

# **INVENTORY UPDATE 98**

## **A REGIONAL ANALYSIS OF HEALTH PERSONNEL IN THE PROVINCE OF BRITISH COLUMBIA**

HHRU 99:4

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

June 1999

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

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

Main entry under title:

Inventory update

Biennial, 1994-  
ISSN 1196-9911

1. Medical personnel--British Columbia--Statistics--Periodicals. 2. Allied health personnel--British Columbia--Statistics--Periodicals. I. University of British Columbia. Centre for Health Services and Policy Research. II. University of British Columbia. Health Human Resources Unit.  
RA450.B716                    610.69'09711'021    C95-910397-X

## 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](mailto:hhru@chspr.ubc.ca)  
URL: [www.chspr.ubc.ca](http://www.chspr.ubc.ca)

## ACKNOWLEDGEMENTS

Special appreciation is extended to the regulatory bodies and professional associations, all of whom took the time to answer our written and verbal requests for information.

*INVENTORY 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 programmer 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 Number
Introduction .....	vii
<b>Table Number</b>	
<b>British Columbia Total</b>	
<b>1</b> Health Personnel, Hospital Beds, Community Pharmacies and Population .....	3
<b>2</b> Health Personnel by Age and Sex .....	4
<b>3</b> Health Personnel by Place of Graduation .....	5
<b>Health Region 1 - East Kootenay</b>	
<b>4</b> Health Personnel, Hospital Beds, Community Pharmacies and Population .....	7
<b>5</b> Health Personnel by Age and Sex .....	8
<b>6</b> Health Personnel by Place of Graduation .....	9
<b>Health Region 2 - West Kootenay - Boundary</b>	
<b>7</b> Health Personnel, Hospital Beds, Community Pharmacies and Population .....	11
<b>8</b> Health Personnel by Age and Sex .....	12
<b>9</b> Health Personnel by Place of Graduation .....	13
<b>Health Region 3 - North Okanagan</b>	
<b>10</b> Health Personnel, Hospital Beds, Community Pharmacies and Population .....	15
<b>11</b> Health Personnel by Age and Sex .....	16
<b>12</b> Health Personnel by Place of Graduation .....	17
<b>Health Region 4 - South Okanagan - Similkameen</b>	
<b>13</b> Health Personnel, Hospital Beds, Community Pharmacies and Population .....	19
<b>14</b> Health Personnel by Age and Sex .....	20
<b>15</b> Health Personnel by Place of Graduation .....	21
<b>Health Region 5 - Thompson</b>	
<b>16</b> Health Personnel, Hospital Beds, Community Pharmacies and Population .....	23
<b>17</b> Health Personnel by Age and Sex .....	24
<b>18</b> Health Personnel by Place of Graduation .....	25

### **Health Region 6 - Fraser Valley**

<b>19</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	27
<b>20</b>	Health Personnel by Age and Sex .....	28
<b>21</b>	Health Personnel by Place of Graduation .....	29

### **Health Region 7 - South Fraser Valley**

<b>22</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	31
<b>23</b>	Health Personnel by Age and Sex .....	32
<b>24</b>	Health Personnel by Place of Graduation .....	33

### **Health Region 8 - Simon Fraser**

<b>25</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	35
<b>26</b>	Health Personnel by Age and Sex .....	36
<b>27</b>	Health Personnel by Place of Graduation .....	37

### **Health Region 9 - Coast Garibaldi**

<b>28</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	39
<b>29</b>	Health Personnel by Age and Sex .....	40
<b>30</b>	Health Personnel by Place of Graduation .....	41

### **Health Region 10 - Central Vancouver Island**

<b>31</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	43
<b>32</b>	Health Personnel by Age and Sex .....	44
<b>33</b>	Health Personnel by Place of Graduation .....	45

### **Health Region 11 - Upper Island/ Central Coast**

<b>34</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	47
<b>35</b>	Health Personnel by Age and Sex .....	48
<b>36</b>	Health Personnel by Place of Graduation .....	49

### **Health Region 12 - Cariboo**

<b>37</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	51
<b>38</b>	Health Personnel by Age and Sex .....	52
<b>39</b>	Health Personnel by Place of Graduation .....	53

### **Health Region 13 - North West**

40	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	55
41	Health Personnel by Age and Sex .....	56
42	Health Personnel by Place of Graduation .....	57

### **Health Region 14 - Peace Liard**

43	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	59
44	Health Personnel by Age and Sex .....	60
45	Health Personnel by Place of Graduation .....	61

### **Health Region 15 - Northern Interior**

46	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	63
47	Health Personnel by Age and Sex .....	64
48	Health Personnel by Place of Graduation .....	65

### **Health Region 16 - Vancouver**

49	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	67
50	Health Personnel by Age and Sex .....	68
51	Health Personnel by Place of Graduation .....	69

### **Health Region 17 - Burnaby**

52	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	71
53	Health Personnel by Age and Sex .....	72
54	Health Personnel by Place of Graduation .....	73

### **Health Region 18 - North Shore**

55	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	75
56	Health Personnel by Age and Sex .....	76
57	Health Personnel by Place of Graduation .....	77

### **Health Region 19 - Richmond**

58	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	79
59	Health Personnel by Age and Sex .....	80
60	Health Personnel by Place of Graduation .....	81

## Health Region 20 - Capital

<b>61</b>	Health Personnel, Hospital Beds, Community Pharmacies and Population .....	83
<b>62</b>	Health Personnel by Age and Sex .....	84
<b>63</b>	Health Personnel by Place of Graduation .....	85

## Appendices

<b>A</b>	Information about Health Personnel .....	87
	<i>Dental Services</i>	
	Certified Dental Assistants .....	88
	Dental Hygienists .....	89
	Dentists .....	90
	<i>Medical &amp; Treatment Services</i>	
	Emergency Medical Assistants .....	90
	Midwives .....	91
	Opticians .....	92
	Pharmacists .....	93
	Physicians .....	93
	<i>Nursing Services</i>	
	Licensed Practical Nurses .....	94
	Registered Nurses .....	95
	Licensed Graduate Nurses .....	95
	Registered Psychiatric Nurses .....	96
	<i>Nutrition &amp; Dietary Services</i>	
	Dietitians and Nutritionists .....	96
	<i>Psychological Services</i>	
	Psychologists .....	97
	<i>Rehabilitation Services</i>	
	Massage Therapists .....	98
	Occupational Therapists .....	98
	Physical Therapists .....	99
<b>B</b>	Map of British Columbia by Health Regions .....	101
	Reports of the Health Human Resources Unit .....	105



## 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 *INVENTORY* series presents a regional analysis of health personnel in the province of British Columbia. The series has two components - *INVENTORY* and *INVENTORY UPDATE* - which are produced in alternate years. *INVENTORY UPDATE*, published for even-numbered years, contains information derived from *ROLLCALL UPDATE 98* 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.

The tables included in this report have been generated in response to a need for regional information about health human resources planning in British Columbia. They have been published in this format to increase the usability of *ROLLCALL UPDATE* information, but are not meant to replace that volume, which offers more detailed information about these sixteen health occupations or groups.

Table 1 gives a brief outline, for each professional group, of the source of data and the dates of record used in producing these tables.

**Table 1**  
**Source of Data and Date of Record for Selected Health Personnel in B.C.**

<u>Occupation</u>	<u>Source of Data</u>	<u>Date of Record</u>
<b><i>Dental Services</i></b>		
Certified Dental Assistants	College of Dental Surgeons of B.C.	Dec 1997 & Dec 1998
Dental Hygienists	College of Dental Hygienists of B.C.	Dec 1997 & Dec 1998
Dentists	College of Dental Surgeons of B.C.	Jan 1998 & Dec 1998
<b><i>Medical &amp; Treatment Services</i></b>		
Emergency Medical Assistants	Emergency Medical Assistant Licensing Board	Dec 1997 & Nov 1998
First Responders	Emergency Medical Assistant Licensing Board	Dec 1997 & Nov 1998
Midwives	College of Midwives of B.C.	Jan 1999
Opticians	College of Opticians of B.C.	May 1998 & Nov 1998
Pharmacists	College of Pharmacists of B.C.	Apr 1998 & Dec 1998
Physicians	College of Physicians and Surgeons of B.C.	Sep 1997 & Sep 1998
<b><i>Nursing Services</i></b>		
Licensed Practical Nurses	College of Licensed Practical Nurses of B.C.	Sep 1997 & Sep 1998
Registered Nurses	Registered Nurses Association of B.C.	Dec 1997 & Dec 1998
Licensed Graduate Nurses	Registered Nurses Association of B.C.	Dec 1997 & Dec 1998
Registered Psychiatric Nurses	Registered Psychiatric Nurses Association of B.C.	Oct 1997 & Dec 1998
<b><i>Nutrition &amp; Dietary Services</i></b>		
Dietitians & Nutritionists	B.C. Dietitians' and Nutritionists' Association	Dec 1997 & Dec 1998
<b><i>Psychological Services / Social Services</i></b>		
Psychologists	College of Psychologists of B.C.	Dec 1997 & Dec 1998
<b><i>Rehabilitation Services</i></b>		
Massage Therapists	College of Massage Therapists of B.C.	Dec 1997 & Dec 1998
Occupational Therapists	B.C. Society of Occupational Therapists	Mar 1998 & Dec 1998
Physical Therapists	College of Physical Therapists of B.C.	Apr 1998 & Mar 1999

Table 2 is reproduced from the Introduction to *ROLLCALL UPDATE 98* and outlines data sources by type of health personnel group. Users of these data should be aware that not all of these health personnel groups have a mandatory registration requirement. When there is no registration requirement, data are taken from professional associations, which are thought to represent a large proportion of those working in the field. There may be, however, a certain number of health personnel who are not members of these professional associations and are therefore not counted in these tables. It is impossible to estimate how many people this represents and where they live or work.

Table 2 also shows the varying proportions of each group that are known to be working in the field, compared to those that are not, and those for whom work status is unknown. The tables in the rest of this publication use *total* numbers for the group, as this represents the potential workforce in each region. The distinction between potential workforce and effective supply is an important one for health planners to make; the former represents health human resources available to the region, while the latter is health human resources currently deployed. More information about employment is available in *ROLLCALL UPDATE 98*.

**Table 2**  
**Health Personnel in British Columbia by**  
**Mandatory/Voluntary Registration by Employment Status, 1998**

<b>MANDATORY REGISTRATION GROUPS</b>	<b>Employed in Field<sup>1</sup></b>	<b>Not Employed In Field<sup>2</sup></b>	<b>Employment Status Unknown</b>	<b>TOTAL</b>
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)	-	-	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
<b>SUB TOTAL</b>	<b>54,453</b>	<b>6,136</b>	<b>16,222</b>	<b>76,811</b>
<b>VOLUNTARY MEMBERSHIP GROUPS</b>				
Dietitians and Nutritionists (BCDNA)	702	99	5	806
Occupational Therapists (BCSOT)	813	64	21	898
<b>SUB TOTAL</b>	<b>1,515</b>	<b>163</b>	<b>26</b>	<b>1,704</b>

<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>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>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).

The main body of this publication is comprised of tables, starting with a set for provincial totals and followed by tables grouped by Health Region. The first table for each Health Region shows number and number per 10,000 population in 1997 and 1998 for each health occupation, with the exception in

this edition of midwives, who appear for the first time. The first table for each health region also shows the average annual rates of change<sup>1</sup> in the number and number per 10,000 population. The average annual rate of change in number is the growth in the number of the health workforce for the year, while the average annual rate of change in ratio shows the growth in the number of the health workforce in relation to the growth in the population. For the latter statistic, a positive number indicates the health workforce grew faster than the general population, and a negative number indicates the health workforce grew more slowly than the general population. This first table also includes numbers of regional hospital beds, community pharmacies, and regional populations.

The second table for each Health Region shows age and sex distribution for each of the groups for which it is available from *ROLLCALL UPDATE 98*. The final table produced for each Health Region shows place of graduation information for those groups contained in the HHRU biennial series *PLACE OF GRADUATION*.

Appendix A is a compilation of information for each health profession excerpted from *ROLLCALL UPDATE 98*. Included are definitions of types of registration status as well as other information that may be useful in using the tables. Employment address is used wherever possible to locate the health professionals. Specific percentages of home vs. employment or other address are outlined for each group. All of this information should be considered when interpreting numbers from the tables in this document.

A map of British Columbia by Health Regions and a table showing the conversion between Local Health Areas and Health Regions is found in Appendix B. *INVENTORY UPDATE 98* presents data based on the same twenty health regions used in *INVENTORY 97*.

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](http://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, *INVENTORY 99*, will be available early in 2000. That publication will contain information on a much larger number of health occupations.

---

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

$$[(\text{Personnel 1998}/\text{Personnel 1997})^{12/n} - 1] \times 100,$$

where n=number of months separating the 1997 and 1998 data based on the dates of record listed for each group.

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

$$[\{(\text{Personnel 1998}/\text{Personnel 1997}) \times (\text{Population 1997}/\text{Population 1998})\}^{12/n} - 1] \times 100,$$

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



# REGIONAL DISTRIBUTIONS



**Table 1**  
**B.C. - TOTAL**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b><i>Dental Services</i></b>						
Certified Dental Assistants	4,803	4,872	12.25	12.22	1.44	-0.23
Dental Hygienists	1,634	1,699	4.17	4.26	4.35	2.48
Dentists	2,495	2,552	6.36	6.40	2.75	0.73
<b><i>Medical &amp; Treatment Services</i></b>						
Emergency Medical Assistants	2,773	2,698	7.07	6.77	-2.95	-4.68
First Responders	7,271	7,849	18.54	19.69	8.70	6.76
Midwives <sup>4</sup>	n/a	49	n/a	0.12	n/a	n/a
Opticians	1,196	1,234	3.05	3.10	6.46	2.99
Pharmacists	2,861	2,994	7.30	7.51	6.25	3.93
Physicians (Directory Active)	8,636	8,742	22.02	21.93	1.23	-0.43
<b><i>Nursing Services</i></b>						
Licensed Practical Nurses	5,252	5,127	13.39	12.86	-2.38	-3.98
Registered Nurses <sup>5</sup>	31,754	31,575	80.97	79.19	-0.56	-2.20
Licensed Graduate Nurses	321	280	0.82	0.70	-12.77	-14.20
Registered Psychiatric Nurses	2,565	2,511	6.54	6.30	-1.81	-3.19
<b><i>Nutrition &amp; Dietary Services</i></b>						
Dietitians & Nutritionists (BCDNA)	782	806	1.99	2.02	3.07	1.38
<b><i>Psychological Services</i></b>						
Psychologists	886	921	2.26	2.31	3.95	2.24
<b><i>Rehabilitation Services</i></b>						
Massage Therapists <sup>6</sup>	1,231	1,314	3.14	3.30	6.74	4.99
Occupational Therapists (BCSOT)	880	898	2.24	2.25	2.46	0.44
Physical Therapists <sup>6</sup>	2,333	2,394	5.95	6.00	3.15	1.12
<b>TOTAL<sup>7</sup></b>	<b>77,673</b>	<b>78,466</b>	<b>198.07</b>	<b>196.80</b>	<b>0.51</b>	<b>-0.32</b>
<b><i>Hospital Beds<sup>8,9</sup></i></b>						
Acute Care Beds	8,847	n/a	22.56	n/a	n/a	n/a
Extended Care Beds	8,628	n/a	22.00	n/a	n/a	n/a
Rehabilitation Beds	242	n/a	0.62	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>17,717</b>	<b>n/a</b>	<b>45.18</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b><i>Community Pharmacies</i></b>	<b>697</b>	<b>723</b>	<b>1.78</b>	<b>1.81</b>	<b>5.00</b>	<b>2.71</b>
<b><i>Population</i></b>	<b>3,921,546</b>	<b>3,987,011</b>	<b>n/a</b>	<b>n/a</b>	<b>0.83</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 2**  
**B.C. - TOTAL**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Sex	Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Unknown	
<b>Dental Services</b>																		
Certified Dental Assistants	0	465	5	1,968	2	1,825	1	542	0	59	0	2	0	3	8	4,864	0	4,872
Dental Hygienists	1	56	22	653	21	616	13	291	3	18	0	2	0	3	60	1,639	0	1,699
Dentists	2	2	378	178	564	200	682	82	340	15	101	4	4	0	2,071	481	0	2,552
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	112	58	571	269	761	269	417	117	89	22	1	0	7	5	1,958	740	0	2,698
First Responders	385	38	2,088	218	2,655	191	1,737	78	322	22	23	4	73	15	7,283	566	0	7,849
Opticians	13	34	61	116	73	107	74	65	20	15	2	0	312	342	555	679	0	1,234
Pharmacists	51	91	433	590	349	477	339	308	175	77	57	6	26	15	1,430	1,564	0	2,994
Physicians (Directory Active)	6	3	887	622	1,846	977	1,897	540	1,128	148	608	55	21	4	6,393	2,349	0	8,742
<b>Nursing Services</b>																		
Licensed Practical Nurses	8	102	55	641	125	1,486	130	1,787	51	627	4	31	5	75	378	4,749	0	5,127
Registered Nurses	30	577	260	5,398	425	9,450	348	9,930	110	4,634	4	409	0	0	1,177	30,398	0	31,575
Licensed Graduate Nurses	0	0	0	1	1	48	3	160	0	60	0	7	0	0	4	276	0	280
Registered Psychiatric Nurses	2	27	51	358	126	501	229	713	155	267	8	20	13	41	584	1,927	0	2,511
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	1	11	4	248	7	285	1	178	0	39	0	2	2	28	15	791	0	806
<b>Psychological Services</b>																		
Psychologists	0	0	8	24	77	109	200	215	145	92	33	18	0	0	463	458	0	921
<b>Rehabilitation Services</b>																		
Massage Therapists	8	32	130	363	131	324	74	194	16	27	8	2	2	3	369	945	0	1,314
Occupational Therapists	0	2	16	191	26	259	7	176	0	55	1	1	2	162	52	846	0	898
Physical Therapists	4	34	148	467	141	626	78	590	32	204	11	26	8	22	422	1,969	3	2,394
<b>TOTAL</b>	<b>623</b>	<b>1,532</b>	<b>5,117</b>	<b>12,305</b>	<b>7,330</b>	<b>17,750</b>	<b>6,230</b>	<b>15,966</b>	<b>2,586</b>	<b>6,381</b>	<b>861</b>	<b>589</b>	<b>475</b>	<b>718</b>	<b>23,222</b>	<b>55,241</b>	<b>3</b>	<b>78,466</b>

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 3**  
**B.C. - TOTAL**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Dental Services</b>																		
Certified Dental Assistants	4,437	91.07	174	3.57	47	0.96	4	0.08	9	0.18	4,671	95.87	201	4.13	0	0.00	4,872	100.00
Dental Hygienists	801	47.15	173	10.18	159	9.36	263	15.48	147	8.65	1,543	90.82	155	9.12	1	0.06	1,699	100.00
Dentists	955	37.42	392	15.36	248	9.72	214	8.39	240	9.40	2,049	80.29	502	19.67	1	0.04	2,552	100.00
<b>Medical &amp; Treatment Services</b>																		
Pharmacists	2,239	74.78	162	5.41	263	8.78	54	1.80	45	1.50	2,763	92.28	203	6.78	28	0.94	2,994	100.00
Physicians (Directory Active)	2,373	27.14	1,072	12.26	739	8.45	1,450	16.59	701	8.02	6,335	72.47	2,407	27.53	0	0.00	8,742	100.00
<b>Nursing Services</b>																		
Licensed Practical Nurses	3,415	66.61	371	7.24	330	6.44	399	7.78	193	3.76	4,708	91.83	283	5.52	136	2.65	5,127	100.00
Registered Nurses	16,800	53.21	2,567	8.13	2,588	8.20	3,203	10.14	1,697	5.37	26,855	85.05	4,713	14.93	7	0.02	31,575	100.00
Registered Psychiatric Nurses	1,604	63.88	101	4.02	289	11.51	0	0.00	0	0.00	1,994	79.41	324	12.90	193	7.69	2,511	100.00
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	383	47.52	82	10.17	78	9.68	98	12.16	102	12.66	743	92.18	57	7.07	6	0.74	806	100.00
<b>Psychological Services</b>																		
Psychologists	367	39.85	79	8.58	44	4.78	138	14.98	33	3.58	661	71.77	260	28.23	0	0.00	921	100.00
<b>Rehabilitation Services</b>																		
Massage Therapists	918	69.86	3	0.23	4	0.30	352	26.79	1	0.08	1,278	97.26	19	1.45	17	1.29	1,314	100.00
Occupational Therapists	347	38.64	86	9.58	43	4.79	125	13.92	60	6.68	661	73.61	224	24.94	13	1.45	898	100.00
Physical Therapists	680	28.40	212	8.86	177	7.39	339	14.16	167	6.98	1,575	65.79	796	33.25	23	0.96	2,394	100.00
<b>TOTAL</b>	<b>35,319</b>	<b>53.19</b>	<b>5,474</b>	<b>8.24</b>	<b>5,009</b>	<b>7.54</b>	<b>6,639</b>	<b>10.00</b>	<b>3,395</b>	<b>5.11</b>	<b>55,836</b>	<b>84.08</b>	<b>10,144</b>	<b>15.28</b>	<b>425</b>	<b>0.64</b>	<b>66,405</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 4**  
**Health Region 1 - East Kootenay**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b><i>Dental Services</i></b>						
Certified Dental Assistants	101	106	12.69	13.19	4.95	3.98
Dental Hygienists	27	29	3.39	3.61	8.11	7.01
Dentists	36	34	4.52	4.23	-6.63	-7.67
<b><i>Medical &amp; Treatment Services</i></b>						
Emergency Medical Assistants	138	134	17.33	16.68	-3.16	-4.14
First Responders	95	103	11.93	12.82	9.22	8.12
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	7	7	0.88	0.87	*	*
Pharmacists	39	44	4.90	5.48	17.45	16.00
Physicians (Directory Active)	124	124	15.58	15.43	0.00	-0.93
<b><i>Nursing Services</i></b>						
Licensed Practical Nurses	188	181	23.62	22.53	-3.72	-4.62
Registered Nurses <sup>5</sup>	544	550	68.33	68.45	1.10	0.17
Licensed Graduate Nurses	0	0	0.00	0.00	*	*
Registered Psychiatric Nurses	14	18	1.76	2.24	24.04	23.05
<b><i>Nutrition &amp; Dietary Services</i></b>						
Dietitians & Nutritionists (BCDNA)	15	17	1.88	2.12	13.33	12.28
<b><i>Psychological Services</i></b>						
Psychologists	8	8	1.00	1.00	*	*
<b><i>Rehabilitation Services</i></b>						
Massage Therapists <sup>6</sup>	21	22	2.64	2.74	4.76	3.79
Occupational Therapists (BCSOT)	10	12	1.26	1.49	24.46	23.07
Physical Therapists <sup>6</sup>	36	41	4.52	5.10	16.89	15.59
<b>TOTAL<sup>7</sup></b>	<b>1,403</b>	<b>1,430</b>	<b>176.23</b>	<b>177.96</b>	<b>0.96</b>	<b>0.49</b>
<b><i>Hospital Beds<sup>8,9</sup></i></b>						
Acute Care Beds	212	n/a	26.63	n/a	n/a	n/a
Extended Care Beds	113	n/a	14.19	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>325</b>	<b>n/a</b>	<b>40.82</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b><i>Community Pharmacies</i></b>	<b>13</b>	<b>15</b>	<b>1.63</b>	<b>1.87</b>	<b>21.02</b>	<b>19.53</b>
<b><i>Population</i></b>	<b>79,610</b>	<b>80,355</b>	<b>n/a</b>	<b>n/a</b>	<b>0.47</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 5**  
**Health Region 1 - East Kootenay**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	15	1	43	0	40	0	6	0	1	0	0	0	0	1	105	106	
Dental Hygienists	0	1	0	12	1	10	1	3	0	0	0	0	0	1	2	27	29	
Dentists	0	0	7	0	5	1	14	1	5	0	1	0	0	0	32	2	34	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	7	3	21	21	37	18	13	5	6	1	0	0	0	2	84	50	134	
First Responders	3	1	21	6	33	5	21	1	10	0	1	0	1	0	90	13	103	
Opticians	0	0	0	1	0	0	0	1	0	0	0	0	4	1	4	3	7	
Pharmacists	1	1	7	9	2	5	3	5	5	2	3	0	1	0	22	22	44	
Physicians (Directory Active)	0	0	9	9	34	12	30	3	15	1	9	1	1	0	98	26	124	
<b>Nursing Services</b>																		
Licensed Practical Nurses	1	9	2	23	1	56	2	61	0	21	0	1	1	3	7	174	181	
Registered Nurses	0	8	5	91	6	159	4	183	0	88	0	6	0	0	15	535	550	
Licensed Graduate Nurses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Registered Psychiatric Nurses	0	0	0	3	1	6	1	4	0	2	0	0	0	1	2	16	18	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	7	0	4	0	3	0	3	0	0	0	0	0	17	17	
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	0	0	2	1	3	1	1	0	0	0	6	2	8	
<b>Rehabilitation Services</b>																		
Massage Therapists	0	2	0	4	2	10	3	0	0	1	0	0	0	0	5	17	22	
Occupational Therapists	0	0	0	4	0	4	0	2	0	0	0	0	0	2	0	12	12	
Physical Therapists	0	0	2	12	2	9	2	7	1	5	0	0	0	1	7	34	41	
<b>TOTAL</b>	<b>12</b>	<b>40</b>	<b>75</b>	<b>245</b>	<b>124</b>	<b>339</b>	<b>96</b>	<b>286</b>	<b>45</b>	<b>126</b>	<b>15</b>	<b>8</b>	<b>8</b>	<b>11</b>	<b>375</b>	<b>1,055</b>	<b>1,430</b>	

