HHRU 96:5	INVENTORY 95. A Regional Analysis of Health Personnel in the Province of British Columbia. December 1996. ISBN 1-896459-92-7.
HHRU 96:4	PRODUCTION 95. A Status Report on the Production of Health Personnel in the Province of British Columbia. October 1996. ISBN 1-896459-91-9. ISSN 1199-4010.

ROLLCALL 95. A Status Report of Health Personnel in the Province of British

Columbia. October 1996. ISBN 1-896459-90-0. ISSN 0707-3542.

HHRU 96:2R Identifying the Population of Health Managers in one Canadian Province: A Two-Stage Approach. April 1996. (A. Kazanjian, N. Pagliccia). ISBN 1-896459-89-7. HHRU 96:1R Key Factors in Physicians' Choice of Practice Location - Level of Satisfaction and Spousal Influence. March 1996. (A. Kazanjian, N. Pagliccia). ISBN 1-896459-88-9. HHRU 95:6E Fee Practice Medical Services Expenditures Per Capita, and Full-Time-Equivalent Physicians in British Columbia, 1993-1994. December 1995. (A. Kazanjian, P. Wong Fung, L. Wood). Only available in an electronic format at: www.chspr.ubc.ca/feepract/. HHRU 95:5R The Impact of Professional and Personal Satisfaction On Perceptions of Rural and Urban: Some Analytic Evidence. December 1993. (N. Pagliccia, L. Apland, A. Kazanjian). ISBN 1-896459-87-0. **HHRU 95:4** PRODUCTION UPDATE 94. A Status Report on the Production of Selected Health Personnel in the Province of British Columbia. May 1995. ISBN 1-896459-86-2. ISSN 1199-4010. HHRU 95:3 Health Personnel Modelling 1975-1994: An Updated Bibliography with Abstracts. March 1995. (N. Pagliccia, K. McGrail, L. Wood). ISBN 1-896459-85-4. HHRU 95:2 INVENTORY UPDATE 94. A Regional Analysis of Health Personnel in the Province of British Columbia. March 1995. ISBN 1-896459-84-6. ISSN 1196-9911. HHRU 95:1 ROLLCALL UPDATE 94. A Status Report of Selected Health Personnel in the Province of British Columbia. March 1995. ISBN 1-896459-83-8. ISSN 0828-9360. **HHRU 94:5** PLACE OF GRADUATION 93. A Status Report on Place of Graduation for Selected Health Personnel in the Province of British Columbia. October 1994. (K. McGrail, K. Kerluke, A. MacDonald, L. Wood). ISBN 1-896459-82-X. ISSN 1200-0701. HHRU 94:4 PRODUCTION 93. A Status Report on the Production of Health Personnel in the Province of British Columbia. August 1994. ISBN 1-896459-81-1. ISSN 1199-4010. HHRU 94:3 ROLLCALL 93. A Status Report of Health Personnel in the Province of British Columbia. May 1994. ISBN 1-896459-80-3. ISSN 0707-3542. HHRU 94:2 Interpreting the Historical Difficult-to-Fill Vacancy Trends - A Multivariate Analysis. April 1994. (N. Pagliccia, A. Kazanjian, L. Wood). ISBN 1-896459-79-X. HHRU 94:1 Social Work Personnel in British Columbia: Defining the population and describing deployment patterns in 1993. January 1994. (J. Finch, A. Kazanjian, L. Wood). ISBN 1-896459-78-1. **HHRU 93:8R** Health Care Managers in British Columbia Part I: Who Manages Our System?, Part II: Exploring Future Directions. December 1993. (A. Kazanjian, N. Pagliccia). ISBN 1-896459-77-3. **HHRU 93:7** Fee Practice Medical Services Expenditures Per Capita, and Full-Time-Equivalent Physicians in British Columbia, 1991-1992. December 1993. (A. Kazanjian, P. Wong

Fung, L. Wood). ISBN 1-896459-76-5.