<sup>1</sup> Age and sex information are not available for all health groups.

**Table 6**  
**Health Region 1 - East Kootenay**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Dental Services</b>																		
Certified Dental Assistants	95	89.62	7	6.60	2	1.89	0	0.00	0	0.00	104	98.11	2	1.89	0	0.00	106	100.00
Dental Hygienists	5	17.24	6	20.69	5	17.24	3	10.34	4	13.79	23	79.31	6	20.69	0	0.00	29	100.00
Dentists	11	32.35	6	17.65	3	8.82	2	5.88	1	2.94	23	67.65	11	32.35	0	0.00	34	100.00
<b>Medical &amp; Treatment Services</b>																		
Pharmacists	27	61.36	7	15.91	6	13.64	0	0.00	0	0.00	40	90.91	3	6.82	1	2.27	44	100.00
Physicians (Directory Active)	19	15.32	29	23.39	19	15.32	23	18.55	6	4.84	96	77.42	28	22.58	0	0.00	124	100.00
<b>Nursing Services</b>																		
Licensed Practical Nurses	132	72.93	23	12.71	8	4.42	11	6.08	4	2.21	178	98.34	1	0.55	2	1.10	181	100.00
Registered Nurses	204	37.09	136	24.73	78	14.18	63	11.45	27	4.91	508	92.36	42	7.64	0	0.00	550	100.00
Registered Psychiatric Nurses	8	44.44	2	11.11	7	38.89	0	0.00	0	0.00	17	94.44	0	0.00	1	5.56	18	100.00
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	5	29.41	4	23.53	2	11.76	1	5.88	2	11.76	14	82.35	3	17.65	0	0.00	17	100.00
<b>Psychological Services</b>																		
Psychologists	3	37.50	2	25.00	0	0.00	0	0.00	0	0.00	5	62.50	3	37.50	0	0.00	8	100.00
<b>Rehabilitation Services</b>																		
Massage Therapists	10	45.45	0	0.00	0	0.00	12	54.55	0	0.00	22	100.00	0	0.00	0	0.00	22	100.00
Occupational Therapists	6	50.00	0	0.00	1	8.33	2	16.67	1	8.33	10	83.33	1	8.33	1	8.33	12	100.00
Physical Therapists	5	12.20	7	17.07	6	14.63	6	14.63	3	7.32	27	65.85	12	29.27	2	4.88	41	100.00
<b>TOTAL</b>	<b>530</b>	<b>44.69</b>	<b>229</b>	<b>19.31</b>	<b>137</b>	<b>11.55</b>	<b>123</b>	<b>10.37</b>	<b>48</b>	<b>4.05</b>	<b>1,067</b>	<b>89.97</b>	<b>112</b>	<b>9.44</b>	<b>7</b>	<b>0.59</b>	<b>1,186</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 7**  
**Health Region 2 - West Kootenay - Boundary**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b><i>Dental Services</i></b>						
Certified Dental Assistants	107	108	13.14	13.18	0.93	0.28
Dental Hygienists	29	35	3.56	4.27	22.77	21.90
Dentists	49	47	6.02	5.73	-4.88	-5.62
<b><i>Medical &amp; Treatment Services</i></b>						
Emergency Medical Assistants	152	153	18.67	18.67	0.72	0.00
First Responders	165	220	20.26	26.84	36.87	35.89
Midwives <sup>4</sup>	n/a	5	n/a	0.61	n/a	n/a
Opticians	12	12	1.47	1.46	0.00	-1.30
Pharmacists	47	55	5.77	6.71	23.32	22.24
Physicians (Directory Active)	140	142	17.19	17.32	1.43	0.77
<b><i>Nursing Services</i></b>						
Licensed Practical Nurses	219	210	26.89	25.62	-4.11	-4.74
Registered Nurses <sup>5</sup>	722	708	88.66	86.38	-1.94	-2.58
Licensed Graduate Nurses	12	12	1.47	1.46	0.00	-0.65
Registered Psychiatric Nurses	23	22	2.82	2.68	-3.74	-4.28
<b><i>Nutrition &amp; Dietary Services</i></b>						
Dietitians & Nutritionists (BCDNA)	19	20	2.33	2.44	5.26	4.58
<b><i>Psychological Services</i></b>						
Psychologists	11	11	1.35	1.34	0.00	-0.65
<b><i>Rehabilitation Services</i></b>						
Massage Therapists <sup>6</sup>	44	45	5.40	5.49	2.27	1.61
Occupational Therapists (BCSOT)	11	11	1.35	1.34	0.00	-0.78
Physical Therapists <sup>6</sup>	56	56	6.88	6.83	0.00	-0.78
<b>TOTAL<sup>7</sup></b>	<b>1,818</b>	<b>1,867</b>	<b>223.25</b>	<b>227.77</b>	<b>1.34</b>	<b>1.01</b>
<b><i>Hospital Beds<sup>8,9</sup></i></b>						
Acute Care Beds	214	n/a	26.28	n/a	n/a	n/a
Extended Care Beds	244	n/a	29.96	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>458</b>	<b>n/a</b>	<b>56.24</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<i>Community Pharmacies</i>	21	22	2.58	2.68	6.40	5.47
<b>Population</b>	<b>81,432</b>	<b>81,967</b>	<b>n/a</b>	<b>n/a</b>	<b>0.33</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 8**  
**Health Region 2 - West Kootenay - Boundary**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	9	1	50	0	32	0	14	0	2	0	0	0	0	1	107	108	
Dental Hygienists	0	3	1	11	2	13	0	3	1	1	0	0	0	0	4	31	35	
Dentists	0	0	11	4	10	1	17	0	4	0	0	0	0	0	42	5	47	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	11	3	21	20	44	23	21	6	1	2	0	0	0	1	98	55	153	
First Responders	22	0	32	3	81	3	57	1	11	0	2	0	8	0	213	7	220	
Opticians	0	0	0	0	3	1	2	1	0	1	0	0	2	2	7	5	12	
Pharmacists	0	2	11	8	6	8	6	7	4	0	1	0	2	0	30	25	55	
Physicians (Directory Active)	0	0	11	4	33	26	30	11	20	0	7	0	0	0	101	41	142	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	2	1	16	3	73	3	83	0	25	0	0	0	4	7	203	210	
Registered Nurses	1	6	6	71	12	226	13	265	0	98	0	10	0	0	32	676	708	
Licensed Graduate Nurses	0	0	0	0	0	0	0	9	0	3	0	0	0	0	0	12	12	
Registered Psychiatric Nurses	0	0	0	1	0	4	3	8	1	4	0	1	0	0	4	18	22	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	1	7	1	4	0	5	0	2	0	0	0	0	2	18	20	
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	0	0	4	5	1	1	0	0	0	0	5	6	11	
<b>Rehabilitation Services</b>																		
Massage Therapists	0	0	7	10	7	10	2	5	2	0	1	0	0	1	19	26	45	
Occupational Therapists	0	0	1	0	0	6	1	1	0	0	0	0	0	2	2	9	11	
Physical Therapists	0	1	3	5	2	20	3	14	0	6	0	1	0	1	8	48	56	
<b>TOTAL</b>	<b>34</b>	<b>26</b>	<b>107</b>	<b>210</b>	<b>204</b>	<b>450</b>	<b>162</b>	<b>438</b>	<b>45</b>	<b>145</b>	<b>11</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>575</b>	<b>1,292</b>	<b>1,867</b>	

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 9**  
**Health Region 2 - West Kootenay - Boundary**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	92	85.19	7	6.48	1	0.93	0	0.00	0	0.00	100	92.59	8	7.41	0	0.00	108	100.00
Dental Hygienists	9	25.71	4	11.43	5	14.29	11	31.43	2	5.71	31	88.57	4	11.43	0	0.00	35	100.00
Dentists	18	38.30	9	19.15	1	2.13	6	12.77	4	8.51	38	80.85	9	19.15	0	0.00	47	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	40	72.73	10	18.18	3	5.45	0	0.00	2	3.64	55	100.00	0	0.00	0	0.00	55	100.00
Physicians (Directory Active)	33	23.24	21	14.79	8	5.63	30	21.13	9	6.34	101	71.13	41	28.87	0	0.00	142	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	165	78.57	17	8.10	7	3.33	7	3.33	3	1.43	199	94.76	7	3.33	4	1.90	210	100.00
Registered Nurses	455	64.27	61	8.62	41	5.79	57	8.05	32	4.52	646	91.24	62	8.76	0	0.00	708	100.00
Registered Psychiatric Nurses	18	81.82	2	9.09	1	4.55	0	0.00	0	0.00	21	95.45	0	0.00	1	4.55	22	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	9	45.00	4	20.00	5	25.00	0	0.00	0	0.00	18	90.00	1	5.00	1	5.00	20	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	4	36.36	0	0.00	0	0.00	5	45.45	0	0.00	9	81.82	2	18.18	0	0.00	11	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	22	48.89	0	0.00	0	0.00	22	48.89	0	0.00	44	97.78	0	0.00	1	2.22	45	100.00
Occupational Therapists	5	45.45	0	0.00	2	18.18	2	18.18	0	0.00	9	81.82	2	18.18	0	0.00	11	100.00
Physical Therapists	11	19.64	12	21.43	2	3.57	7	12.50	4	7.14	36	64.29	18	32.14	2	3.57	56	100.00
<b>TOTAL</b>	<b>881</b>	<b>59.93</b>	<b>147</b>	<b>10.00</b>	<b>76</b>	<b>5.17</b>	<b>147</b>	<b>10.00</b>	<b>56</b>	<b>3.81</b>	<b>1,307</b>	<b>88.91</b>	<b>154</b>	<b>10.48</b>	<b>9</b>	<b>0.61</b>	<b>1,470</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 10**  
**Health Region 3 - North Okanagan**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b><i>Dental Services</i></b>						
Certified Dental Assistants	148	144	12.80	12.29	-2.70	-3.96
Dental Hygienists	44	45	3.81	3.84	2.48	1.04
Dentists	61	57	5.28	4.87	-7.82	-9.25
<b><i>Medical &amp; Treatment Services</i></b>						
Emergency Medical Assistants	93	92	8.04	7.85	-1.17	-2.57
First Responders	101	156	8.73	13.32	60.68	58.41
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	31	31	2.68	2.65	0.00	-2.57
Pharmacists	68	73	5.88	6.23	9.92	8.03
Physicians (Directory Active)	190	198	16.43	16.90	4.21	2.86
<b><i>Nursing Services</i></b>						
Licensed Practical Nurses	212	205	18.33	17.50	-3.30	-4.55
Registered Nurses <sup>5</sup>	830	813	71.78	69.40	-2.05	-3.32
Licensed Graduate Nurses	0	0	0.00	0.00	*	*
Registered Psychiatric Nurses	74	76	6.40	6.49	2.31	1.18
<b><i>Nutrition &amp; Dietary Services</i></b>						
Dietitians & Nutritionists (BCDNA)	15	18	1.30	1.54	20.00	18.45
<b><i>Psychological Services</i></b>						
Psychologists	8	10	0.69	0.85	*	*
<b><i>Rehabilitation Services</i></b>						
Massage Therapists <sup>6</sup>	45	49	3.89	4.18	8.89	7.48
Occupational Therapists (BCSOT)	12	12	1.04	1.02	0.00	-1.55
Physical Therapists <sup>6</sup>	75	76	6.49	6.49	1.60	0.03
<b>TOTAL<sup>7</sup></b>	<b>2,007</b>	<b>2,055</b>	<b>173.56</b>	<b>175.41</b>	<b>1.19</b>	<b>0.53</b>
<b><i>Hospital Beds<sup>8,9</sup></i></b>						
Acute Care Beds	269	n/a	23.26	n/a	n/a	n/a
Extended Care Beds	305	n/a	26.38	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>574</b>	<b>n/a</b>	<b>49.64</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b><i>Community Pharmacies</i></b>	<b>18</b>	<b>19</b>	<b>1.56</b>	<b>1.62</b>	<b>7.48</b>	<b>5.62</b>
<b><i>Population</i></b>	<b>115,635</b>	<b>117,151</b>	<b>n/a</b>	<b>n/a</b>	<b>0.65</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 11**  
**Health Region 3 - North Okanagan**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	0	6	0	55	0	55	0	22	0	6	0	0	0	0	0	0	144	144
Dental Hygienists	0	3	0	16	1	17	0	8	0	0	0	0	0	0	0	1	44	45
Dentists	0	0	13	3	8	3	17	0	12	0	1	0	0	0	51	6	57	
<b><i>Medical &amp; Treatment Services</i></b>																		
Emergency Medical Assistants	4	0	16	5	20	14	19	8	5	1	0	0	0	0	64	28	92	
First Responders	10	3	30	6	47	14	34	4	7	1	0	0	0	0	128	28	156	
Opticians	0	0	0	4	0	2	4	4	1	0	0	0	11	5	16	15	31	
Pharmacists	1	0	6	14	13	8	16	8	3	0	2	0	1	1	42	31	73	
Physicians (Directory Active)	0	0	22	7	53	19	39	5	36	3	14	0	0	0	164	34	198	
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	0	1	0	17	3	64	5	85	1	24	1	1	1	2	11	194	205	
Registered Nurses	0	8	5	78	5	251	5	319	1	135	0	6	0	0	16	797	813	
Licensed Graduate Nurses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Registered Psychiatric Nurses	0	0	0	3	0	16	6	29	7	13	1	0	0	1	14	62	76	
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	0	0	1	4	1	9	0	2	0	1	0	0	0	0	2	16	18	
<b><i>Psychological Services</i></b>																		
Psychologists	0	0	0	0	0	1	3	1	2	2	1	0	0	0	6	4	10	
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	0	0	3	15	5	15	4	6	0	1	0	0	0	0	12	37	49	
Occupational Therapists	0	0	0	2	0	6	0	2	0	1	0	0	0	1	0	12	12	
Physical Therapists	1	3	2	13	7	16	4	22	1	4	1	2	0	0	16	60	76	
<b>TOTAL</b>	<b>16</b>	<b>24</b>	<b>98</b>	<b>242</b>	<b>163</b>	<b>510</b>	<b>156</b>	<b>525</b>	<b>76</b>	<b>192</b>	<b>21</b>	<b>9</b>	<b>13</b>	<b>10</b>	<b>543</b>	<b>1,512</b>	<b>2,055</b>	

<sup>1</sup>Age and sex information are not available for all health groups.

**Table 12**  
**Health Region 3 - North Okanagan**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	126	87.50	8	5.56	2	1.39	0	0.00	0	0.00	136	94.44	8	5.56	0	0.00	144	100.00
Dental Hygienists	16	35.56	9	20.00	8	17.78	4	8.89	2	4.44	39	86.67	6	13.33	0	0.00	45	100.00
Dentists	19	33.33	19	33.33	6	10.53	3	5.26	4	7.02	51	89.47	6	10.53	0	0.00	57	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	54	73.97	3	4.11	13	17.81	0	0.00	0	0.00	70	95.89	3	4.11	0	0.00	73	100.00
Physicians (Directory Active)	56	28.28	35	17.68	24	12.12	23	11.62	17	8.59	155	78.28	43	21.72	0	0.00	198	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	127	61.95	28	13.66	16	7.80	18	8.78	5	2.44	194	94.63	2	0.98	9	4.39	205	100.00
Registered Nurses	468	57.56	120	14.76	82	10.09	63	7.75	28	3.44	761	93.60	52	6.40	0	0.00	813	100.00
Registered Psychiatric Nurses	47	61.84	9	11.84	13	17.11	0	0.00	0	0.00	69	90.79	0	0.00	7	9.21	76	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	9	50.00	1	5.56	3	16.67	1	5.56	1	5.56	15	83.33	3	16.67	0	0.00	18	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	4	40.00	0	0.00	1	10.00	1	10.00	0	0.00	6	60.00	4	40.00	0	0.00	10	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	35	71.43	0	0.00	1	2.04	13	26.53	0	0.00	49	100.00	0	0.00	0	0.00	49	100.00
Occupational Therapists	4	33.33	4	33.33	2	16.67	1	8.33	0	0.00	11	91.67	1	8.33	0	0.00	12	100.00
Physical Therapists	23	30.26	12	15.79	10	13.16	6	7.89	2	2.63	53	69.74	23	30.26	0	0.00	76	100.00
<b>TOTAL</b>	<b>988</b>	<b>55.63</b>	<b>248</b>	<b>13.96</b>	<b>181</b>	<b>10.19</b>	<b>133</b>	<b>7.49</b>	<b>59</b>	<b>3.32</b>	<b>1,609</b>	<b>90.60</b>	<b>151</b>	<b>8.50</b>	<b>16</b>	<b>0.90</b>	<b>1,776</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 13**  
**Health Region 4 - South Okanagan - Similkameen**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	314	316	14.01	13.91	0.64	-0.71
Dental Hygienists	101	107	4.51	4.71	6.50	4.95
Dentists	128	128	5.71	5.64	0.00	-1.60
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	163	166	7.27	7.31	2.01	0.53
First Responders	349	433	15.57	19.06	26.53	24.69
Midwives <sup>4</sup>	n/a	1	n/a	0.04	n/a	n/a
Opticians	87	91	3.88	4.01	9.41	6.51
Pharmacists	165	174	7.36	7.66	7.34	5.43
Physicians (Directory Active)	396	420	17.67	18.49	6.06	4.65
<b>Nursing Services</b>						
Licensed Practical Nurses	517	505	23.07	22.23	-2.32	-3.62
Registered Nurses <sup>5</sup>	1,800	1,813	80.32	79.82	0.72	-0.62
Licensed Graduate Nurses	7	5	0.31	0.22	*	*
Registered Psychiatric Nurses	102	99	4.55	4.36	-2.53	-3.64
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	35	38	1.56	1.67	8.57	7.12
<b>Psychological Services</b>						
Psychologists	25	24	1.12	1.06	-4.00	-5.28
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	71	75	3.17	3.30	5.63	4.23
Occupational Therapists (BCSOT)	69	69	3.08	3.04	0.00	-1.60
Physical Therapists <sup>6</sup>	152	146	6.78	6.43	-4.72	-6.24
<b>TOTAL<sup>7</sup></b>	<b>4,481</b>	<b>4,609</b>	<b>199.94</b>	<b>202.91</b>	<b>1.42</b>	<b>0.74</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	597	n/a	26.64	n/a	n/a	n/a
Extended Care Beds	635	n/a	28.33	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>1,232</b>	<b>n/a</b>	<b>54.97</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	43	43	1.92	1.89	0.00	-1.77
<b>Population</b>	<b>224,114</b>	<b>227,143</b>	<b>n/a</b>	<b>n/a</b>	<b>0.67</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 14**  
**Health Region 4 - South Okanagan - Similkameen**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	0	24	0	131	1	120	0	34	0	5	0	1	0	0	1	315	316	
Dental Hygienists	0	5	0	39	0	43	1	18	0	1	0	0	0	0	1	106	107	
Dentists	0	0	22	6	25	8	41	1	19	0	6	0	0	0	113	15	128	
<b><i>Medical &amp; Treatment Services</i></b>																		
Emergency Medical Assistants	12	4	39	14	40	15	26	5	10	1	0	0	0	0	127	39	166	
First Responders	44	2	117	4	126	3	94	4	34	0	3	0	1	1	419	14	433	
Opticians	0	0	4	12	4	15	2	11	3	3	0	0	18	19	31	60	91	
Pharmacists	2	4	28	24	16	25	26	16	18	6	6	0	2	1	98	76	174	
Physicians (Directory Active)	0	0	29	18	118	50	105	13	55	6	23	2	1	0	331	89	420	
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	1	13	10	57	20	143	13	172	2	64	0	2	0	8	46	459	505	
Registered Nurses	0	24	16	239	23	560	14	604	6	302	0	25	0	0	59	1,754	1,813	
Licensed Graduate Nurses	0	0	0	0	0	1	0	2	0	2	0	0	0	0	0	5	5	
Registered Psychiatric Nurses	0	1	3	9	10	20	6	28	0	17	0	2	1	2	20	79	99	
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	0	0	0	15	0	15	1	6	0	1	0	0	0	0	1	37	38	
<b><i>Psychological Services</i></b>																		
Psychologists	0	0	0	0	2	3	8	3	5	1	2	0	0	0	17	7	24	
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	2	1	7	15	11	17	7	11	2	1	1	0	0	0	30	45	75	
Occupational Therapists	0	0	1	13	0	21	1	12	0	4	0	0	1	16	3	66	69	
Physical Therapists	0	1	8	23	12	51	7	32	1	8	2	0	0	1	30	116	146	
<b>TOTAL</b>	<b>61</b>	<b>79</b>	<b>284</b>	<b>619</b>	<b>408</b>	<b>1,110</b>	<b>352</b>	<b>972</b>	<b>155</b>	<b>422</b>	<b>43</b>	<b>32</b>	<b>24</b>	<b>48</b>	<b>1,327</b>	<b>3,282</b>	<b>4,609</b>	

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 15**  
**Health Region 4 - South Okanagan - Similkameen**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	281	88.92	16	5.06	7	2.22	0	0.00	0	0.00	304	96.20	12	3.80	0	0.00	316	100.00
Dental Hygienists	39	36.45	22	20.56	15	14.02	14	13.08	4	3.74	94	87.85	13	12.15	0	0.00	107	100.00
Dentists	26	20.31	29	22.66	21	16.41	10	7.81	17	13.28	103	80.47	25	19.53	0	0.00	128	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	116	66.67	25	14.37	27	15.52	1	0.57	0	0.00	169	97.13	3	1.72	2	1.15	174	100.00
Physicians (Directory Active)	100	23.81	76	18.10	65	15.48	77	18.33	22	5.24	340	80.95	80	19.05	0	0.00	420	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	348	68.91	51	10.10	41	8.12	33	6.53	16	3.17	489	96.83	9	1.78	7	1.39	505	100.00
Registered Nurses	923	50.91	264	14.56	266	14.67	174	9.60	73	4.03	1,700	93.77	113	6.23	0	0.00	1,813	100.00
Registered Psychiatric Nurses	49	49.49	11	11.11	23	23.23	0	0.00	0	0.00	83	83.84	5	5.05	11	11.11	99	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	18	47.37	5	13.16	6	15.79	5	13.16	3	7.89	37	97.37	1	2.63	0	0.00	38	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	2	8.33	5	20.83	2	8.33	8	33.33	0	0.00	17	70.83	7	29.17	0	0.00	24	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	45	60.00	1	1.33	0	0.00	28	37.33	0	0.00	74	98.67	1	1.33	0	0.00	75	100.00
Occupational Therapists	22	31.88	9	13.04	11	15.94	9	13.04	3	4.35	54	78.26	14	20.29	1	1.45	69	100.00
Physical Therapists	43	29.45	11	7.53	17	11.64	21	14.38	10	6.85	102	69.86	44	30.14	0	0.00	146	100.00
<b>TOTAL</b>	<b>2,012</b>	<b>51.41</b>	<b>525</b>	<b>13.41</b>	<b>501</b>	<b>12.80</b>	<b>380</b>	<b>9.71</b>	<b>148</b>	<b>3.78</b>	<b>3,566</b>	<b>91.11</b>	<b>327</b>	<b>8.35</b>	<b>21</b>	<b>0.54</b>	<b>3,914</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 16**  
**Health Region 5 - Thompson**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	166	173	12.58	12.91	4.22	2.66
Dental Hygienists	54	57	4.09	4.26	6.08	4.35
Dentists	57	60	4.32	4.48	6.35	4.45
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	195	196	14.78	14.63	0.56	-1.08
First Responders	246	267	18.64	19.93	9.35	7.57
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	28	31	2.12	2.31	22.58	18.94
Pharmacists	80	87	6.06	6.49	11.83	9.61
Physicians (Directory Active)	208	211	15.76	15.75	1.44	-0.07
<b>Nursing Services</b>						
Licensed Practical Nurses	226	215	17.13	16.05	-4.87	-6.29
Registered Nurses <sup>5</sup>	1,081	1,075	81.92	80.25	-0.56	-2.04
Licensed Graduate Nurses	1	1	0.08	0.07	*	*
Registered Psychiatric Nurses	59	52	4.47	3.88	-10.26	-11.41
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	22	22	1.67	1.64	0.00	-1.49
<b>Psychological Services</b>						
Psychologists	11	11	0.83	0.82	0.00	-1.49
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	31	33	2.35	2.46	6.45	4.86
Occupational Therapists (BCSOT)	21	23	1.59	1.72	11.53	9.54
Physical Therapists <sup>6</sup>	60	60	4.55	4.48	0.00	-1.79
<b>TOTAL<sup>7</sup></b>	<b>2,546</b>	<b>2,574</b>	<b>192.94</b>	<b>192.15</b>	<b>0.55</b>	<b>-0.21</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	346	n/a	26.22	n/a	n/a	n/a
Extended Care Beds	249	n/a	18.87	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>595</b>	<b>n/a</b>	<b>45.09</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>22</b>	<b>23</b>	<b>1.67</b>	<b>1.72</b>	<b>6.11</b>	<b>4.00</b>
<b>Population</b>	<b>131,956</b>	<b>133,957</b>	<b>n/a</b>	<b>n/a</b>	<b>0.76</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 17**  
**Health Region 5 - Thompson**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	15	0	66	0	66	0	25	0	1	0	0	0	0	0	0	173	173
Dental Hygienists	0	2	1	23	0	22	0	8	0	1	0	0	0	0	0	1	56	57
Dentists	1	0	9	5	11	2	22	0	6	0	4	0	0	0	53	7	60	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	10	10	46	22	36	24	36	5	4	2	0	0	1	0	133	63	196	
First Responders	16	2	77	12	82	14	48	3	11	1	0	0	0	1	234	33	267	
Opticians	0	1	1	3	3	2	3	4	0	0	0	0	4	10	11	20	31	
Pharmacists	3	3	17	14	9	12	8	6	8	3	2	0	2	0	49	38	87	
Physicians (Directory Active)	0	0	15	10	61	11	53	11	35	3	11	1	0	0	175	36	211	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	0	1	21	1	56	2	94	3	31	0	2	0	4	7	208	215	
Registered Nurses	1	11	8	192	12	369	6	336	3	130	0	7	0	0	30	1,045	1,075	
Licensed Graduate Nurses	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	
Registered Psychiatric Nurses	0	0	0	4	1	8	2	22	7	6	0	1	1	0	11	41	52	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	5	0	13	0	3	0	1	0	0	0	0	0	22	22	
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	3	0	3	2	3	0	0	0	0	0	9	2	11	
<b>Rehabilitation Services</b>																		
Massage Therapists	0	2	2	14	2	5	1	3	0	3	1	0	0	0	6	27	33	
Occupational Therapists	0	0	1	7	0	6	1	7	0	1	0	0	0	0	2	21	23	
Physical Therapists	0	0	1	9	5	16	5	12	1	11	0	0	0	0	12	48	60	
<b>TOTAL</b>	<b>31</b>	<b>46</b>	<b>179</b>	<b>407</b>	<b>226</b>	<b>626</b>	<b>190</b>	<b>541</b>	<b>81</b>	<b>195</b>	<b>18</b>	<b>11</b>	<b>8</b>	<b>15</b>	<b>733</b>	<b>1,841</b>	<b>2,574</b>	

<sup>1</sup> Age and sex information are not available for all health groups.

**Table 18**  
**Health Region 5 - Thompson**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	156	90.17	14	8.09	0	0.00	0	0.00	0	0.00	170	98.27	3	1.73	0	0.00	173	100.00
Dental Hygienists	28	49.12	8	14.04	4	7.02	9	15.79	6	10.53	55	96.49	2	3.51	0	0.00	57	100.00
Dentists	27	45.00	11	18.33	7	11.67	5	8.33	2	3.33	52	86.67	8	13.33	0	0.00	60	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	68	78.16	4	4.60	10	11.49	0	0.00	0	0.00	82	94.25	5	5.75	0	0.00	87	100.00
Physicians (Directory Active)	45	21.33	39	18.48	21	9.95	40	18.96	13	6.16	158	74.88	53	25.12	0	0.00	211	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	131	60.93	25	11.63	22	10.23	13	6.05	9	4.19	200	93.02	9	4.19	6	2.79	215	100.00
Registered Nurses	725	67.44	97	9.02	79	7.35	91	8.47	32	2.98	1,024	95.26	51	4.74	0	0.00	1,075	100.00
Registered Psychiatric Nurses	30	57.69	3	5.77	6	11.54	0	0.00	0	0.00	39	75.00	7	13.46	6	11.54	52	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	11	50.00	2	9.09	1	4.55	2	9.09	3	13.64	19	86.36	2	9.09	1	4.55	22	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	5	45.45	0	0.00	2	18.18	1	9.09	1	9.09	9	81.82	2	18.18	0	0.00	11	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	26	78.79	0	0.00	0	0.00	7	21.21	0	0.00	33	100.00	0	0.00	0	0.00	33	100.00
Occupational Therapists	10	43.48	5	21.74	0	0.00	3	13.04	0	0.00	18	78.26	5	21.74	0	0.00	23	100.00
Physical Therapists	20	33.33	7	11.67	6	10.00	5	8.33	4	6.67	42	70.00	18	30.00	0	0.00	60	100.00
<b>TOTAL</b>	<b>1,282</b>	<b>61.66</b>	<b>215</b>	<b>10.34</b>	<b>158</b>	<b>7.60</b>	<b>176</b>	<b>8.47</b>	<b>70</b>	<b>3.37</b>	<b>1,901</b>	<b>91.44</b>	<b>165</b>	<b>7.94</b>	<b>13</b>	<b>0.63</b>	<b>2,079</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 19**  
**Health Region 6 - Fraser Valley**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	338	366	14.45	15.28	8.28	5.70
Dental Hygienists	80	80	3.42	3.34	0.00	-2.60
Dentists	100	105	4.28	4.38	6.03	3.00
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	111	98	4.75	4.09	-12.71	-14.97
First Responders	386	408	16.51	17.03	6.23	3.47
Midwives <sup>4</sup>	n/a	1	n/a	0.04	n/a	n/a
Opticians	71	75	3.04	3.13	11.59	6.33
Pharmacists	142	152	6.07	6.35	9.50	6.03
Physicians (Directory Active)	324	329	13.86	13.73	1.54	-0.88
<b>Nursing Services</b>						
Licensed Practical Nurses	236	234	10.09	9.77	-0.85	-3.21
Registered Nurses <sup>5</sup>	1,414	1,394	60.47	58.19	-1.41	-3.76
Licensed Graduate Nurses	7	8	0.30	0.33	*	*
Registered Psychiatric Nurses	141	136	6.03	5.68	-3.05	-5.03
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	23	23	0.98	0.96	0.00	-2.38
<b>Psychological Services</b>						
Psychologists	28	27	1.20	1.13	-3.57	-5.87
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	36	41	1.54	1.71	13.89	11.17
Occupational Therapists (BCSOT)	17	18	0.73	0.75	7.10	4.04
Physical Therapists <sup>6</sup>	79	78	3.38	3.26	-1.52	-4.33
<b>TOTAL<sup>7</sup></b>	<b>3,533</b>	<b>3,572</b>	<b>151.09</b>	<b>149.12</b>	<b>0.55</b>	<b>-0.66</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	400	n/a	17.11	n/a	n/a	n/a
Extended Care Beds	601	n/a	25.70	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>1,001</b>	<b>n/a</b>	<b>42.81</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>40</b>	<b>42</b>	<b>1.71</b>	<b>1.75</b>	<b>6.72</b>	<b>3.34</b>
<b>Population</b>	<b>233,830</b>	<b>239,540</b>	<b>n/a</b>	<b>n/a</b>	<b>1.21</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 20**  
**Health Region 6 - Fraser Valley**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	0	73	1	149	0	117	0	21	0	5	0	0	0	0	1	365	366	
Dental Hygienists	0	3	1	29	1	33	2	10	1	0	0	0	0	0	5	75	80	
Dentists	0	0	22	5	27	8	25	2	13	0	3	0	0	0	90	15	105	
<b><i>Medical &amp; Treatment Services</i></b>																		
Emergency Medical Assistants	6	2	24	5	34	1	20	1	5	0	0	0	0	0	89	9	98	
First Responders	29	0	145	9	145	7	37	1	6	0	0	0	23	6	385	23	408	
Opticians	0	3	2	4	3	6	6	6	2	1	1	0	17	24	31	44	75	
Pharmacists	4	9	34	23	18	19	13	15	11	3	3	0	0	0	83	69	152	
Physicians (Directory Active)	0	0	29	26	82	14	88	18	34	5	30	2	0	1	263	66	329	
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	0	5	0	26	6	78	2	77	2	31	0	2	0	5	10	224	234	
Registered Nurses	1	23	9	237	17	386	16	451	11	221	0	22	0	0	54	1,340	1,394	
Licensed Graduate Nurses	0	0	0	0	0	0	0	3	0	4	0	1	0	0	0	8	8	
Registered Psychiatric Nurses	0	0	3	8	7	23	16	38	12	22	3	0	1	3	42	94	136	
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	0	1	0	7	0	10	0	3	0	2	0	0	0	0	0	23	23	
<b><i>Psychological Services</i></b>																		
Psychologists	0	0	1	3	3	3	8	3	4	2	0	0	0	0	16	11	27	
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	0	2	4	9	4	9	5	5	1	1	1	0	0	0	15	26	41	
Occupational Therapists	0	0	0	2	1	6	0	3	0	0	0	0	0	6	1	17	18	
Physical Therapists	1	2	9	18	4	12	2	20	3	6	0	0	1	0	20	58	78	
<b>TOTAL</b>	<b>41</b>	<b>123</b>	<b>284</b>	<b>560</b>	<b>352</b>	<b>732</b>	<b>240</b>	<b>677</b>	<b>105</b>	<b>303</b>	<b>41</b>	<b>27</b>	<b>42</b>	<b>45</b>	<b>1,105</b>	<b>2,467</b>	<b>3,572</b>	

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 21**  
**Health Region 6 - Fraser Valley**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	339	92.62	7	1.91	3	0.82	0	0.00	1	0.27	350	95.63	16	4.37	0	0.00	366	100.00
Dental Hygienists	26	32.50	3	3.75	8	10.00	22	27.50	12	15.00	71	88.75	9	11.25	0	0.00	80	100.00
Dentists	45	42.86	20	19.05	12	11.43	5	4.76	7	6.67	89	84.76	16	15.24	0	0.00	105	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	119	78.29	4	2.63	12	7.89	0	0.00	3	1.97	138	90.79	13	8.55	1	0.66	152	100.00
Physicians (Directory Active)	95	28.88	26	7.90	38	11.55	48	14.59	17	5.17	224	68.09	105	31.91	0	0.00	329	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	136	58.12	25	10.68	20	8.55	23	9.83	13	5.56	217	92.74	8	3.42	9	3.85	234	100.00
Registered Nurses	733	52.58	117	8.39	185	13.27	148	10.62	72	5.16	1,255	90.03	139	9.97	0	0.00	1,394	100.00
Registered Psychiatric Nurses	70	51.47	10	7.35	23	16.91	0	0.00	0	0.00	103	75.74	20	14.71	13	9.56	136	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	11	47.83	2	8.70	3	13.04	4	17.39	2	8.70	22	95.65	1	4.35	0	0.00	23	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	10	37.04	2	7.41	3	11.11	4	14.81	2	7.41	21	77.78	6	22.22	0	0.00	27	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	28	68.29	0	0.00	0	0.00	10	24.39	0	0.00	38	92.68	2	4.88	1	2.44	41	100.00
Occupational Therapists	3	16.67	7	38.89	3	16.67	0	0.00	1	5.56	14	77.78	4	22.22	0	0.00	18	100.00
Physical Therapists	26	33.33	10	12.82	5	6.41	10	12.82	4	5.13	55	70.51	22	28.21	1	1.28	78	100.00
<b>TOTAL</b>	<b>1,641</b>	<b>55.01</b>	<b>233</b>	<b>7.81</b>	<b>315</b>	<b>10.56</b>	<b>274</b>	<b>9.19</b>	<b>134</b>	<b>4.49</b>	<b>2,597</b>	<b>87.06</b>	<b>361</b>	<b>12.10</b>	<b>25</b>	<b>0.84</b>	<b>2,983</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 22**  
**Health Region 7 - South Fraser Valley**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	700	719	12.72	12.78	2.71	0.42
Dental Hygienists	195	196	3.54	3.48	0.56	-1.89
Dentists	277	291	5.03	5.17	6.10	3.26
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	128	135	2.33	2.40	5.98	3.40
First Responders	1,013	1,028	18.41	18.27	1.62	-0.86
Midwives <sup>4</sup>	n/a	3	n/a	0.05	n/a	n/a
Opticians	153	152	2.78	2.70	-1.30	-5.66
Pharmacists	317	347	5.76	6.17	12.81	9.47
Physicians (Directory Active)	694	703	12.61	12.49	1.30	-0.97
<b>Nursing Services</b>						
Licensed Practical Nurses	392	404	7.12	7.18	3.06	0.76
Registered Nurses <sup>5</sup>	2,909	2,899	52.87	51.51	-0.34	-2.57
Licensed Graduate Nurses	36	34	0.65	0.60	-5.56	-7.66
Registered Psychiatric Nurses	258	257	4.69	4.57	-0.33	-2.24
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	69	69	1.25	1.23	0.00	-2.23
<b>Psychological Services</b>						
Psychologists	67	74	1.22	1.31	10.45	7.98
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	109	116	1.98	2.06	6.42	4.05
Occupational Therapists (BCSOT)	69	70	1.25	1.24	1.74	-0.98
Physical Therapists <sup>6</sup>	188	208	3.42	3.70	12.90	9.88
<b>TOTAL<sup>7</sup></b>	<b>7,574</b>	<b>7,702</b>	<b>137.65</b>	<b>136.85</b>	<b>0.84</b>	<b>-0.29</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	748	n/a	13.59	n/a	n/a	n/a
Extended Care Beds	801	n/a	14.56	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>1,549</b>	<b>n/a</b>	<b>28.15</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>84</b>	<b>88</b>	<b>1.53</b>	<b>1.56</b>	<b>6.40</b>	<b>3.24</b>
<b>Population</b>	<b>550,229</b>	<b>562,799</b>	<b>n/a</b>	<b>n/a</b>	<b>1.14</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 23**  
**Health Region 7 - South Fraser Valley**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Sex Unknown	Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
<b><i>Dental Services</i></b>																			
Certified Dental Assistants	0	64	0	283	0	275	1	92	0	3	0	0	0	1	1	718	0	719	
Dental Hygienists	0	2	4	64	0	76	1	45	0	3	0	0	0	1	5	191	0	196	
Dentists	1	0	29	21	83	36	72	12	31	2	4	0	0	0	220	71	0	291	
<b><i>Medical &amp; Treatment Services</i></b>																			
Emergency Medical Assistants	0	0	26	6	56	5	28	4	10	0	0	0	0	0	120	15	0	135	
First Responders	62	2	361	21	356	12	179	2	25	1	1	0	6	0	990	38	0	1,028	
Opticians	4	8	9	10	7	14	6	5	2	1	0	0	37	49	65	87	0	152	
Pharmacists	4	7	58	86	38	50	38	31	18	5	6	0	5	1	167	180	0	347	
Physicians (Directory Active)	0	0	50	28	157	95	166	56	87	7	49	8	0	0	509	194	0	703	
<b><i>Nursing Services</i></b>																			
Licensed Practical Nurses	3	11	2	55	6	108	7	146	5	53	0	4	0	4	23	381	0	404	
Registered Nurses	3	63	20	447	25	770	24	995	11	487	0	54	0	0	83	2,816	0	2,899	
Licensed Graduate Nurses	0	0	0	1	0	8	1	16	0	8	0	0	0	0	1	33	0	34	
Registered Psychiatric Nurses	0	4	4	44	9	49	13	84	13	24	1	7	1	4	41	216	0	257	
<b><i>Nutrition &amp; Dietary Services</i></b>																			
Dietitians & Nutritionists	0	1	0	20	0	27	0	14	0	4	0	0	0	3	0	69	0	69	
<b><i>Psychological Services</i></b>																			
Psychologists	0	0	2	2	8	9	16	12	18	2	4	1	0	0	48	26	0	74	
<b><i>Rehabilitation Services</i></b>																			
Massage Therapists	2	4	21	26	9	36	4	12	1	1	0	0	0	0	37	79	0	116	
Occupational Therapists	0	1	0	11	1	23	0	18	0	2	1	0	0	13	2	68	0	70	
Physical Therapists	0	2	19	36	14	52	7	49	5	13	1	1	2	5	48	158	2	208	
<b>TOTAL</b>	<b>79</b>	<b>169</b>	<b>605</b>	<b>1,161</b>	<b>769</b>	<b>1,645</b>	<b>563</b>	<b>1,593</b>	<b>226</b>	<b>616</b>	<b>67</b>	<b>75</b>	<b>51</b>	<b>81</b>	<b>2,360</b>	<b>5,340</b>	<b>2</b>	<b>7,702</b>	

<sup>1</sup>Age and sex information are not available for all health groups.