HHRU 93:6 Social Workers in Health Care in British Columbia, 1991. July 1993. (L.E. Apland, L. Wood, A. Kazanjian). ISBN 1-896459-75-7. **HHRU 93:5** Difficult-to-Fill Vacancies in Selected Health Care Disciplines in British Columbia, 1980-1991. June 1993. (A. MacDonald, A. Kazanjian). ISBN 1-896459-74-9. HHRU 93:4 ROLLCALL UPDATE 92. A Status Report of Selected Health Personnel in the Province of British Columbia. April 1993. ISBN 1-896459-73-0. ISSN 0828-9360. **HHRU 93:3** Nursing Resources in British Columbia: Trends, Tensions and Tentative Solutions. February 1993. (A. Kazanjian, L. Wood). ISBN 1-896459-72-2. Also listed as Health Policy Research Unit Report HPRU 93:5D. HHRU 93:2 Nursing Resources Models: Part I: Synthesis of the Literature and a Modelling Strategy for B.C. February 1993. (N. Pagliccia, L. Wood, A. Kazanjian). ISBN 1-896459-71-4. HHRU 93:1 Study of Rural Physician Supply: Perceptions of Rural and Urban. January 1993. (N. Pagliccia, L.E. Apland, A. Kazanjian). ISBN 1-896459-70-6. **HHRU 92:8** Diagnostic Medical Sonographers in British Columbia, 1991. December 1992. (L.E. Apland, A. Kazanjian). ISBN 1-896459-69-2. **HHRU 92:7** Fee Practice Medical Service Expenditures per Capita, and Full-Time-Equivalent Physicians in British Columbia, 1989-1990. November 1992. (A. Kazanjian, P. Wong Fung, M.L. Barer). ISBN 1-896459-68-4. **HHRU 92:6** PLACE OF GRADUATION 91. A Status Report on Place of Graduation for Selected Health Personnel in the Province of British Columbia. November 1992. (A. MacDonald, K. Kerluke, L.E. Apland, L. Wood). ISBN 1-896459-67-6. ISSN 1200-0701. HHRU 92:5R Health "Manpower" Planning or Gender Relations? The Obvious and the Oblique. June 1992. (A. Kazanjian). ISBN 1-896459-66-8. HHRU 92:4R A Human Resources Decision Support Model: Nurse Deployment Patterns in One Canadian System. November 1992. (A. Kazanjian, I. Pulcins, K. Kerluke). ISBN 1-896459-65-X. HHRU 92:3 PRODUCTION 91. A Status Report on the Production of Health Personnel in the Province of British Columbia. May 1992. ISBN 1-896459-64-1. ISSN 1199-4010. HHRU 92:2 ROLLCALL 91. A Status Report of Health Personnel in the Province of British Columbia. May 1992. ISBN 1-896459-63-3. ISSN 0707-3542. HHRU 92:1 Information Needed to Support Health Human Resources Management. February 1992. (A. Kazanjian). ISBN 1-896459-62-5.

A Single Stochastic Model For Forecasting Nurse Supply and For Estimating Life-Cycle

ROLLCALL UPDATE 90. A Status Report of Selected Health Personnel in the Province

Activity Patterns. May 1991. (A. Kazanjian). ISBN 1-896459-61-7.

of British Columbia. March 1991. ISBN 1-896459-60-9. ISSN 0828-9360.

**HHRU 91:4R** 

HHRU 91:3

HHRU 91:2 Study of Rural Physician Supply: Practice Location Decisions and Problems in Retention. Volume I. March 1991. (A. Kazanjian, N. Pagliccia, L. Apland, S. Cavalier, L. Wood). ISBN 1-896459-59-5. HHRU 91:1 Registered Psychologists in British Columbia, 1990: A Status Report. March 1991. (C. Jackson, L. Wood, K. Kerluke, A. Kazanjian). ISBN 1-896459-58-7. HHRU 90:7 Place of Graduation for Selected Health Occupations - 1989. (HMRU 90:7) November 1990. (S. Cavalier, K. Kerluke, L. Wood). ISBN 1-896459-57-9. **HHRU 90:6** Health Managers in B.C. Part II: Who Manages Our System? - Sociodemographic (HMRU 90:6) Characteristics, Employment Patterns, Educational Background and Training of Health Managers. June 1990. (A. Kazanjian, C. Jackson, N. Pagliccia). ISBN 1-896459-56-0. **HHRU 90:5** Health Personnel Modelling: A Bibliography With Abstracts. (HMRU 90:5) June 1990. (N. Pagliccia, C. Jackson, A. Kazanjian). ISBN 1-896459-55-2. HHRU 90:4 PRODUCTION 89. A Status Report on the Production of Health Personnel in (HMRU 90:4) the Province of British Columbia. March 1990. ISBN 1-896459-54-4. ISSN 1199-4010. HHRU 90:3 ROLLCALL 89. A Status Report of Health Personnel in the Province of British (HMRU 90:3) Columbia. March 1990. ISBN 1-896459-53-6. ISSN 0707-3542. HHRU 90:2 Proceedings of the Workshop on Priorities in Health Human Resources Research in (HMRU 90:2) Canada. March 1990. (A. Kazanjian, K. Friesen). ISBN 1-896459-52-8. HHRU 90:1 Nurse Deployment Patterns: Examples for Health Human Resources Management. (HMRU 90:1) February 1990. (A. Kazanjian, I. Pulcins, K. Kerluke). ISBN 1-896459-51-X. HHRU 89:4 Providers of Vision Care in British Columbia: A Report on the Status of Ophthalmologists and Optometrists, and On the Utilization of Ophthalmological and (HMRU 89:4) Optometric Services, 1975-1988. July 1989. (I. Pulcins, P. Wong Fung, C. Jackson, K. Kerluke, A. Kazanjian). ISBN 1-896459-50-1. HHRU 89:3 Fee Practice Medical Service Expenditures Per Capita, and Full-Time-Equivalent (HMRU 89:3) Physicians in British Columbia, 1987-88. August 1989. (A. Kazanjian, P. Wong Fung, M.L. Barer). ISBN 1-896459-49-8. HHRU 89:2 Health Managers in B.C. Part I: Methods and Preliminary Findings From Survey of (HMRU 89:2) Chief Executive Officers. July 1989. (A. Kazanjian, N. Pagliccia, C. Jackson). ISBN 1-896459-48-X. HHRU 89:1 ROLLCALL UPDATE 88. A Status Report of Selected Health Personnel in the Province (HMRU 89:1) of British Columbia. March 1989. ISBN 1-896459-47-1. ISSN 0828-9360.