**Table 24**  
**Health Region 7 - South Fraser Valley**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<i>Dental Services</i>																		
Certified Dental Assistants	624	86.79	20	2.78	10	1.39	0	0.00	1	0.14	655	91.10	64	8.90	0	0.00	719	100.00
Dental Hygienists	98	50.00	16	8.16	16	8.16	31	15.82	12	6.12	173	88.27	23	11.73	0	0.00	196	100.00
Dentists	149	51.20	31	10.65	33	11.34	20	6.87	15	5.15	248	85.22	43	14.78	0	0.00	291	100.00
<i>Medical &amp; Treatment Services</i>																		
Pharmacists	264	76.08	13	3.75	20	5.76	6	1.73	6	1.73	309	89.05	32	9.22	6	1.73	347	100.00
Physicians (Directory Active)	196	27.88	65	9.25	66	9.39	99	14.08	57	8.11	483	68.71	220	31.29	0	0.00	703	100.00
<i>Nursing Services</i>																		
Licensed Practical Nurses	254	62.87	32	7.92	27	6.68	36	8.91	15	3.71	364	90.10	28	6.93	12	2.97	404	100.00
Registered Nurses	1,524	52.57	183	6.31	251	8.66	264	9.11	141	4.86	2,363	81.51	535	18.45	1	0.03	2,899	100.00
Registered Psychiatric Nurses	184	71.60	9	3.50	28	10.89	0	0.00	0	0.00	221	85.99	15	5.84	21	8.17	257	100.00
<i>Nutrition &amp; Dietary Services</i>																		
Dietitians & Nutritionists	36	52.17	8	11.59	6	8.70	10	14.49	6	8.70	66	95.65	2	2.90	1	1.45	69	100.00
<i>Psychological Services</i>																		
Psychologists	28	37.84	6	8.11	3	4.05	11	14.86	4	5.41	52	70.27	22	29.73	0	0.00	74	100.00
<i>Rehabilitation Services</i>																		
Massage Therapists	93	80.17	0	0.00	0	0.00	21	18.10	0	0.00	114	98.28	1	0.86	1	0.86	116	100.00
Occupational Therapists	28	40.00	7	10.00	2	2.86	9	12.86	7	10.00	53	75.71	16	22.86	1	1.43	70	100.00
Physical Therapists	55	26.44	16	7.69	22	10.58	24	11.54	13	6.25	130	62.50	72	34.62	6	2.88	208	100.00
<b>TOTAL</b>	<b>3,533</b>	<b>55.61</b>	<b>406</b>	<b>6.39</b>	<b>484</b>	<b>7.62</b>	<b>531</b>	<b>8.36</b>	<b>277</b>	<b>4.36</b>	<b>5,231</b>	<b>82.34</b>	<b>1,073</b>	<b>16.89</b>	<b>49</b>	<b>0.77</b>	<b>6,353</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 25**  
**Health Region 8 - Simon Fraser**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	482	484	15.73	15.38	0.41	-2.20
Dental Hygienists	107	128	3.49	4.07	21.59	18.14
Dentists	171	184	5.58	5.85	9.19	5.79
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	86	90	2.81	2.86	5.08	2.11
First Responders	513	578	16.74	18.37	13.90	10.67
Midwives <sup>4</sup>	n/a	2	n/a	0.06	n/a	n/a
Opticians	91	102	2.97	3.24	25.64	19.19
Pharmacists	208	226	6.79	7.18	11.70	7.84
Physicians (Directory Active)	572	586	18.66	18.62	2.45	-0.22
<b>Nursing Services</b>						
Licensed Practical Nurses	313	295	10.21	9.38	-5.75	-8.20
Registered Nurses <sup>5</sup>	2,744	2,749	89.53	87.36	0.18	-2.42
Licensed Graduate Nurses	20	21	0.65	0.67	5.00	2.27
Registered Psychiatric Nurses	961	925	31.36	29.40	-3.22	-5.38
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	69	76	2.25	2.42	10.14	7.28
<b>Psychological Services</b>						
Psychologists	52	54	1.70	1.72	3.85	1.14
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	73	83	2.38	2.64	13.70	10.74
Occupational Therapists (BCSOT)	62	57	2.02	1.81	-9.60	-12.41
Physical Therapists <sup>6</sup>	156	168	5.09	5.34	9.30	5.90
<b>TOTAL<sup>7</sup></b>	<b>6,680</b>	<b>6,806</b>	<b>217.96</b>	<b>216.30</b>	<b>0.94</b>	<b>-0.38</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	665	n/a	21.70	n/a	n/a	n/a
Extended Care Beds	607	n/a	19.81	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>1,272</b>	<b>n/a</b>	<b>41.50</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>45</b>	<b>46</b>	<b>1.47</b>	<b>1.46</b>	<b>2.97</b>	<b>-0.58</b>
<b>Population</b>	<b>306,475</b>	<b>314,660</b>	<b>n/a</b>	<b>n/a</b>	<b>1.33</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 26**  
**Health Region 8 - Simon Fraser**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	0	23	0	216	0	186	0	53	0	5	0	0	0	1	0	484	484	
Dental Hygienists	0	9	1	60	2	40	1	15	0	0	0	0	0	0	4	124	128	
Dentists	0	1	33	20	45	13	36	8	21	1	6	0	0	0	141	43	184	
<b><i>Medical &amp; Treatment Services</i></b>																		
Emergency Medical Assistants	1	0	20	5	41	6	15	0	2	0	0	0	0	0	79	11	90	
First Responders	9	0	160	16	211	12	141	9	15	3	1	0	0	1	537	41	578	
Opticians	1	4	7	12	3	11	6	3	1	1	0	0	25	28	43	59	102	
Pharmacists	3	7	33	39	21	38	31	29	13	6	2	0	3	1	106	120	226	
Physicians (Directory Active)	0	1	50	36	127	67	135	34	82	10	38	4	2	0	434	152	586	
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	0	5	2	30	6	90	12	113	1	27	0	2	0	7	21	274	295	
Registered Nurses	0	52	22	436	29	887	51	860	18	369	1	24	0	0	121	2,628	2,749	
Licensed Graduate Nurses	0	0	0	0	0	3	0	11	0	7	0	0	0	0	0	21	21	
Registered Psychiatric Nurses	2	11	26	129	44	139	108	252	75	118	2	4	4	11	261	664	925	
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	0	1	0	28	2	22	0	13	0	6	0	1	0	3	2	74	76	
<b><i>Psychological Services</i></b>																		
Psychologists	0	0	1	2	6	9	16	12	5	0	1	2	0	0	29	25	54	
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	0	4	17	31	4	10	3	10	0	2	0	1	1	0	25	58	83	
Occupational Therapists	0	0	1	10	5	16	0	10	0	6	0	0	1	8	7	50	57	
Physical Therapists	0	6	11	33	9	55	3	31	3	12	0	4	1	0	27	141	168	
<b>TOTAL</b>	<b>16</b>	<b>124</b>	<b>384</b>	<b>1,103</b>	<b>555</b>	<b>1,604</b>	<b>558</b>	<b>1,463</b>	<b>236</b>	<b>573</b>	<b>51</b>	<b>42</b>	<b>37</b>	<b>60</b>	<b>1,837</b>	<b>4,969</b>	<b>6,806</b>	

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 27**  
**Health Region 8 - Simon Fraser**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<i>Dental Services</i>																		
Certified Dental Assistants	443	91.53	19	3.93	3	0.62	0	0.00	1	0.21	466	96.28	18	3.72	0	0.00	484	100.00
Dental Hygienists	56	43.75	12	9.38	13	10.16	20	15.63	18	14.06	119	92.97	9	7.03	0	0.00	128	100.00
Dentists	83	45.11	25	13.59	21	11.41	10	5.43	16	8.70	155	84.24	29	15.76	0	0.00	184	100.00
<i>Medical &amp; Treatment Services</i>																		
Pharmacists	170	75.22	10	4.42	10	4.42	6	2.65	7	3.10	203	89.82	20	8.85	3	1.33	226	100.00
Physicians (Directory Active)	154	26.28	65	11.09	45	7.68	90	15.36	63	10.75	417	71.16	169	28.84	0	0.00	586	100.00
<i>Nursing Services</i>																		
Licensed Practical Nurses	180	61.02	12	4.07	21	7.12	34	11.53	15	5.08	262	88.81	26	8.81	7	2.37	295	100.00
Registered Nurses	1,563	56.86	117	4.26	214	7.78	216	7.86	119	4.33	2,229	81.08	518	18.84	2	0.07	2,749	100.00
Registered Psychiatric Nurses	588	63.57	12	1.30	66	7.14	0	0.00	0	0.00	666	72.00	201	21.73	58	6.27	925	100.00
<i>Nutrition &amp; Dietary Services</i>																		
Dietitians & Nutritionists	44	57.89	8	10.53	7	9.21	6	7.89	5	6.58	70	92.11	6	7.89	0	0.00	76	100.00
<i>Psychological Services</i>																		
Psychologists	26	48.15	2	3.70	3	5.56	1	1.85	7	12.96	39	72.22	15	27.78	0	0.00	54	100.00
<i>Rehabilitation Services</i>																		
Massage Therapists	74	89.16	0	0.00	0	0.00	9	10.84	0	0.00	83	100.00	0	0.00	0	0.00	83	100.00
Occupational Therapists	20	35.09	6	10.53	1	1.75	4	7.02	3	5.26	34	59.65	22	38.60	1	1.75	57	100.00
Physical Therapists	62	36.90	10	5.95	11	6.55	22	13.10	13	7.74	118	70.24	49	29.17	1	0.60	168	100.00
<b>TOTAL</b>	<b>3,463</b>	<b>57.57</b>	<b>298</b>	<b>4.95</b>	<b>415</b>	<b>6.90</b>	<b>418</b>	<b>6.95</b>	<b>267</b>	<b>4.44</b>	<b>4,861</b>	<b>80.81</b>	<b>1,082</b>	<b>17.99</b>	<b>72</b>	<b>1.20</b>	<b>6,015</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 28**  
**Health Region 9 - Coast Garibaldi**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	78	83	10.36	10.61	6.41	2.38
Dental Hygienists	28	27	3.72	3.45	-3.89	-7.86
Dentists	36	36	4.78	4.60	0.00	-4.53
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	124	123	16.47	15.72	-0.88	-4.97
First Responders	232	232	30.82	29.66	0.00	-4.13
Midwives <sup>4</sup>	n/a	1	n/a	0.13	n/a	n/a
Opticians	11	12	1.46	1.53	19.01	10.16
Pharmacists	45	51	5.98	6.52	18.16	12.23
Physicians (Directory Active)	106	106	14.08	13.55	0.00	-3.79
<b>Nursing Services</b>						
Licensed Practical Nurses	94	103	12.49	13.17	9.57	5.42
Registered Nurses <sup>5</sup>	407	392	54.07	50.11	-3.69	-7.34
Licensed Graduate Nurses	1	1	0.13	0.13	*	*
Registered Psychiatric Nurses	26	29	3.45	3.71	9.81	6.23
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	6	6	0.80	0.77	*	*
<b>Psychological Services</b>						
Psychologists	8	9	1.06	1.15	*	*
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	49	59	6.51	7.54	20.41	15.84
Occupational Therapists (BCSOT)	6	6	0.80	0.77	*	*
Physical Therapists <sup>6</sup>	54	58	7.17	7.41	8.95	4.02
<b>TOTAL<sup>7</sup></b>	<b>1,311</b>	<b>1,333</b>	<b>174.18</b>	<b>170.39</b>	<b>0.84</b>	<b>-1.09</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	103	n/a	13.68	n/a	n/a	n/a
Extended Care Beds	145	n/a	19.26	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>248</b>	<b>n/a</b>	<b>32.95</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>18</b>	<b>18</b>	<b>2.39</b>	<b>2.30</b>	<b>0.00</b>	<b>-5.02</b>
<b>Population</b>	<b>75,268</b>	<b>78,233</b>	<b>n/a</b>	<b>n/a</b>	<b>1.95</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 29**  
**Health Region 9 - Coast Garibaldi**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	5	0	26	0	40	0	9	0	3	0	0	0	0	0	83	83	
Dental Hygienists	0	0	0	6	0	11	0	9	0	0	0	1	0	0	0	27	27	
Dentists	0	0	6	1	6	1	10	2	6	1	3	0	0	0	31	5	36	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	3	4	40	14	26	7	13	9	4	2	1	0	0	0	87	36	123	
First Responders	10	2	65	5	91	3	32	2	11	5	1	0	5	0	215	17	232	
Opticians	0	0	1	2	1	1	1	1	0	0	0	0	3	2	6	6	12	
Pharmacists	1	1	7	11	6	11	3	3	5	1	2	0	0	0	24	27	51	
Physicians (Directory Active)	0	0	9	5	24	15	27	4	12	1	9	0	0	0	81	25	106	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	4	0	16	2	34	0	34	1	12	0	0	0	0	3	100	103	
Registered Nurses	1	4	3	64	1	134	4	117	1	55	0	8	0	0	10	382	392	
Licensed Graduate Nurses	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	
Registered Psychiatric Nurses	0	0	0	5	3	14	1	6	0	0	0	0	0	0	4	25	29	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	6	6	
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	1	0	2	2	2	0	2	0	0	0	7	2	9	
<b>Rehabilitation Services</b>																		
Massage Therapists	1	0	6	16	6	21	3	5	0	1	0	0	0	0	16	43	59	
Occupational Therapists	0	0	0	0	0	3	0	2	0	0	0	0	0	1	0	6	6	
Physical Therapists	0	0	4	19	0	15	1	14	1	2	0	2	0	0	6	52	58	
<b>TOTAL</b>	<b>16</b>	<b>20</b>	<b>141</b>	<b>190</b>	<b>167</b>	<b>313</b>	<b>97</b>	<b>223</b>	<b>43</b>	<b>83</b>	<b>18</b>	<b>11</b>	<b>8</b>	<b>3</b>	<b>490</b>	<b>843</b>	<b>1,333</b>	

<sup>1</sup> Age and sex information are not available for all health groups.

**Table 30**  
**Health Region 9 - Coast Garibaldi**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	74	89.16	2	2.41	2	2.41	1	1.20	1	1.20	80	96.39	3	3.61	0	0.00	83	100.00
Dental Hygienists	12	44.44	6	22.22	1	3.70	2	7.41	2	7.41	23	85.19	4	14.81	0	0.00	27	100.00
Dentists	17	47.22	1	2.78	2	5.56	3	8.33	5	13.89	28	77.78	8	22.22	0	0.00	36	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	41	80.39	1	1.96	4	7.84	3	5.88	0	0.00	49	96.08	2	3.92	0	0.00	51	100.00
Physicians (Directory Active)	30	28.30	8	7.55	9	8.49	24	22.64	11	10.38	82	77.36	24	22.64	0	0.00	106	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	84	81.55	3	2.91	5	4.85	3	2.91	4	3.88	99	96.12	2	1.94	2	1.94	103	100.00
Registered Nurses	211	53.83	25	6.38	28	7.14	61	15.56	22	5.61	347	88.52	45	11.48	0	0.00	392	100.00
Registered Psychiatric Nurses	26	89.66	2	6.90	1	3.45	0	0.00	0	0.00	29	100.00	0	0.00	0	0.00	29	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	2	33.33	0	0.00	0	0.00	1	16.67	3	50.00	6	100.00	0	0.00	0	0.00	6	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	3	33.33	0	0.00	1	11.11	1	11.11	0	0.00	5	55.56	4	44.44	0	0.00	9	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	41	69.49	0	0.00	1	1.69	16	27.12	0	0.00	58	98.31	1	1.69	0	0.00	59	100.00
Occupational Therapists	2	33.33	0	0.00	0	0.00	1	16.67	0	0.00	3	50.00	3	50.00	0	0.00	6	100.00
Physical Therapists	13	22.41	6	10.34	0	0.00	18	31.03	7	12.07	44	75.86	14	24.14	0	0.00	58	100.00
<b>TOTAL</b>	<b>556</b>	<b>57.62</b>	<b>54</b>	<b>5.60</b>	<b>54</b>	<b>5.60</b>	<b>134</b>	<b>13.89</b>	<b>55</b>	<b>5.70</b>	<b>853</b>	<b>88.39</b>	<b>110</b>	<b>11.40</b>	<b>2</b>	<b>0.21</b>	<b>965</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 31**  
**Health Region 10 - Central Vancouver Island**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	378	368	15.92	15.26	-2.65	-4.15
Dental Hygienists	87	87	3.66	3.61	0.00	-1.69
Dentists	121	120	5.10	4.97	-0.99	-2.83
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	226	214	9.52	8.87	-5.78	-7.37
First Responders	626	698	26.36	28.94	12.61	10.71
Midwives <sup>4</sup>	n/a	4	n/a	0.17	n/a	n/a
Opticians	56	58	2.36	2.40	7.27	3.97
Pharmacists	139	148	5.85	6.14	8.72	6.49
Physicians (Directory Active)	393	406	16.55	16.83	3.31	1.71
<b>Nursing Services</b>						
Licensed Practical Nurses	456	448	19.20	18.57	-1.75	-3.28
Registered Nurses <sup>5</sup>	1,518	1,575	63.92	65.29	3.75	2.15
Licensed Graduate Nurses	7	6	0.29	0.25	*	*
Registered Psychiatric Nurses	67	70	2.82	2.90	3.83	2.45
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	35	37	1.47	1.53	5.71	4.08
<b>Psychological Services</b>						
Psychologists	33	33	1.39	1.37	0.00	-1.55
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	58	65	2.44	2.69	12.07	10.33
Occupational Therapists (BCSOT)	44	47	1.85	1.95	8.24	6.23
Physical Therapists <sup>6</sup>	117	117	4.93	4.85	0.00	-1.86
<b>TOTAL<sup>7</sup></b>	<b>4,361</b>	<b>4,497</b>	<b>183.63</b>	<b>186.43</b>	<b>1.55</b>	<b>0.76</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	478	n/a	20.13	n/a	n/a	n/a
Extended Care Beds	448	n/a	18.86	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>926</b>	<b>n/a</b>	<b>38.99</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>45</b>	<b>49</b>	<b>1.89</b>	<b>2.03</b>	<b>12.02</b>	<b>9.72</b>
<b>Population</b>	<b>237,487</b>	<b>241,223</b>	<b>n/a</b>	<b>n/a</b>	<b>0.78</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 32**  
**Health Region 10 - Central Vancouver Island**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	36	1	140	0	140	0	48	0	3	0	0	0	0	1	367	368	
Dental Hygienists	0	2	2	34	0	31	1	15	0	2	0	0	0	0	3	84	87	
Dentists	0	0	19	3	36	11	29	2	17	0	3	0	0	0	104	16	120	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	12	8	49	21	38	21	44	12	7	2	0	0	0	0	150	64	214	
First Responders	44	6	196	22	223	27	129	15	22	3	4	2	4	1	622	76	698	
Opticians	0	0	5	10	3	5	5	4	1	4	0	0	8	13	22	36	58	
Pharmacists	1	4	22	21	21	21	19	17	12	4	4	0	1	1	80	68	148	
Physicians (Directory Active)	0	0	24	12	108	41	95	20	67	9	29	1	0	0	323	83	406	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	10	4	49	6	149	4	168	3	48	0	3	0	4	17	431	448	
Registered Nurses	0	20	6	191	21	443	10	569	4	284	0	27	0	0	41	1,534	1,575	
Licensed Graduate Nurses	0	0	0	0	0	0	0	2	0	4	0	0	0	0	0	6	6	
Registered Psychiatric Nurses	0	0	0	6	4	21	4	26	2	7	0	0	0	0	10	60	70	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	8	0	14	0	12	0	2	0	0	0	1	0	37	37	
<b>Psychological Services</b>																		
Psychologists	0	0	1	0	2	4	9	9	3	3	2	0	0	0	17	16	33	
<b>Rehabilitation Services</b>																		
Massage Therapists	0	0	4	16	7	20	4	14	0	0	0	0	0	0	15	50	65	
Occupational Therapists	0	0	0	8	1	15	0	14	0	2	0	0	0	7	1	46	47	
Physical Therapists	0	0	5	15	6	30	2	42	4	10	1	0	0	2	18	99	117	
<b>TOTAL</b>	<b>57</b>	<b>86</b>	<b>338</b>	<b>556</b>	<b>476</b>	<b>993</b>	<b>355</b>	<b>989</b>	<b>142</b>	<b>387</b>	<b>43</b>	<b>33</b>	<b>13</b>	<b>29</b>	<b>1,424</b>	<b>3,073</b>	<b>4,497</b>	

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 33**  
**Health Region 10 - Central Vancouver Island**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
<i>Dental Services</i>																		
Certified Dental Assistants	358	97.28	9	2.45	0	0.00	0	0.00	0	0.00	367	99.73	1	0.27	0	0.00	368	100.00
Dental Hygienists	43	49.43	18	20.69	6	6.90	9	10.34	6	6.90	82	94.25	5	5.75	0	0.00	87	100.00
Dentists	49	40.83	27	22.50	15	12.50	10	8.33	10	8.33	111	92.50	9	7.50	0	0.00	120	100.00
<i>Medical &amp; Treatment Services</i>																		
Pharmacists	112	75.68	3	2.03	20	13.51	5	3.38	0	0.00	140	94.59	7	4.73	1	0.68	148	100.00
Physicians (Directory Active)	110	27.09	72	17.73	36	8.87	60	14.78	20	4.93	298	73.40	108	26.60	0	0.00	406	100.00
<i>Nursing Services</i>																		
Licensed Practical Nurses	364	81.25	21	4.69	18	4.02	26	5.80	8	1.79	437	97.54	8	1.79	3	0.67	448	100.00
Registered Nurses	843	53.52	160	10.16	127	8.06	207	13.14	74	4.70	1,411	89.59	164	10.41	0	0.00	1,575	100.00
Registered Psychiatric Nurses	44	62.86	1	1.43	12	17.14	0	0.00	0	0.00	57	81.43	4	5.71	9	12.86	70	100.00
<i>Nutrition &amp; Dietary Services</i>																		
Dietitians & Nutritionists	14	37.84	9	24.32	4	10.81	5	13.51	4	10.81	36	97.30	1	2.70	0	0.00	37	100.00
<i>Psychological Services</i>																		
Psychologists	8	24.24	2	6.06	3	9.09	11	33.33	2	6.06	26	78.79	7	21.21	0	0.00	33	100.00
<i>Rehabilitation Services</i>																		
Massage Therapists	38	58.46	1	1.54	0	0.00	24	36.92	0	0.00	63	96.92	1	1.54	1	1.54	65	100.00
Occupational Therapists	15	31.91	10	21.28	2	4.26	6	12.77	3	6.38	36	76.60	10	21.28	1	2.13	47	100.00
Physical Therapists	27	23.08	16	13.68	12	10.26	13	11.11	6	5.13	74	63.25	41	35.04	2	1.71	117	100.00
<b>TOTAL</b>	<b>2,025</b>	<b>57.51</b>	<b>349</b>	<b>9.91</b>	<b>255</b>	<b>7.24</b>	<b>376</b>	<b>10.68</b>	<b>133</b>	<b>3.78</b>	<b>3,138</b>	<b>89.12</b>	<b>366</b>	<b>10.39</b>	<b>17</b>	<b>0.48</b>	<b>3,521</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 34**  
**Health Region 11 - Upper Island/Central Coast**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	186	189	15.49	15.54	1.61	0.32
Dental Hygienists	48	52	4.00	4.28	9.12	7.61
Dentists	59	60	4.91	4.93	2.04	0.48
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	205	184	17.07	15.13	-11.12	-12.36
First Responders	254	266	21.15	21.87	5.16	3.70
Midwives <sup>4</sup>	n/a	5	n/a	0.41	n/a	n/a
Opticians	23	22	1.92	1.81	-8.51	-10.82
Pharmacists	56	62	4.66	5.10	14.53	12.59
Physicians (Directory Active)	186	192	15.49	15.79	3.23	1.91
<b>Nursing Services</b>						
Licensed Practical Nurses	195	176	16.24	14.47	-9.74	-10.89
Registered Nurses <sup>5</sup>	811	838	67.54	68.90	3.33	2.01
Licensed Graduate Nurses	6	5	0.50	0.41	*	*
Registered Psychiatric Nurses	33	34	2.75	2.80	2.59	1.47
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	12	13	1.00	1.07	8.33	6.95
<b>Psychological Services</b>						
Psychologists	16	14	1.33	1.15	-12.50	-13.61
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	36	39	3.00	3.21	8.33	6.95
Occupational Therapists (BCSOT)	17	19	1.42	1.56	14.28	12.53
Physical Therapists <sup>6</sup>	57	61	4.75	5.02	8.48	6.82
<b>TOTAL<sup>7</sup></b>	<b>2,200</b>	<b>2,226</b>	<b>183.21</b>	<b>183.02</b>	<b>0.59</b>	<b>-0.05</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	212	n/a	17.66	n/a	n/a	n/a
Extended Care Beds	196	n/a	16.32	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>408</b>	<b>n/a</b>	<b>33.98</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	21	22	1.75	1.81	6.40	4.60
<b>Population</b>	<b>120,079</b>	<b>121,628</b>	<b>n/a</b>	<b>n/a</b>	<b>0.64</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 35**  
**Health Region 11 - Upper Island/Central Coast**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<i>Dental Services</i>																		
Certified Dental Assistants	0	14	0	52	0	99	0	22	0	1	0	0	0	1	0	189	189	
Dental Hygienists	0	0	0	17	0	26	1	8	0	0	0	0	0	0	1	51	52	
Dentists	0	1	13	4	6	2	24	2	7	0	1	0	0	0	51	9	60	
<i>Medical &amp; Treatment Services</i>																		
Emergency Medical Assistants	5	8	30	18	43	25	30	13	7	2	0	0	1	2	116	68	184	
First Responders	20	3	73	4	92	8	52	2	11	0	1	0	0	0	249	17	266	
Opticians	0	1	3	3	1	3	1	1	0	0	0	0	1	8	6	16	22	
Pharmacists	0	1	10	15	11	9	4	5	4	0	2	0	0	1	31	31	62	
Physicians (Directory Active)	0	0	11	15	49	24	49	10	22	3	8	0	1	0	140	52	192	
<i>Nursing Services</i>																		
Licensed Practical Nurses	0	1	0	20	1	68	0	64	1	19	0	1	0	1	2	174	176	
Registered Nurses	0	5	6	116	11	268	4	287	1	128	0	12	0	0	22	816	838	
Licensed Graduate Nurses	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	5	5	
Registered Psychiatric Nurses	0	0	0	3	0	15	2	11	1	0	0	0	1	1	4	30	34	
<i>Nutrition &amp; Dietary Services</i>																		
Dietitians & Nutritionists	0	0	0	2	0	6	0	4	0	1	0	0	0	0	0	13	13	
<i>Psychological Services</i>																		
Psychologists	0	0	0	0	1	1	3	2	4	3	0	0	0	0	8	6	14	
<i>Rehabilitation Services</i>																		
Massage Therapists	0	0	1	10	3	12	0	10	0	3	0	0	0	0	4	35	39	
Occupational Therapists	0	0	0	2	0	3	0	9	0	1	0	0	0	4	0	19	19	
Physical Therapists	0	1	4	8	2	13	3	24	1	4	0	0	0	1	10	51	61	
<b>TOTAL</b>	<b>25</b>	<b>35</b>	<b>151</b>	<b>289</b>	<b>220</b>	<b>582</b>	<b>173</b>	<b>477</b>	<b>59</b>	<b>167</b>	<b>12</b>	<b>13</b>	<b>4</b>	<b>19</b>	<b>644</b>	<b>1,582</b>	<b>2,226</b>	

<sup>1</sup>Age and sex information are not available for all health groups.

**Table 36**  
**Health Region 11 - Upper Island/Central Coast**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	169	89.42	11	5.82	4	2.12	0	0.00	1	0.53	185	97.88	4	2.12	0	0.00	189	100.00
Dental Hygienists	22	42.31	2	3.85	7	13.46	12	23.08	2	3.85	45	86.54	7	13.46	0	0.00	52	100.00
Dentists	18	30.00	15	25.00	6	10.00	7	11.67	8	13.33	54	90.00	6	10.00	0	0.00	60	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	39	62.90	5	8.06	11	17.74	2	3.23	3	4.84	60	96.77	1	1.61	1	1.61	62	100.00
Physicians (Directory Active)	54	28.13	29	15.10	18	9.38	22	11.46	16	8.33	139	72.40	53	27.60	0	0.00	192	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	123	69.89	9	5.11	9	5.11	17	9.66	8	4.55	166	94.32	5	2.84	5	2.84	176	100.00
Registered Nurses	439	52.39	61	7.28	91	10.86	106	12.65	70	8.35	767	91.53	71	8.47	0	0.00	838	100.00
Registered Psychiatric Nurses	17	50.00	8	23.53	3	8.82	0	0.00	0	0.00	28	82.35	2	5.88	4	11.76	34	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	4	30.77	2	15.38	2	15.38	3	23.08	1	7.69	12	92.31	1	7.69	0	0.00	13	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	7	50.00	1	7.14	0	0.00	2	14.29	0	0.00	10	71.43	4	28.57	0	0.00	14	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	24	61.54	0	0.00	0	0.00	15	38.46	0	0.00	39	100.00	0	0.00	0	0.00	39	100.00
Occupational Therapists	8	42.11	1	5.26	0	0.00	2	10.53	1	5.26	12	63.16	7	36.84	0	0.00	19	100.00
Physical Therapists	25	40.98	4	6.56	4	6.56	9	14.75	3	4.92	45	73.77	15	24.59	1	1.64	61	100.00
<b>TOTAL</b>	<b>949</b>	<b>54.26</b>	<b>148</b>	<b>8.46</b>	<b>155</b>	<b>8.86</b>	<b>197</b>	<b>11.26</b>	<b>113</b>	<b>6.46</b>	<b>1,562</b>	<b>89.31</b>	<b>176</b>	<b>10.06</b>	<b>11</b>	<b>0.63</b>	<b>1,749</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 37**  
**Health Region 12 - Cariboo**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	83	83	11.10	10.94	0.00	-1.42
Dental Hygienists	29	30	3.88	3.95	3.77	2.16
Dentists	30	29	4.01	3.82	-3.99	-5.62
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	93	84	12.44	11.07	-10.51	-11.89
First Responders	47	73	6.29	9.62	61.66	59.16
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	23	23	3.08	3.03	0.00	-2.82
Pharmacists	38	43	5.08	5.67	17.92	15.69
Physicians (Directory Active)	79	82	10.56	10.81	3.80	2.33
<b>Nursing Services</b>						
Licensed Practical Nurses	110	99	14.71	13.05	-10.00	-11.28
Registered Nurses <sup>5</sup>	433	427	57.90	56.29	-1.39	-2.78
Licensed Graduate Nurses	1	1	0.13	0.13	*	*
Registered Psychiatric Nurses	27	24	3.61	3.16	-9.60	-10.70
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	10	9	1.34	1.19	-10.00	-11.28
<b>Psychological Services</b>						
Psychologists	4	5	0.53	0.66	*	*
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	13	12	1.74	1.58	-7.69	-9.00
Occupational Therapists (BCSOT)	6	5	0.80	0.66	*	*
Physical Therapists <sup>6</sup>	28	29	3.74	3.82	4.30	2.53
<b>TOTAL<sup>7</sup></b>	<b>1,054</b>	<b>1,058</b>	<b>140.95</b>	<b>139.48</b>	<b>0.19</b>	<b>-0.52</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	117	n/a	15.65	n/a	n/a	n/a
Extended Care Beds	101	n/a	13.51	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>218</b>	<b>n/a</b>	<b>29.15</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>13</b>	<b>14</b>	<b>1.74</b>	<b>1.85</b>	<b>10.39</b>	<b>8.30</b>
<b>Population</b>	<b>74,778</b>	<b>75,854</b>	<b>n/a</b>	<b>n/a</b>	<b>0.72</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 38**  
**Health Region 12 - Cariboo**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	5	0	40	0	33	0	5	0	0	0	0	0	0	0	0	83	83
Dental Hygienists	0	4	0	14	1	8	0	3	0	0	0	0	0	0	0	1	29	30
Dentists	0	0	8	1	7	3	8	0	2	0	0	0	0	0	0	25	4	29
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	2	0	15	9	20	14	11	8	2	3	0	0	0	0	50	34	84	84
First Responders	2	0	20	0	20	3	20	2	3	1	1	1	0	0	66	7	73	73
Opticians	0	0	0	4	1	4	1	3	0	0	0	0	2	8	4	19	23	23
Pharmacists	4	4	8	7	6	2	3	1	4	2	1	1	0	0	26	17	43	43
Physicians (Directory Active)	0	0	5	2	26	7	21	6	10	0	5	0	0	0	67	15	82	82
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	0	0	7	0	32	0	42	0	17	0	0	0	1	0	99	99	99
Registered Nurses	0	7	0	79	1	116	3	155	0	59	1	6	0	0	5	422	427	427
Licensed Graduate Nurses	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1
Registered Psychiatric Nurses	0	0	0	1	1	8	1	6	3	3	0	0	1	0	6	18	24	24
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	5	0	2	0	1	0	0	0	0	0	1	0	9	9	9
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	0	0	1	1	1	2	0	0	0	0	2	3	5	5
<b>Rehabilitation Services</b>																		
Massage Therapists	0	0	0	5	2	2	0	2	0	1	0	0	0	0	2	10	12	12
Occupational Therapists	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	5	5	5
Physical Therapists	1	0	1	3	2	10	0	10	0	1	0	1	0	0	4	25	29	29
<b>TOTAL</b>	<b>9</b>	<b>20</b>	<b>57</b>	<b>180</b>	<b>87</b>	<b>246</b>	<b>69</b>	<b>245</b>	<b>25</b>	<b>90</b>	<b>8</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>258</b>	<b>800</b>	<b>1,058</b>	<b>1,058</b>

<sup>1</sup>Age and sex information are not available for all health groups.



**Table 39**  
**Health Region 12 - Cariboo**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	80	96.39	2	2.41	1	1.20	0	0.00	0	0.00	83	100.00	0	0.00	0	0.00	83	100.00
Dental Hygienists	22	73.33	2	6.67	1	3.33	0	0.00	4	13.33	29	96.67	1	3.33	0	0.00	30	100.00
Dentists	11	37.93	1	3.45	3	10.34	2	6.90	3	10.34	20	68.97	9	31.03	0	0.00	29	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	34	79.07	1	2.33	7	16.28	0	0.00	0	0.00	42	97.67	1	2.33	0	0.00	43	100.00
Physicians (Directory Active)	28	34.15	6	7.32	3	3.66	9	10.98	4	4.88	50	60.98	32	39.02	0	0.00	82	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	68	68.69	10	10.10	7	7.07	8	8.08	2	2.02	95	95.96	2	2.02	2	2.02	99	100.00
Registered Nurses	290	67.92	28	6.56	25	5.85	36	8.43	15	3.51	394	92.27	33	7.73	0	0.00	427	100.00
Registered Psychiatric Nurses	14	58.33	1	4.17	5	20.83	0	0.00	0	0.00	20	83.33	1	4.17	3	12.50	24	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	6	66.67	1	11.11	0	0.00	1	11.11	1	11.11	9	100.00	0	0.00	0	0.00	9	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	3	60.00	0	0.00	0	0.00	0	0.00	0	0.00	3	60.00	2	40.00	0	0.00	5	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	5	41.67	0	0.00	0	0.00	7	58.33	0	0.00	12	100.00	0	0.00	0	0.00	12	100.00
Occupational Therapists	1	20.00	2	40.00	1	20.00	1	20.00	0	0.00	5	100.00	0	0.00	0	0.00	5	100.00
Physical Therapists	12	41.38	0	0.00	2	6.90	0	0.00	2	6.90	16	55.17	13	44.83	0	0.00	29	100.00
<b>TOTAL</b>	<b>574</b>	<b>65.45</b>	<b>54</b>	<b>6.16</b>	<b>55</b>	<b>6.27</b>	<b>64</b>	<b>7.30</b>	<b>31</b>	<b>3.53</b>	<b>778</b>	<b>88.71</b>	<b>94</b>	<b>10.72</b>	<b>5</b>	<b>0.57</b>	<b>877</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 40**  
**Health Region 13 - North West**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	101	98	11.13	10.75	-2.97	-3.38
Dental Hygienists	31	34	3.42	3.73	10.60	10.09
Dentists	40	39	4.41	4.28	-2.99	-3.49
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	186	183	20.50	20.08	-1.76	-2.21
First Responders	302	323	33.28	35.44	7.61	7.11
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	12	12	1.32	1.32	0.00	-0.85
Pharmacists	61	61	6.72	6.69	0.00	-0.56
Physicians (Directory Active)	127	136	13.99	14.92	7.09	6.63
<b>Nursing Services</b>						
Licensed Practical Nurses	112	104	12.34	11.41	-7.14	-7.54
Registered Nurses <sup>5</sup>	591	567	65.12	62.21	-4.06	-4.47
Licensed Graduate Nurses	4	4	0.44	0.44	*	*
Registered Psychiatric Nurses	27	28	2.98	3.07	3.17	2.79
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	14	13	1.54	1.43	-7.14	-7.54
<b>Psychological Services</b>						
Psychologists	7	5	0.77	0.55	*	*
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	13	13	1.43	1.43	0.00	-0.42
Occupational Therapists (BCSOT)	15	11	1.65	1.21	-31.08	-31.43
Physical Therapists <sup>6</sup>	31	32	3.42	3.51	3.88	3.36
<b>TOTAL<sup>7</sup></b>	<b>1,674</b>	<b>1,663</b>	<b>184.46</b>	<b>182.47</b>	<b>-0.33</b>	<b>-0.54</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	216	n/a	23.80	n/a	n/a	n/a
Extended Care Beds	66	n/a	7.27	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>282</b>	<b>n/a</b>	<b>31.07</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>15</b>	<b>16</b>	<b>1.65</b>	<b>1.76</b>	<b>8.99</b>	<b>8.37</b>
<b>Population</b>	<b>90,751</b>	<b>91,137</b>	<b>n/a</b>	<b>n/a</b>	<b>0.21</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 41**  
**Health Region 13 - North West**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	11	0	37	0	37	0	12	0	1	0	0	0	0	0	0	98	98
Dental Hygienists	0	5	0	19	0	9	0	1	0	0	0	0	0	0	0	0	34	34
Dentists	0	0	7	2	11	0	12	0	6	1	0	0	0	0	0	36	3	39
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	11	2	47	32	28	22	19	12	6	2	0	0	2	0	113	70	183	
First Responders	26	1	104	11	98	9	55	3	7	0	2	0	5	2	297	26	323	
Opticians	0	0	2	1	0	2	3	0	0	0	0	0	3	1	8	4	12	
Pharmacists	2	2	9	11	7	13	8	3	5	1	0	0	0	0	31	30	61	
Physicians (Directory Active)	0	0	10	13	42	9	29	7	17	3	5	1	0	0	103	33	136	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	3	1	8	1	29	0	41	1	16	0	1	0	3	3	101	104	
Registered Nurses	2	15	6	118	10	175	6	176	2	53	0	4	0	0	26	541	567	
Licensed Graduate Nurses	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	4	
Registered Psychiatric Nurses	0	0	0	5	0	4	2	14	1	1	0	0	0	1	3	25	28	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	6	0	4	0	3	0	0	0	0	0	0	0	13	13	
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	0	0	2	1	2	0	0	0	0	0	4	1	5	
<b>Rehabilitation Services</b>																		
Massage Therapists	0	0	0	6	0	2	1	3	0	0	0	1	0	0	1	12	13	
Occupational Therapists	0	0	0	4	0	2	0	4	0	0	0	0	0	1	0	11	11	
Physical Therapists	0	0	3	5	5	8	0	8	0	3	0	0	0	0	8	24	32	
<b>TOTAL</b>	<b>41</b>	<b>39</b>	<b>189</b>	<b>278</b>	<b>202</b>	<b>325</b>	<b>137</b>	<b>292</b>	<b>47</b>	<b>81</b>	<b>7</b>	<b>7</b>	<b>10</b>	<b>8</b>	<b>633</b>	<b>1,030</b>	<b>1,663</b>	

<sup>1</sup>Age and sex information are not available for all health groups.

**Table 42**  
**Health Region 13 - North West**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Dental Services</b>																		
Certified Dental Assistants	87	88.78	1	1.02	0	0.00	0	0.00	1	1.02	89	90.82	9	9.18	0	0.00	98	100.00
Dental Hygienists	22	64.71	3	8.82	0	0.00	5	14.71	0	0.00	30	88.24	4	11.76	0	0.00	34	100.00
Dentists	11	28.21	10	25.64	1	2.56	2	5.13	1	2.56	25	64.10	14	35.90	0	0.00	39	100.00
<b>Medical &amp; Treatment Services</b>																		
Pharmacists	37	60.66	5	8.20	11	18.03	2	3.28	1	1.64	56	91.80	4	6.56	1	1.64	61	100.00
Physicians (Directory Active)	25	18.38	17	12.50	7	5.15	27	19.85	11	8.09	87	63.97	49	36.03	0	0.00	136	100.00
<b>Nursing Services</b>																		
Licensed Practical Nurses	56	53.85	5	4.81	9	8.65	13	12.50	8	7.69	91	87.50	6	5.77	7	6.73	104	100.00
Registered Nurses	262	46.21	63	11.11	51	8.99	79	13.93	57	10.05	512	90.30	55	9.70	0	0.00	567	100.00
Registered Psychiatric Nurses	19	67.86	2	7.14	6	21.43	0	0.00	0	0.00	27	96.43	1	3.57	0	0.00	28	100.00
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	5	38.46	0	0.00	3	23.08	4	30.77	1	7.69	13	100.00	0	0.00	0	0.00	13	100.00
<b>Psychological Services</b>																		
Psychologists	2	40.00	0	0.00	0	0.00	1	20.00	0	0.00	3	60.00	2	40.00	0	0.00	5	100.00
<b>Rehabilitation Services</b>																		
Massage Therapists	8	61.54	0	0.00	0	0.00	5	38.46	0	0.00	13	100.00	0	0.00	0	0.00	13	100.00
Occupational Therapists	5	45.45	1	9.09	0	0.00	4	36.36	0	0.00	10	90.91	1	9.09	0	0.00	11	100.00
Physical Therapists	8	25.00	3	9.38	2	6.25	7	21.88	2	6.25	22	68.75	10	31.25	0	0.00	32	100.00
<b>TOTAL</b>	<b>547</b>	<b>47.94</b>	<b>110</b>	<b>9.64</b>	<b>90</b>	<b>7.89</b>	<b>149</b>	<b>13.06</b>	<b>82</b>	<b>7.19</b>	<b>978</b>	<b>85.71</b>	<b>155</b>	<b>13.58</b>	<b>8</b>	<b>0.70</b>	<b>1,141</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 43**  
**Health Region 14 - Peace Liard**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	59	59	9.05	8.94	0.00	-1.22
Dental Hygienists	12	16	1.84	2.43	36.87	35.04
Dentists	24	22	3.68	3.34	-9.91	-11.24
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	122	103	18.72	15.61	-16.86	-17.97
First Responders	77	83	11.82	12.58	8.53	7.08
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	6	5	0.92	0.76	*	*
Pharmacists	29	31	4.45	4.70	9.30	7.52
Physicians (Directory Active)	59	61	9.05	9.25	3.39	2.13
<b>Nursing Services</b>						
Licensed Practical Nurses	88	91	13.51	13.79	3.41	2.14
Registered Nurses <sup>5</sup>	355	354	54.48	53.66	-0.28	-1.50
Licensed Graduate Nurses	4	4	0.61	0.61	*	*
Registered Psychiatric Nurses	21	23	3.22	3.49	8.11	6.98
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	4	4	0.61	0.61	*	*
<b>Psychological Services</b>						
Psychologists	3	2	0.46	0.30	*	*
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	6	6	0.92	0.91	*	*
Occupational Therapists (BCSOT)	3	5	0.46	0.76	*	*
Physical Therapists <sup>6</sup>	27	26	4.14	3.94	-4.43	-5.83
<b>TOTAL<sup>7</sup></b>	<b>899</b>	<b>895</b>	<b>137.97</b>	<b>135.68</b>	<b>-0.22</b>	<b>-0.83</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	171	n/a	26.24	n/a	n/a	n/a
Extended Care Beds	55	n/a	8.44	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>226</b>	<b>n/a</b>	<b>34.68</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>10</b>	<b>11</b>	<b>1.53</b>	<b>1.67</b>	<b>13.55</b>	<b>11.70</b>
<b>Population</b>	<b>65,159</b>	<b>65,966</b>	<b>n/a</b>	<b>n/a</b>	<b>0.62</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 44**  
**Health Region 14 - Peace Liard**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	8	0	23	0	23	0	5	0	0	0	0	0	0	0	0	59	59
Dental Hygienists	0	0	1	10	0	4	0	1	0	0	0	0	0	0	0	1	15	16
Dentists	0	0	7	3	4	0	4	0	4	0	0	0	0	0	0	19	3	22
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	9	6	26	19	11	15	9	5	1	0	0	0	2	0	58	45	103	103
First Responders	2	0	17	1	30	5	23	0	3	0	0	0	1	1	76	7	83	83
Opticians	0	1	0	1	1	0	0	0	0	0	0	0	1	1	2	3	5	5
Pharmacists	1	3	5	7	1	2	7	2	2	1	0	0	0	0	16	15	31	31
Physicians (Directory Active)	0	0	8	2	19	5	15	2	4	0	6	0	0	0	52	9	61	61
<b>Nursing Services</b>																		
Licensed Practical Nurses	1	1	1	12	0	21	0	45	0	8	0	2	0	0	2	89	91	91
Registered Nurses	1	8	2	84	4	112	0	97	0	44	0	2	0	0	7	347	354	354
Licensed Graduate Nurses	0	0	0	0	1	1	0	1	0	1	0	0	0	0	1	3	4	4
Registered Psychiatric Nurses	0	0	1	6	4	4	3	2	2	0	0	0	0	1	10	13	23	23
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	4	4	4
<b>Psychological Services</b>																		
Psychologists	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	2
<b>Rehabilitation Services</b>																		
Massage Therapists	0	1	1	1	0	1	0	1	0	1	0	0	0	0	1	5	6	6
Occupational Therapists	0	0	0	2	1	0	0	0	0	0	0	0	0	2	1	4	5	5
Physical Therapists	0	1	2	6	2	5	0	5	0	4	0	0	0	1	4	22	26	26
<b>TOTAL</b>	<b>14</b>	<b>29</b>	<b>71</b>	<b>179</b>	<b>78</b>	<b>199</b>	<b>62</b>	<b>167</b>	<b>17</b>	<b>59</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>252</b>	<b>643</b>	<b>895</b>	<b>895</b>

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 45**  
**Health Region 14 - Peace Liard**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
<b>Dental Services</b>																		
Certified Dental Assistants	52	88.14	5	8.47	0	0.00	0	0.00	0	0.00	57	96.61	2	3.39	0	0.00	59	100.00
Dental Hygienists	6	37.50	3	18.75	0	0.00	3	18.75	2	12.50	14	87.50	2	12.50	0	0.00	16	100.00
Dentists	3	13.64	6	27.27	2	9.09	1	4.55	8	36.36	20	90.91	2	9.09	0	0.00	22	100.00
<b>Medical &amp; Treatment Services</b>																		
Pharmacists	16	51.61	5	16.13	7	22.58	0	0.00	1	3.23	29	93.55	1	3.23	1	3.23	31	100.00
Physicians (Directory Active)	6	9.84	9	14.75	0	0.00	4	6.56	1	1.64	20	32.79	41	67.21	0	0.00	61	100.00
<b>Nursing Services</b>																		
Licensed Practical Nurses	46	50.55	20	21.98	9	9.89	6	6.59	8	8.79	89	97.80	1	1.10	1	1.10	91	100.00
Registered Nurses	131	37.01	78	22.03	56	15.82	32	9.04	31	8.76	328	92.66	26	7.34	0	0.00	354	100.00
Registered Psychiatric Nurses	4	17.39	8	34.78	7	30.43	0	0.00	0	0.00	19	82.61	1	4.35	3	13.04	23	100.00
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0.00	2	50.00	0	0.00	1	25.00	0	0.00	3	75.00	0	0.00	1	25.00	4	100.00
<b>Psychological Services</b>																		
Psychologists	1	50.00	0	0.00	0	0.00	0	0.00	1	50.00	2	100.00	0	0.00	0	0.00	2	100.00
<b>Rehabilitation Services</b>																		
Massage Therapists	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	0	0.00	6	100.00
Occupational Therapists	0	0.00	2	40.00	0	0.00	0	0.00	1	20.00	3	60.00	2	40.00	0	0.00	5	100.00
Physical Therapists	4	15.38	5	19.23	0	0.00	1	3.85	2	7.69	12	46.15	14	53.85	0	0.00	26	100.00
<b>TOTAL</b>	<b>275</b>	<b>39.29</b>	<b>143</b>	<b>20.43</b>	<b>81</b>	<b>11.57</b>	<b>48</b>	<b>6.86</b>	<b>55</b>	<b>7.86</b>	<b>602</b>	<b>86.00</b>	<b>92</b>	<b>13.14</b>	<b>6</b>	<b>0.86</b>	<b>700</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 46**  
**Health Region 15 - Northern Interior**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	207	206	15.89	15.62	-0.48	-1.71
Dental Hygienists	61	65	4.68	4.93	7.17	5.73
Dentists	57	58	4.38	4.40	2.11	0.60
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	192	183	14.74	13.88	-5.10	-6.38
First Responders	252	298	19.35	22.60	20.07	18.46
Midwives <sup>4</sup>	n/a	1	n/a	0.08	n/a	n/a
Opticians	22	24	1.69	1.82	19.01	16.09
Pharmacists	69	68	5.30	5.16	-1.93	-3.54
Physicians (Directory Active)	195	197	14.97	14.94	1.03	-0.22
<b>Nursing Services</b>						
Licensed Practical Nurses	178	169	13.67	12.82	-5.06	-6.23
Registered Nurses <sup>5</sup>	928	909	71.26	68.94	-2.05	-3.25
Licensed Graduate Nurses	3	3	0.23	0.23	*	*
Registered Psychiatric Nurses	31	31	2.38	2.35	0.00	-1.06
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	14	15	1.07	1.14	7.14	5.82
<b>Psychological Services</b>						
Psychologists	12	13	0.92	0.99	8.33	7.00
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	10	12	0.77	0.91	20.00	18.52
Occupational Therapists (BCSOT)	12	12	0.92	0.91	0.00	-1.48
Physical Therapists <sup>6</sup>	49	53	3.76	4.02	9.87	8.25
<b>TOTAL<sup>7</sup></b>	<b>2,292</b>	<b>2,316</b>	<b>175.99</b>	<b>175.64</b>	<b>0.52</b>	<b>-0.10</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	295	n/a	22.65	n/a	n/a	n/a
Extended Care Beds	86	n/a	6.60	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>381</b>	<b>n/a</b>	<b>29.25</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	23	23	1.77	1.74	0.00	-1.64
<b>Population</b>	<b>130,236</b>	<b>131,861</b>	<b>n/a</b>	<b>n/a</b>	<b>0.62</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 47**  
**Health Region 15 - Northern Interior**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	22	0	77	1	79	0	26	0	1	0	0	0	0	1	205	206	
Dental Hygienists	0	1	0	45	0	12	0	7	0	0	0	0	0	0	0	65	65	
Dentists	0	0	9	5	14	4	17	2	7	0	0	0	0	0	47	11	58	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	11	5	43	16	52	16	21	10	7	2	0	0	0	0	134	49	183	
First Responders	28	8	62	9	88	20	52	4	20	3	0	0	4	0	254	44	298	
Opticians	0	1	0	2	0	6	0	0	1	0	0	0	5	9	6	18	24	
Pharmacists	3	2	11	17	12	6	8	3	3	1	1	0	0	1	38	30	68	
Physicians (Directory Active)	0	0	29	12	54	27	39	5	18	1	11	0	1	0	152	45	197	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	2	3	27	2	53	2	57	0	23	0	0	0	0	7	162	169	
Registered Nurses	0	27	6	201	12	268	8	282	1	100	0	4	0	0	27	882	909	
Licensed Graduate Nurses	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	3	
Registered Psychiatric Nurses	0	0	1	5	3	3	0	16	0	2	0	0	0	1	4	27	31	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	0	0	6	0	3	0	5	0	0	0	0	0	1	0	15	15	
<b>Psychological Services</b>																		
Psychologists	0	0	0	1	1	2	5	3	1	0	0	0	0	0	7	6	13	
<b>Rehabilitation Services</b>																		
Massage Therapists	0	0	1	3	2	1	1	4	0	0	0	0	0	0	4	8	12	
Occupational Therapists	0	0	0	4	0	2	1	2	0	0	0	0	0	3	1	11	12	
Physical Therapists	0	1	2	14	2	13	0	19	0	1	0	0	0	1	4	49	53	
<b>TOTAL</b>	<b>42</b>	<b>69</b>	<b>167</b>	<b>444</b>	<b>243</b>	<b>515</b>	<b>154</b>	<b>448</b>	<b>58</b>	<b>134</b>	<b>12</b>	<b>4</b>	<b>10</b>	<b>16</b>	<b>686</b>	<b>1,630</b>	<b>2,316</b>	

<sup>1</sup>Age and sex information are not available for all health groups.

**Table 48**  
**Health Region 15 - Northern Interior**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	197	95.63	3	1.46	2	0.97	1	0.49	0	0.00	203	98.54	3	1.46	0	0.00	206	100.00
Dental Hygienists	55	84.62	2	3.08	3	4.62	0	0.00	0	0.00	60	92.31	5	7.69	0	0.00	65	100.00
Dentists	28	48.28	4	6.90	1	1.72	5	8.62	7	12.07	45	77.59	13	22.41	0	0.00	58	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	50	73.53	2	2.94	11	16.18	0	0.00	1	1.47	64	94.12	4	5.88	0	0.00	68	100.00
Physicians (Directory Active)	49	24.87	22	11.17	12	6.09	24	12.18	15	7.61	122	61.93	75	38.07	0	0.00	197	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	113	66.86	9	5.33	15	8.88	15	8.88	8	4.73	160	94.67	6	3.55	3	1.78	169	100.00
Registered Nurses	552	60.73	81	8.91	74	8.14	69	7.59	57	6.27	833	91.64	76	8.36	0	0.00	909	100.00
Registered Psychiatric Nurses	19	61.29	2	6.45	4	12.90	0	0.00	0	0.00	25	80.65	1	3.23	5	16.13	31	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	6	40.00	3	20.00	0	0.00	1	6.67	5	33.33	15	100.00	0	0.00	0	0.00	15	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	3	23.08	4	30.77	1	7.69	1	7.69	1	7.69	10	76.92	3	23.08	0	0.00	13	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	9	75.00	0	0.00	0	0.00	3	25.00	0	0.00	12	100.00	0	0.00	0	0.00	12	100.00
Occupational Therapists	4	33.33	4	33.33	1	8.33	1	8.33	0	0.00	10	83.33	2	16.67	0	0.00	12	100.00
Physical Therapists	21	39.62	7	13.21	4	7.55	5	9.43	3	5.66	40	75.47	12	22.64	1	1.89	53	100.00
<b>TOTAL</b>	<b>1,106</b>	<b>61.17</b>	<b>143</b>	<b>7.91</b>	<b>128</b>	<b>7.08</b>	<b>125</b>	<b>6.91</b>	<b>97</b>	<b>5.37</b>	<b>1,599</b>	<b>88.44</b>	<b>200</b>	<b>11.06</b>	<b>9</b>	<b>0.50</b>	<b>1,808</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 49**  
**Health Region 16 - Vancouver**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	391	401	7.09	7.16	2.56	1.00
Dental Hygienists	251	250	4.55	4.47	-0.43	-2.08
Dentists	617	642	11.19	11.47	4.88	2.97
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	227	230	4.12	4.11	1.44	-0.24
First Responders	836	866	15.16	15.47	3.92	2.20
Midwives <sup>4</sup>	n/a	12	n/a	0.21	n/a	n/a
Opticians	219	213	3.97	3.80	-5.40	-8.26
Pharmacists	677	693	12.28	12.38	3.16	1.08
Physicians (Directory Active)	3,003	3,009	54.47	53.75	0.20	-1.32
<b>Nursing Services</b>						
Licensed Practical Nurses	824	837	14.95	14.95	1.58	0.03
Registered Nurses <sup>5</sup>	7,676	7,709	139.23	137.70	0.43	-1.10
Licensed Graduate Nurses	109	85	1.98	1.52	-22.02	-23.20
Registered Psychiatric Nurses	284	288	5.15	5.14	1.21	-0.11
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	237	247	4.30	4.41	4.22	2.63
<b>Psychological Services</b>						
Psychologists	304	316	5.51	5.64	3.95	2.37
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	317	321	5.75	5.73	1.26	-0.28
Occupational Therapists (BCSOT)	286	278	5.19	4.97	-3.35	-5.11
Physical Therapists <sup>6</sup>	566	570	10.27	10.18	0.85	-0.99
<b>TOTAL<sup>7</sup></b>	<b>16,824</b>	<b>16,955</b>	<b>305.16</b>	<b>302.86</b>	<b>0.39</b>	<b>-0.38</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	2,057	n/a	37.31	n/a	n/a	n/a
Extended Care Beds	1,594	n/a	28.91	n/a	n/a	n/a
Rehabilitation Beds	242	n/a	4.39	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>3,893</b>	<b>n/a</b>	<b>70.61</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	121	123	2.19	2.20	2.21	0.14
<b>Population</b>	<b>551,320</b>	<b>559,831</b>	<b>n/a</b>	<b>n/a</b>	<b>0.77</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 50**  
**Health Region 16 - Vancouver**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	37	1	178	0	129	0	47	0	9	0	0	0	0	1	400	401	
Dental Hygienists	1	7	9	97	7	88	2	35	0	2	0	1	0	1	19	231	250	
Dentists	0	0	88	54	132	54	155	28	77	6	40	4	4	0	496	146	642	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	3	1	45	15	108	16	37	0	5	0	0	0	0	0	198	32	230	
First Responders	6	1	202	22	321	9	239	1	60	0	0	0	4	1	832	34	866	
Opticians	3	6	7	12	22	11	15	11	3	1	1	0	67	54	118	95	213	
Pharmacists	11	22	73	161	93	135	69	74	16	22	8	2	3	4	273	420	693	
Physicians (Directory Active)	5	2	458	328	517	340	550	218	315	64	183	19	8	2	2,036	973	3,009	
<b>Nursing Services</b>																		
Licensed Practical Nurses	2	23	18	135	37	195	55	229	18	105	2	1	2	15	134	703	837	
Registered Nurses	12	189	97	1,759	139	2,403	97	2,023	31	883	2	74	0	0	378	7,331	7,709	
Licensed Graduate Nurses	0	0	0	0	0	15	1	51	0	14	0	4	0	0	1	84	85	
Registered Psychiatric Nurses	0	6	6	61	21	78	24	57	10	16	1	2	1	5	63	225	288	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	0	4	2	81	2	89	0	53	0	6	0	0	0	10	4	243	247	
<b>Psychological Services</b>																		
Psychologists	0	0	2	11	31	42	53	87	35	39	10	6	0	0	131	185	316	
<b>Rehabilitation Services</b>																		
Massage Therapists	1	5	30	103	38	71	14	48	2	6	2	0	0	1	87	234	321	
Occupational Therapists	0	1	6	68	9	73	0	48	0	19	0	0	0	54	15	263	278	
Physical Therapists	1	7	43	138	34	149	14	123	3	43	2	6	0	7	97	473	570	
<b>TOTAL</b>	<b>45</b>	<b>311</b>	<b>1,087</b>	<b>3,223</b>	<b>1,511</b>	<b>3,897</b>	<b>1,325</b>	<b>3,133</b>	<b>575</b>	<b>1,235</b>	<b>251</b>	<b>119</b>	<b>89</b>	<b>154</b>	<b>4,883</b>	<b>12,072</b>	<b>16,955</b>	

<sup>1</sup>Age and sex information are not available for all health groups.



**Table 51**  
**Health Region 16 - Vancouver**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	368	91.77	13	3.24	2	0.50	0	0.00	1	0.25	384	95.76	17	4.24	0	0.00	401	100.00
Dental Hygienists	104	41.60	21	8.40	16	6.40	51	20.40	32	12.80	224	89.60	25	10.00	1	0.40	250	100.00
Dentists	236	36.76	57	8.88	55	8.57	54	8.41	69	10.75	471	73.36	170	26.48	1	0.16	642	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	543	78.35	23	3.32	29	4.18	20	2.89	15	2.16	630	90.91	55	7.94	8	1.15	693	100.00
Physicians (Directory Active)	866	28.78	299	9.94	214	7.11	528	17.55	268	8.91	2,175	72.28	834	27.72	0	0.00	3,009	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	524	62.60	35	4.18	46	5.50	54	6.45	26	3.11	685	81.84	121	14.46	31	3.70	837	100.00
Registered Nurses	3,964	51.42	427	5.54	398	5.16	761	9.87	462	5.99	6,012	77.99	1,696	22.00	1	0.01	7,709	100.00
Registered Psychiatric Nurses	199	69.10	6	2.08	28	9.72	0	0.00	0	0.00	233	80.90	31	10.76	24	8.33	288	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	133	53.85	8	3.24	19	7.69	32	12.96	30	12.15	222	89.88	25	10.12	0	0.00	247	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	132	41.77	27	8.54	10	3.16	48	15.19	7	2.22	224	70.89	92	29.11	0	0.00	316	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	245	76.32	0	0.00	2	0.62	64	19.94	0	0.00	311	96.88	4	1.25	6	1.87	321	100.00
Occupational Therapists	117	42.09	14	5.04	9	3.24	38	13.67	24	8.63	202	72.66	73	26.26	3	1.08	278	100.00
Physical Therapists	163	28.60	30	5.26	28	4.91	82	14.39	40	7.02	343	60.18	222	38.95	5	0.88	570	100.00
<b>TOTAL</b>	<b>7,594</b>	<b>48.80</b>	<b>960</b>	<b>6.17</b>	<b>856</b>	<b>5.50</b>	<b>1,732</b>	<b>11.13</b>	<b>974</b>	<b>6.26</b>	<b>12,116</b>	<b>77.86</b>	<b>3,365</b>	<b>21.62</b>	<b>80</b>	<b>0.51</b>	<b>15,561</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 52**  
**Health Region 17 - Burnaby**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	168	178	8.96	9.35	5.95	4.31
Dental Hygienists	50	43	2.67	2.26	-15.17	-16.61
Dentists	129	134	6.88	7.04	4.67	2.72
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	15	16	0.80	0.84	7.29	5.48
First Responders	252	249	13.45	13.08	-1.30	-2.97
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	99	104	5.28	5.46	10.36	6.96
Pharmacists	145	140	7.74	7.35	-4.57	-6.54
Physicians (Directory Active)	250	253	13.34	13.29	1.20	-0.37
<b>Nursing Services</b>						
Licensed Practical Nurses	91	81	4.86	4.25	-10.99	-12.37
Registered Nurses <sup>5</sup>	1,094	1,093	58.37	57.41	-0.09	-1.64
Licensed Graduate Nurses	36	29	1.92	1.52	-19.44	-20.69
Registered Psychiatric Nurses	183	168	9.76	8.82	-7.07	-8.31
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	37	39	1.97	2.05	5.41	3.77
<b>Psychological Services</b>						
Psychologists	48	52	2.56	2.73	8.33	6.65
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	40	49	2.13	2.57	22.50	20.60
Occupational Therapists (BCSOT)	43	48	2.29	2.52	14.11	11.99
Physical Therapists <sup>6</sup>	81	82	4.32	4.31	1.48	-0.40
<b>TOTAL<sup>7</sup></b>	<b>2,761</b>	<b>2,758</b>	<b>147.31</b>	<b>144.87</b>	<b>-0.05</b>	<b>-0.83</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	216	n/a	11.52	n/a	n/a	n/a
Extended Care Beds	472	n/a	25.18	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>688</b>	<b>n/a</b>	<b>36.71</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	31	31	1.65	1.63	0.00	-2.06
<b>Population</b>	<b>187,422</b>	<b>190,375</b>	<b>n/a</b>	<b>n/a</b>	<b>0.78</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 53**  
**Health Region 17 - Burnaby**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>Dental Services</b>																		
Certified Dental Assistants	0	19	0	81	0	58	0	19	0	1	0	0	0	0	0	0	178	178
Dental Hygienists	0	2	1	23	0	15	0	2	0	0	0	0	0	0	0	1	42	43
Dentists	0	0	22	11	26	17	27	4	21	1	5	0	0	0	101	33	134	
<b>Medical &amp; Treatment Services</b>																		
Emergency Medical Assistants	0	0	3	0	7	3	3	0	0	0	0	0	0	0	13	3	16	
First Responders	3	0	60	4	91	1	79	0	11	0	0	0	0	0	244	5	249	
Opticians	4	4	5	9	5	7	5	0	2	0	0	0	31	32	52	52	104	
Pharmacists	5	6	20	31	15	22	11	14	8	0	5	0	2	1	66	74	140	
Physicians (Directory Active)	0	0	20	14	59	37	46	20	31	3	19	3	1	0	176	77	253	
<b>Nursing Services</b>																		
Licensed Practical Nurses	0	1	2	21	3	21	0	21	3	9	0	0	0	0	8	73	81	
Registered Nurses	3	33	8	206	9	297	12	335	4	173	0	13	0	0	36	1,057	1,093	
Licensed Graduate Nurses	0	0	0	0	0	5	0	21	0	2	0	1	0	0	0	29	29	
Registered Psychiatric Nurses	0	3	4	32	9	39	16	39	9	8	0	1	2	6	40	128	168	
<b>Nutrition &amp; Dietary Services</b>																		
Dietitians & Nutritionists	1	0	0	20	0	11	0	2	0	2	0	0	1	2	2	37	39	
<b>Psychological Services</b>																		
Psychologists	0	0	0	3	8	10	6	8	8	7	2	0	0	0	24	28	52	
<b>Rehabilitation Services</b>																		
Massage Therapists	2	3	8	12	6	8	3	5	1	1	0	0	0	0	20	29	49	
Occupational Therapists	0	0	1	10	3	15	0	8	0	4	0	0	0	7	4	44	48	
Physical Therapists	0	1	6	21	6	20	4	16	1	4	1	0	2	0	20	62	82	
<b>TOTAL</b>	<b>18</b>	<b>72</b>	<b>160</b>	<b>498</b>	<b>247</b>	<b>586</b>	<b>212</b>	<b>514</b>	<b>99</b>	<b>215</b>	<b>32</b>	<b>18</b>	<b>39</b>	<b>48</b>	<b>807</b>	<b>1,951</b>	<b>2,758</b>	

<sup>1</sup> Age and sex information are not available for all health groups.

**Table 54**  
**Health Region 17 - Burnaby**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	162	91.01	5	2.81	1	0.56	1	0.56	1	0.56	170	95.51	8	4.49	0	0.00	178	100.00
Dental Hygienists	25	58.14	5	11.63	3	6.98	4	9.30	4	9.30	41	95.35	2	4.65	0	0.00	43	100.00
Dentists	44	32.84	18	13.43	8	5.97	18	13.43	15	11.19	103	76.87	31	23.13	0	0.00	134	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	114	81.43	4	2.86	6	4.29	2	1.43	1	0.71	127	90.71	13	9.29	0	0.00	140	100.00
Physicians (Directory Active)	88	34.78	34	13.44	23	9.09	37	14.62	14	5.53	196	77.47	57	22.53	0	0.00	253	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	54	66.67	2	2.47	5	6.17	7	8.64	2	2.47	70	86.42	8	9.88	3	3.70	81	100.00
Registered Nurses	533	48.76	59	5.40	65	5.95	95	8.69	64	5.86	816	74.66	275	25.16	2	0.18	1,093	100.00
Registered Psychiatric Nurses	128	76.19	1	0.60	10	5.95	0	0.00	0	0.00	139	82.74	18	10.71	11	6.55	168	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	19	48.72	4	10.26	3	7.69	4	10.26	6	15.38	36	92.31	3	7.69	0	0.00	39	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	28	53.85	2	3.85	2	3.85	5	9.62	2	3.85	39	75.00	13	25.00	0	0.00	52	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	43	87.76	0	0.00	0	0.00	3	6.12	0	0.00	46	93.88	1	2.04	2	4.08	49	100.00
Occupational Therapists	23	47.92	2	4.17	2	4.17	5	10.42	4	8.33	36	75.00	10	20.83	2	4.17	48	100.00
Physical Therapists	29	35.37	1	1.22	3	3.66	14	17.07	9	10.98	56	68.29	26	31.71	0	0.00	82	100.00
<b>TOTAL</b>	<b>1,290</b>	<b>54.66</b>	<b>137</b>	<b>5.81</b>	<b>131</b>	<b>5.55</b>	<b>195</b>	<b>8.26</b>	<b>122</b>	<b>5.17</b>	<b>1,875</b>	<b>79.45</b>	<b>465</b>	<b>19.70</b>	<b>20</b>	<b>0.85</b>	<b>2,360</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 55**  
**Health Region 18 - North Shore**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	172	172	9.73	9.66	0.00	-0.79
Dental Hygienists	122	126	6.90	7.07	3.58	2.68
Dentists	159	164	9.00	9.21	3.79	2.80
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	82	82	4.64	4.60	0.00	-0.87
First Responders	348	354	19.70	19.88	1.88	1.00
Midwives <sup>4</sup>	n/a	3	n/a	0.17	n/a	n/a
Opticians	53	57	3.00	3.20	15.66	13.83
Pharmacists	151	144	8.55	8.09	-6.13	-7.13
Physicians (Directory Active)	374	375	21.17	21.05	0.27	-0.53
<b>Nursing Services</b>						
Licensed Practical Nurses	151	146	8.55	8.20	-3.31	-4.08
Registered Nurses <sup>5</sup>	1,272	1,230	71.99	69.06	-3.30	-4.07
Licensed Graduate Nurses	38	36	2.15	2.02	-5.26	-6.02
Registered Psychiatric Nurses	65	67	3.68	3.76	2.63	1.93
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	39	39	2.21	2.19	0.00	-0.79
<b>Psychological Services</b>						
Psychologists	53	51	3.00	2.86	-3.77	-4.54
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	93	92	5.26	5.17	-1.08	-1.86
Occupational Therapists (BCSOT)	31	36	1.75	2.02	19.65	18.51
Physical Therapists <sup>6</sup>	140	140	7.92	7.86	0.00	-0.95
<b>TOTAL<sup>7</sup></b>	<b>3,343</b>	<b>3,311</b>	<b>189.20</b>	<b>185.90</b>	<b>-0.48</b>	<b>-0.88</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	329	n/a	18.62	n/a	n/a	n/a
Extended Care Beds	319	n/a	18.05	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>648</b>	<b>n/a</b>	<b>36.67</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>28</b>	<b>28</b>	<b>1.58</b>	<b>1.57</b>	<b>0.00</b>	<b>-1.06</b>
<b>Population</b>	<b>176,692</b>	<b>178,107</b>	<b>n/a</b>	<b>n/a</b>	<b>0.40</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 56**  
**Health Region 18 - North Shore**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	0	9	0	62	0	79	0	18	0	3	0	1	0	0	0	172	172	
Dental Hygienists	0	2	0	34	0	46	0	39	0	5	0	0	0	0	0	126	126	
Dentists	0	0	14	9	40	18	29	9	33	1	11	0	0	0	127	37	164	
<b><i>Medical &amp; Treatment Services</i></b>																		
Emergency Medical Assistants	0	0	13	9	37	7	12	3	1	0	0	0	0	0	63	19	82	
First Responders	4	2	76	6	110	0	143	4	9	0	0	0	0	0	342	12	354	
Opticians	0	0	7	4	4	1	4	0	1	1	0	0	12	23	28	29	57	
Pharmacists	2	5	10	38	8	23	17	15	11	10	2	1	0	2	50	94	144	
Physicians (Directory Active)	0	0	19	23	61	50	76	22	67	8	44	5	0	0	267	108	375	
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	0	2	3	30	4	50	2	37	1	13	0	0	1	3	11	135	146	
Registered Nurses	2	20	6	213	11	332	5	348	1	273	0	19	0	0	25	1,205	1,230	
Licensed Graduate Nurses	0	0	0	0	0	12	1	15	0	7	0	1	0	0	1	35	36	
Registered Psychiatric Nurses	0	1	2	17	3	16	2	16	1	6	0	1	0	2	8	59	67	
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	0	1	0	9	0	9	0	14	0	3	0	0	0	3	0	39	39	
<b><i>Psychological Services</i></b>																		
Psychologists	0	0	0	0	5	1	13	11	12	5	3	1	0	0	33	18	51	
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	0	3	6	28	7	30	3	11	1	3	0	0	0	0	17	75	92	
Occupational Therapists	0	0	0	6	0	14	0	7	0	4	0	1	0	4	0	36	36	
Physical Therapists	0	2	7	26	5	35	3	31	0	28	0	2	0	1	15	125	140	
<b>TOTAL</b>	<b>8</b>	<b>47</b>	<b>163</b>	<b>514</b>	<b>295</b>	<b>723</b>	<b>310</b>	<b>600</b>	<b>138</b>	<b>370</b>	<b>60</b>	<b>32</b>	<b>13</b>	<b>38</b>	<b>987</b>	<b>2,324</b>	<b>3,311</b>	

<sup>1</sup> Age and sex information are not available for all health groups.



**Table 57**  
**Health Region 18 - North Shore**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	159	92.44	4	2.33	1	0.58	1	0.58	0	0.00	165	95.93	7	4.07	0	0.00	172	100.00
Dental Hygienists	56	44.44	10	7.94	13	10.32	18	14.29	15	11.90	112	88.89	14	11.11	0	0.00	126	100.00
Dentists	59	35.98	32	19.51	16	9.76	12	7.32	13	7.93	132	80.49	32	19.51	0	0.00	164	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	113	78.47	7	4.86	8	5.56	3	2.08	1	0.69	132	91.67	11	7.64	1	0.69	144	100.00
Physicians (Directory Active)	125	33.33	49	13.07	18	4.80	62	16.53	30	8.00	284	75.73	91	24.27	0	0.00	375	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	104	71.23	7	4.79	6	4.11	11	7.53	6	4.11	134	91.78	9	6.16	3	2.05	146	100.00
Registered Nurses	601	48.86	77	6.26	96	7.80	153	12.44	82	6.67	1,009	82.03	221	17.97	0	0.00	1,230	100.00
Registered Psychiatric Nurses	52	77.61	2	2.99	6	8.96	0	0.00	0	0.00	60	89.55	1	1.49	6	8.96	67	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	19	48.72	4	10.26	3	7.69	5	12.82	7	17.95	38	97.44	1	2.56	0	0.00	39	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	22	43.14	4	7.84	3	5.88	6	11.76	2	3.92	37	72.55	14	27.45	0	0.00	51	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	68	73.91	0	0.00	0	0.00	23	25.00	0	0.00	91	98.91	1	1.09	0	0.00	92	100.00
Occupational Therapists	15	41.67	1	2.78	1	2.78	7	19.44	1	2.78	25	69.44	10	27.78	1	2.78	36	100.00
Physical Therapists	30	21.43	5	3.57	10	7.14	23	16.43	12	8.57	80	57.14	60	42.86	0	0.00	140	100.00
<b>TOTAL</b>	<b>1,423</b>	<b>51.15</b>	<b>202</b>	<b>7.26</b>	<b>181</b>	<b>6.51</b>	<b>324</b>	<b>11.65</b>	<b>169</b>	<b>6.07</b>	<b>2,299</b>	<b>82.64</b>	<b>472</b>	<b>16.97</b>	<b>11</b>	<b>0.40</b>	<b>2,782</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 58**  
**Health Region 19 - Richmond**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	174	165	11.08	10.27	-5.17	-7.29
Dental Hygienists	72	75	4.58	4.67	4.55	2.01
Dentists	114	115	7.26	7.16	1.05	-1.65
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	34	30	2.16	1.87	-12.76	-14.89
First Responders	224	232	14.26	14.44	3.90	1.37
Midwives <sup>4</sup>	n/a	0	n/a	0.00	n/a	n/a
Opticians	85	93	5.41	5.79	19.71	14.42
Pharmacists	122	125	7.77	7.78	3.29	0.23
Physicians (Directory Active)	278	273	17.70	16.99	-1.80	-3.99
<b>Nursing Services</b>						
Licensed Practical Nurses	105	106	6.69	6.60	0.95	-1.30
Registered Nurses <sup>5</sup>	734	695	46.73	43.26	-5.31	-7.43
Licensed Graduate Nurses	12	9	0.76	0.56	-25.00	-26.68
Registered Psychiatric Nurses	28	25	1.78	1.56	-9.26	-11.00
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	19	14	1.21	0.87	-26.32	-27.96
<b>Psychological Services</b>						
Psychologists	35	37	2.23	2.30	5.71	3.35
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	25	35	1.59	2.18	40.00	36.87
Occupational Therapists (BCSOT)	54	54	3.44	3.36	0.00	-2.68
Physical Therapists <sup>6</sup>	105	108	6.69	6.72	3.44	0.67
<b>TOTAL<sup>7</sup></b>	<b>2,220</b>	<b>2,191</b>	<b>141.35</b>	<b>136.38</b>	<b>-0.66</b>	<b>-1.77</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	210	n/a	13.37	n/a	n/a	n/a
Extended Care Beds	216	n/a	13.75	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>426</b>	<b>n/a</b>	<b>27.12</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>22</b>	<b>24</b>	<b>1.40</b>	<b>1.49</b>	<b>12.30</b>	<b>8.97</b>
<b>Population</b>	<b>157,058</b>	<b>160,649</b>	<b>n/a</b>	<b>n/a</b>	<b>1.14</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 59**  
**Health Region 19 - Richmond**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
<b><i>Dental Services</i></b>																	
Certified Dental Assistants	0	13	0	58	0	66	0	24	0	4	0	0	0	0	0	165	165
Dental Hygienists	0	3	0	19	1	29	1	21	0	1	0	0	0	0	2	73	75
Dentists	0	0	18	11	22	9	34	8	8	1	4	0	0	0	86	29	115
<b><i>Medical &amp; Treatment Services</i></b>																	
Emergency Medical Assistants	0	0	5	3	13	2	6	0	1	0	0	0	0	0	25	5	30
First Responders	0	1	45	4	69	2	101	1	9	0	0	0	0	0	224	8	232
Opticians	0	2	2	7	7	7	6	2	1	0	0	0	33	26	49	44	93
Pharmacists	0	7	27	25	16	16	13	14	3	2	0	1	1	0	60	65	125
Physicians (Directory Active)	0	0	25	11	58	36	71	14	34	2	20	1	1	0	209	64	273
<b><i>Nursing Services</i></b>																	
Licensed Practical Nurses	0	0	3	21	5	28	0	31	1	15	0	1	0	1	9	97	106
Registered Nurses	1	14	7	115	9	175	8	236	0	119	0	11	0	0	25	670	695
Licensed Graduate Nurses	0	0	0	0	0	2	0	6	0	1	0	0	0	0	0	9	9
Registered Psychiatric Nurses	0	1	0	7	0	6	0	7	1	2	0	0	0	1	1	24	25
<b><i>Nutrition &amp; Dietary Services</i></b>																	
Dietitians & Nutritionists	0	1	0	4	0	5	0	3	0	0	0	0	0	1	0	14	14
<b><i>Psychological Services</i></b>																	
Psychologists	0	0	1	1	3	5	10	10	4	2	1	0	0	0	19	18	37
<b><i>Rehabilitation Services</i></b>																	
Massage Therapists	0	3	7	10	5	3	4	2	0	1	0	0	0	0	16	19	35
Occupational Therapists	0	0	3	20	2	10	1	3	0	3	0	0	0	12	6	48	54
Physical Therapists	0	2	6	25	7	23	7	29	1	8	0	0	0	0	21	87	108
<b>TOTAL</b>	<b>1</b>	<b>47</b>	<b>149</b>	<b>341</b>	<b>217</b>	<b>424</b>	<b>262</b>	<b>411</b>	<b>63</b>	<b>161</b>	<b>25</b>	<b>14</b>	<b>35</b>	<b>41</b>	<b>752</b>	<b>1,439</b>	<b>2,191</b>

<sup>1</sup> Age and sex information are not available for all health groups.

**Table 60**  
**Health Region 19 - Richmond**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<i>Dental Services</i>																		
Certified Dental Assistants	142	86.06	8	4.85	1	0.61	0	0.00	0	0.00	151	91.52	14	8.48	0	0.00	165	100.00
Dental Hygienists	36	48.00	4	5.33	13	17.33	10	13.33	7	9.33	70	93.33	5	6.67	0	0.00	75	100.00
Dentists	46	40.00	9	7.83	10	8.70	6	5.22	12	10.43	83	72.17	32	27.83	0	0.00	115	100.00
<i>Medical &amp; Treatment Services</i>																		
Pharmacists	103	82.40	4	3.20	6	4.80	1	0.80	1	0.80	115	92.00	8	6.40	2	1.60	125	100.00
Physicians (Directory Active)	92	33.70	28	10.26	31	11.36	25	9.16	18	6.59	194	71.06	79	28.94	0	0.00	273	100.00
<i>Nursing Services</i>																		
Licensed Practical Nurses	68	64.15	4	3.77	9	8.49	5	4.72	4	3.77	90	84.91	13	12.26	3	2.83	106	100.00
Registered Nurses	302	43.45	54	7.77	59	8.49	46	6.62	46	6.62	507	72.95	187	26.91	1	0.14	695	100.00
Registered Psychiatric Nurses	20	80.00	1	4.00	2	8.00	0	0.00	0	0.00	23	92.00	1	4.00	1	4.00	25	100.00
<i>Nutrition &amp; Dietary Services</i>																		
Dietitians & Nutritionists	7	50.00	1	7.14	2	14.29	1	7.14	2	14.29	13	92.86	1	7.14	0	0.00	14	100.00
<i>Psychological Services</i>																		
Psychologists	13	35.14	3	8.11	2	5.41	7	18.92	1	2.70	26	70.27	11	29.73	0	0.00	37	100.00
<i>Rehabilitation Services</i>																		
Massage Therapists	30	85.71	0	0.00	0	0.00	4	11.43	0	0.00	34	97.14	1	2.86	0	0.00	35	100.00
Occupational Therapists	26	48.15	2	3.70	2	3.70	5	9.26	3	5.56	38	70.37	16	29.63	0	0.00	54	100.00
Physical Therapists	49	45.37	6	5.56	3	2.78	11	10.19	4	3.70	73	67.59	34	31.48	1	0.93	108	100.00
<b>TOTAL</b>	<b>934</b>	<b>51.12</b>	<b>124</b>	<b>6.79</b>	<b>140</b>	<b>7.66</b>	<b>121</b>	<b>6.62</b>	<b>98</b>	<b>5.36</b>	<b>1,417</b>	<b>77.56</b>	<b>402</b>	<b>22.00</b>	<b>8</b>	<b>0.44</b>	<b>1,827</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**Table 61**  
**Health Region 20 - Capital**  
**Health Personnel, Hospital Beds, Community Pharmacies and Population**  
**1997 and 1998<sup>1</sup>**

Health Group	Number		Number per 10,000 Population		Average Annual Rate of Change	
	1997	1998	1997	1998	Number <sup>2</sup>	Ratio <sup>3</sup>
<b>Dental Services</b>						
Certified Dental Assistants	450	454	13.55	13.57	0.89	0.12
Dental Hygienists	206	217	6.20	6.49	5.84	4.96
Dentists	230	227	6.93	6.78	-1.56	-2.47
<b>Medical &amp; Treatment Services</b>						
Emergency Medical Assistants	201	202	6.05	6.04	0.54	-0.30
First Responders	953	982	28.70	29.35	3.32	2.46
Midwives <sup>4</sup>	n/a	11	n/a	0.33	n/a	n/a
Opticians	107	110	3.22	3.29	5.69	4.07
Pharmacists	263	270	7.92	8.07	3.56	2.51
Physicians (Directory Active)	938	939	28.25	28.07	0.11	-0.66
<b>Nursing Services</b>						
Licensed Practical Nurses	545	518	16.41	15.48	-4.95	-5.68
Registered Nurses <sup>5</sup>	3,891	3,785	117.19	113.13	-2.72	-3.47
Licensed Graduate Nurses	17	16	0.51	0.48	-5.88	-6.60
Registered Psychiatric Nurses	141	139	4.25	4.15	-1.22	-1.87
<b>Nutrition &amp; Dietary Services</b>						
Dietitians & Nutritionists (BCDNA)	88	87	2.65	2.60	-1.14	-1.89
<b>Psychological Services</b>						
Psychologists	153	165	4.61	4.93	7.84	7.02
<b>Rehabilitation Services</b>						
Massage Therapists <sup>6</sup>	141	147	4.25	4.39	4.26	3.46
Occupational Therapists (BCSOT)	92	105	2.77	3.14	17.19	16.11
Physical Therapists <sup>6</sup>	276	285	8.31	8.52	3.93	2.97
<b>TOTAL<sup>7</sup></b>	<b>8,692</b>	<b>8,648</b>	<b>261.80</b>	<b>258.48</b>	<b>-0.25</b>	<b>-0.64</b>
<b>Hospital Beds<sup>8,9</sup></b>						
Acute Care Beds	992	n/a	29.88	n/a	n/a	n/a
Extended Care Beds	1,375	n/a	41.41	n/a	n/a	n/a
Rehabilitation Beds	0	n/a	0.00	n/a	n/a	n/a
<b>TOTAL BEDS</b>	<b>2,367</b>	<b>n/a</b>	<b>71.29</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Community Pharmacies</b>	<b>64</b>	<b>66</b>	<b>1.93</b>	<b>1.97</b>	<b>4.19</b>	<b>3.13</b>
<b>Population</b>	<b>332,015</b>	<b>334,575</b>	<b>n/a</b>	<b>n/a</b>	<b>0.38</b>	<b>n/a</b>

<sup>1</sup> Dates of record differ for health groups. Please refer to the Introduction for specific dates of record for each group.

<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.

<sup>4</sup> Midwives appear in *ROLLCALL UPDATE* and *INVENTORY UPDATE* for the first time in 1998. Hence, 1997 data are not available.

<sup>5</sup> The date of record for RN's has changed from June to December of each year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>6</sup> The registration category of "inactive" has been included in the totals this year, so the 1997 data will differ from those published in *ROLLCALL 97* and *INVENTORY 97*.

<sup>7</sup> Total excludes Midwives because comparable data for 1997 and 1998 are not available.

<sup>8</sup> Data for 1998 are not available because hospital bed capacity data were never approved by the B.C. Ministry of Health in 1998.

<sup>9</sup> Bassinets are not included in the 1997 data because of reporting problems contributing to data unavailability.

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

n/a - Not applicable/not comparable.

**Table 62**  
**Health Region 20 - Capital**  
**Selected Health Personnel<sup>1</sup> by Age and Sex**  
**1998**

Health Group	< 25		25-34		35-44		45-54		55-64		65 +		Age Unknown		Subtotal		Sex	Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Unknown	
<i>Dental Services</i>																		
Certified Dental Assistants	0	57	0	201	0	151	0	40	0	5	0	0	0	0	0	454	0	454
Dental Hygienists	0	2	1	81	5	83	2	40	1	2	0	0	0	0	9	208	0	217
Dentists	0	0	21	10	46	9	89	1	41	1	9	0	0	0	206	21	0	227
<i>Medical &amp; Treatment Services</i>																		
Emergency Medical Assistants	5	2	42	15	70	15	34	11	5	2	0	0	1	0	157	45	0	202
First Responders	45	4	225	53	341	34	201	19	37	4	6	1	11	1	866	116	0	982
Opticians	1	3	6	15	5	9	4	8	2	2	0	0	28	27	46	64	0	110
Pharmacists	3	1	37	29	30	52	36	40	22	8	7	1	3	1	138	132	0	270
Physicians (Directory Active)	1	0	54	47	164	92	233	61	167	19	88	7	5	1	712	227	0	939
<i>Nursing Services</i>																		
Licensed Practical Nurses	0	9	2	50	18	138	21	187	8	66	1	8	0	10	50	468	0	518
Registered Nurses	2	40	22	461	68	1,119	58	1,292	15	633	0	75	0	0	165	3,620	0	3,785
Licensed Graduate Nurses	0	0	0	0	0	1	0	12	0	3	0	0	0	0	0	16	0	16
Registered Psychiatric Nurses	0	0	1	9	6	28	19	48	10	16	0	1	0	1	36	103	0	139
<i>Nutrition &amp; Dietary Services</i>																		
Dietitians & Nutritionists	0	2	0	12	1	34	0	28	0	5	0	1	1	3	2	85	0	87
<i>Psychological Services</i>																		
Psychologists	0	0	0	1	3	19	35	42	31	22	4	8	0	0	73	92	0	165
<i>Rehabilitation Services</i>																		
Massage Therapists	0	2	5	29	11	41	12	37	6	0	2	0	1	1	37	110	0	147
Occupational Therapists	0	0	2	15	3	32	2	24	0	8	0	0	0	19	7	98	0	105
Physical Therapists	0	4	10	38	15	74	11	82	6	31	3	7	2	1	47	237	1	285
<b>TOTAL</b>	<b>57</b>	<b>126</b>	<b>428</b>	<b>1,066</b>	<b>786</b>	<b>1,931</b>	<b>757</b>	<b>1,972</b>	<b>351</b>	<b>827</b>	<b>120</b>	<b>109</b>	<b>52</b>	<b>65</b>	<b>2,551</b>	<b>6,096</b>	<b>1</b>	<b>8,648</b>

<sup>1</sup>Age and sex information are not available for all health groups.



**Table 63**  
**Health Region 20 - Capital**  
**Selected Health Personnel<sup>1</sup> by Place of Graduation**  
**1998**

Health Group	Place of Graduation																TOTAL	
	B.C.		Alberta		Saskatchewan & Manitoba		Ontario		Other Canada		Canada Subtotal		Other Country		Unknown			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b><i>Dental Services</i></b>																		
Certified Dental Assistants	433	95.37	13	2.86	5	1.10	0	0.00	1	0.22	452	99.56	2	0.44	0	0.00	454	100.00
Dental Hygienists	121	55.76	17	7.83	22	10.14	35	16.13	13	5.99	208	95.85	9	4.15	0	0.00	217	100.00
Dentists	55	24.23	62	27.31	25	11.01	33	14.54	23	10.13	198	87.22	29	12.78	0	0.00	227	100.00
<b><i>Medical &amp; Treatment Services</i></b>																		
Pharmacists	179	66.30	26	9.63	42	15.56	3	1.11	3	1.11	253	93.70	17	6.30	0	0.00	270	100.00
Physicians (Directory Active)	202	21.51	143	15.23	82	8.73	198	21.09	89	9.48	714	76.04	225	23.96	0	0.00	939	100.00
<b><i>Nursing Services</i></b>																		
Licensed Practical Nurses	338	65.25	33	6.37	30	5.79	59	11.39	29	5.60	489	94.40	12	2.32	17	3.28	518	100.00
Registered Nurses	2,077	54.87	359	9.48	322	8.51	482	12.73	193	5.10	3,433	90.70	352	9.30	0	0.00	3,785	100.00
Registered Psychiatric Nurses	68	48.92	9	6.47	38	27.34	0	0.00	0	0.00	115	82.73	15	10.79	9	6.47	139	100.00
<b><i>Nutrition &amp; Dietary Services</i></b>																		
Dietitians & Nutritionists	25	28.74	14	16.09	9	10.34	11	12.64	20	22.99	79	90.80	6	6.90	2	2.30	87	100.00
<b><i>Psychological Services</i></b>																		
Psychologists	63	38.18	19	11.52	8	4.85	25	15.15	3	1.82	118	71.52	47	28.48	0	0.00	165	100.00
<b><i>Rehabilitation Services</i></b>																		
Massage Therapists	68	46.26	1	0.68	0	0.00	66	44.90	1	0.68	136	92.52	6	4.08	5	3.40	147	100.00
Occupational Therapists	33	31.43	9	8.57	3	2.86	25	23.81	8	7.62	78	74.29	25	23.81	2	1.90	105	100.00
Physical Therapists	54	18.95	44	15.44	30	10.53	55	19.30	24	8.42	207	72.63	77	27.02	1	0.35	285	100.00
<b>TOTAL</b>	<b>3,716</b>	<b>50.64</b>	<b>749</b>	<b>10.21</b>	<b>616</b>	<b>8.39</b>	<b>992</b>	<b>13.52</b>	<b>407</b>	<b>5.55</b>	<b>6,480</b>	<b>88.31</b>	<b>822</b>	<b>11.20</b>	<b>36</b>	<b>0.49</b>	<b>7,338</b>	<b>100.00</b>

<sup>1</sup> Place of graduation is not available for all health groups. Therefore, the total number shown here will be less than the total shown in the first table of this section.



**APPENDIX A**  
**INFORMATION ABOUT HEALTH PERSONNEL**

## CERTIFIED DENTAL ASSISTANTS

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

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

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

---

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

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

- (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>

**Notes:**

Information on certified dental assistants was prepared from registration data maintained by the College of Dental Surgeons of British Columbia (CDSBC), and includes CDA's 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. 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.

## 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.<sup>4</sup>

**Notes:**

Information on dental hygienists was prepared from registration data maintained by the College of Dental Hygienists of British Columbia (CDHBC) and includes 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.

Dental hygienists included in these tables 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.

<sup>3</sup> Rules of the College of Dental Surgeons of British Columbia, Auxiliary Bodies, Article 10.19, revised April 1996.

<sup>4</sup> 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.

## 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>5</sup>

**Notes:**

Information on dentists was prepared from registration data maintained by the College of Dental Surgeons of British Columbia (CDSBC) and includes 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.

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 license to practice in the province.

## 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.

<sup>5</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3113, Ottawa: Employment and Immigration Canada.

- (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>6</sup>

**Notes:**

Information on emergency medical assistants was derived from the registration data maintained by the Emergency Medical Assistants Licensing Board (EMALB), of the B.C. Ministry of Health, and includes 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 EMA's. First Responders are shown as separate categories, as the level of training is quite different from other EMA's. In addition, as stated above acting as an EMA is not generally a primary work duty for first responders.

## 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>7</sup>

<sup>6</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.

<sup>7</sup> Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3232, Ottawa: Employment and Immigration Canada.

**Notes:**

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 *INVENTORY UPDATE 98*, thus there are no comparisons to 1997 personnel.

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). 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>8</sup> All registrants must remain active in both the home and hospital environments.

## 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>9</sup>

**Notes:**

Information on opticians was 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*, 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.

A *licensed dispensing optician* is licensed by the College of Opticians of B.C. to provide dispensing services for eyeglasses. They are not permitted to dispense contact lens. A *licensed contact lens fitter* is licensed by the College of Opticians of B.C. to provide dispensing services for both eyeglasses and contact lens. Licensed contact lens fitters have had additional training in fitting contact lens. A *non-practising*

<sup>8</sup> Adapted from information supplied by the College of Midwives of B.C.

<sup>9</sup> Adapted from *National Occupational Classification 1992*, Major Group 32, No. 3231, Ottawa: Employment and Immigration Canada.



*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 College of Opticians of B.C. 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 College of Opticians of B.C. A *student contact lens fitter* is enrolled in an approved contact lens program. The College of Opticians of B.C. 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.<sup>10</sup>

---

## 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>11</sup>

**Notes:**

Information on pharmacists has been prepared from registration data maintained by the College of Pharmacists of British Columbia (CPBC) and includes 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.

---

## 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;

---

<sup>10</sup> 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](http://www.opticians.ca/english/practice1.htm#BRITISH_COLUMBIA)).

<sup>11</sup> Adapted from information provided by the College of Pharmacists of British Columbia. See also *National Occupational Classification 1992*, Major Group 31, No. 3131, Ottawa: Employment and Immigration Canada.

- (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>12</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>13</sup>

Osteopaths diagnose disorders and injuries of the musculo-skeletal, circulatory and nervous systems. Treatments include manipulative therapy, medications or surgery.<sup>14</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.

#### Notes:

Information on physicians was derived from the College of Physicians and Surgeons of British Columbia (CPSBC) physician database and includes physicians who, at the date of record, were registered by the CPSBC on the *full*, *special* or *temporary* registers, and who reported a British Columbia address. 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. 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.

---

## 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>15</sup>

#### Notes:

Information on Licensed Practical Nurses (LPN's) was derived from registration data maintained by the College of Licensed Practical Nurses of British Columbia (CLPNBC) and include LPN's who reported a British Columbia address at the date of record. The data in the tables are presented based on employment

---

<sup>12</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3112, Ottawa; Employment and Immigration Canada.

<sup>13</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3111, Ottawa; Employment and Immigration Canada.

<sup>14</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3123, Ottawa; Employment and Immigration Canada.

<sup>15</sup> 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.

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.

## 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 administration, supervision, education, consultation, teaching or research for any of the foregoing.<sup>16</sup>

**Notes:**

Information on registered nurses (RN's) was derived from registration data maintained by the Registered Nurses Association of British Columbia (RNABC) and includes RN's who reported a British Columbia address at the date of record. 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. 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.

The date of record for RN's has changed from June of each year to December of each year. The data shown for 1997 will therefore differ from those published in *INVENTORY 97* and *ROLLCALL 97*.

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

## 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>17</sup>

<sup>16</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.)

<sup>17</sup> Adapted from the *Nursing Statutes Amendment Act*, S.B.C. 1988, Chapter 51, Section 15.

**Notes:**

Information on licensed graduate nurses (LGN's) was derived from registration data maintained by the Registered Nurses Association of British Columbia (RNABC) and includes LGN's who reported a British Columbia address at the date of record. 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. 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.

---

## 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>18</sup>

**Notes:**

Information on Registered Psychiatric Nurses (RPN's) was derived from the data maintained by the Registered Psychiatric Nurses Association of British Columbia (RPNABC), and includes RPN's who reported a British Columbia address at the date of record. 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. The data in the tables are presented based on employment address when the membership status is practising and employment address is available. In 1997 and 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.

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.

---

## 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

---

<sup>18</sup> Adapted from information provided by the Registered Psychiatric Nurses Association of British Columbia. See also *National Occupational Classification 1992*, Major Group 31, No. 3152, Ottawa; Employment and Immigration Canada.

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>19</sup>

**Notes:**

Information on registered dietitians and nutritionists (RDN's) was derived from the membership database of the British Columbia Dietitians' and Nutritionists' Association (BCDNA), and includes 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.

As noted in *INVENTORY 97* and *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.

---

## 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>20</sup>

**Notes:**

Information on psychologists was prepared from registration data maintained by the College of Psychologists of British Columbia (CPBC) and includes registered psychologists who reported a British Columbia address at the date of record. 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. 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.

---

<sup>19</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.

<sup>20</sup> Adapted from *National Occupational Classification 1992*, Major Group 41, No. 4151, Ottawa; Employment and Immigration Canada.

## MASSAGE THERAPISTS

**Definition:** A massage therapist (formerly a massage practitioner)

...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>21</sup>

**Notes:**

Information on massage therapists (MT's) was prepared from registration data maintained by the College of Massage Therapists of British Columbia (CMTBC), and reflects members who reported a British Columbia address at the date of record. MT's may register with the CMTBC as either *full* or *inactive* registrants. 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 *INVENTORY* tables did not therefore include inactive registrants. As of 1995, the CMTBC requires inactive registrants to renew their registration each year<sup>21</sup>, so accurate data on inactive registrants are now available and are presented in the tables this year. 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.

---

## OCCUPATIONAL THERAPISTS

**Definition:** An occupational therapist

...plans and carries out individually designed programs of activity for patients with physical or mental health problems to enhance their ability to care for themselves and to engage in work and recreational pursuits.

Occupational therapists perform some or all of the following duties:

- (a) observe patients and consult physicians' prognoses to assess patients' emotional and physical capacities;
- (b) develop treatment programs which may include manual and creative arts, industrial and vocational skills and recreational activities;
- (c) implement the treatment programs and evaluate their progress;
- (d) maintain clinical and statistical records;
- (e) advise on health risks in the workplace or participate in other programs, such as pre-retirement programs, to prevent physical or mental health problems;
- (f) conduct research in occupational therapy;
- (g) act as an occupational therapy consultant or educator.<sup>22</sup>

---

<sup>21</sup> Adapted from information provided by the College of Massage Therapists of British Columbia.

<sup>22</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3143, Ottawa: Employment and Immigration Canada.

**Notes:**

Information on occupational therapists (OT's) was prepared from registration data maintained by the British Columbia Society of Occupational Therapists (BCSOT), and includes BCSOT members who reported a British Columbia address at the date of record. OT's who are also registered with the College of Physical Therapists of British Columbia (CPTBC) are included in both the occupational therapy and physical therapy categories. The exact number of personnel who are both members of the BCSOT and registered with the CPTBC is not known due to the unavailability of those data from the CPTBC, so the extent of double-counting of personnel in these two groups can not be determined.

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. 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.

---

## 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>23</sup>

---

<sup>23</sup> Adapted from *National Occupational Classification 1992*, Major Group 31, No. 3142, Ottawa: Employment and Immigration Canada.

**Notes:**

Information on physical therapists (PT's) was prepared from registration data maintained by the College of Physical Therapists of BC (CPTBC), and includes PT's who reported a British Columbia address at the date of record. PT's who also hold membership in the British Columbia Society of Occupational Therapists (BCSOT) are included in both the physical therapy and occupational therapy categories. 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.

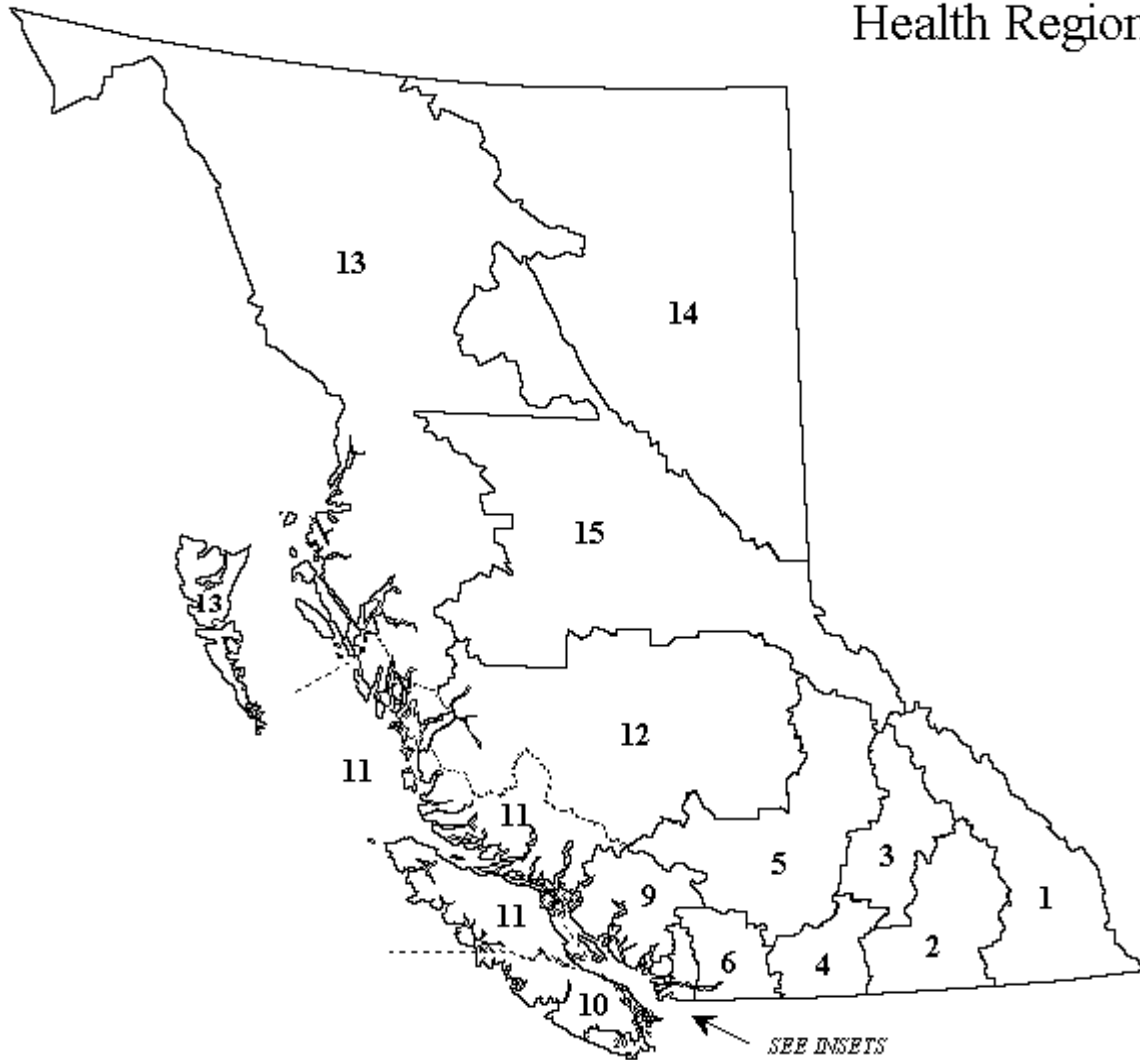
A PT may be a *full, limited* or *inactive* registrant of the CPTBC. A PT may work as a limited (formerly temporary) registrant until all qualifications for membership are met. PT's with inactive registration status are included in these tables as these registrants are now required to pay a fee and register each year. Remedial gymnasts may also register as members of the CPTBC but are not included in the tables. The 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.



**APPENDIX B**

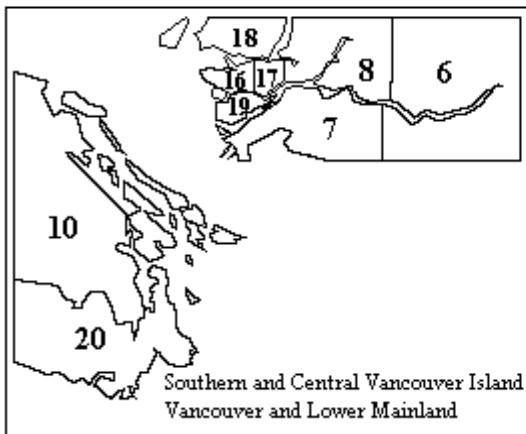
**MAP OF BRITISH COLUMBIA  
BY HEALTH REGIONS**

## British Columbia Health Regions



### HEALTH REGIONS

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



Prepared by: Planning & Evaluation Division, Ministry of Health and Ministry Responsible for Seniors  
Boundary Source: B C STATS, Ministry of Finance and Corporate Relations

## Conversion Summary: B.C. Health Regions and Local Health Areas

<b>B.C. Health Regions</b>	<b>Local Health Area(s)</b>	
1 East Kootenay	1 Fernie 2 Cranbrook 3 Kimberley	4 Windermere 5 Creston 18 Golden
2 West Kootenay - Boundary	6 Kootenay Lake 7 Nelson 9 Castlegar 10 Arrow Lakes	11 Trail 12 Grand Forks 13 Kettle Valley
3 North Okanagan	19 Revelstoke 20 Salmon Arm 21 Armstrong-Spallumcheen	22 Vernon 78 Enderby
4 South Okanagan - Similkameen	14 Southern Okanagan 15 Penticton 16 Keremeos	17 Princeton 23 Central Okanagan 77 Summerland
5 Thompson	24 Kamloops 26 North Thompson 29 Lillooet	30 South Cariboo 31 Merritt
6 Fraser Valley	32 Hope 33 Chilliwack 34 Abbotsford	75 Mission 76 Agassiz - Harrison
7 South Fraser Valley	35 Langley 36 Surrey	37 Delta
8 Simon Fraser	40 New Westminister 42 Maple Ridge	43 Coquitlam
9 Coast Garibaldi	46 Sunshine Coast 47 Powell River	48 Howe Sound
10 Central Vancouver Island	65 Cowichan 66 Lake Cowichan 67 Ladysmith	68 Nanaimo 69 Qualicum 70 Alberni
11 Upper Island/Central Coast	71 Courtenay 72 Campbell River 83 Central Coast	84 Vancouver Island West 85 Vancouver Island North
12 Cariboo	25 100 Mile House 27 Cariboo - Chilcotin	28 Quesnel 49 Bella Coola Valley
13 North West	50 Queen Charlotte 51 Snow Country 52 Prince Rupert 53 Upper Skeena 54 Smithers	80 Kitimat 87 Stikine 88 Terrace 92 Nisga'a 94 Telegraph Creek
14 Peace Liard	59 Peace River South 60 Peace River North	81 Fort Nelson
15 Northern Interior	55 Burns Lake 56 Nechako	57 Prince George
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 62 Sooke	63 Saanich 64 Gulf Islands

Source: Boundary Conversion Steering Committee, British Columbia Ministry of Health

05/97



**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/](http://www.chspr.ubc.ca/)

*Some of the early reports may not be available for distribution*

- HHRU 99:2**      *ROLLCALL UPDATE 98. A Status Report of Selected Health Personnel in the Province of British Columbia.* May 1999. ISBN 1-894066-97-9. ISSN 0828-9360.
- 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.* July 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.

- HHRU 96:3**      *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/](http://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.
- HHRU 91:4R** *A Single Stochastic Model For Forecasting Nurse Supply and For Estimating Life-Cycle Activity Patterns.* May 1991. (A. Kazanjian). ISBN 1-896459-61-7.

- HHRU 91:3** *ROLLCALL UPDATE 90. A Status Report of Selected Health Personnel in the Province of British Columbia.* March 1991. ISBN 1-896459-60-9. ISSN 0828-9360.
- HHRU 91:2** *Study of Rural Physician Supply: Practice Location Decisions and Problems in Retention. Volume I.* March 1991. (A. Kazanjian, N. Pagliccia, L. Aplan, 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 Characteristics, Employment Patterns, Educational Background and Training of Health Managers.* June 1990. (A. Kazanjian, C. Jackson, N. Pagliccia). ISBN 1-896459-56-0.  
(HMRU 90:6)
- 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 the Province of British Columbia.* March 1990. ISBN 1-896459-54-4.  
(HMRU 90:4) ISSN 1199-4010.
- HHRU 90:3** *ROLLCALL 89. A Status Report of Health Personnel in the Province of British Columbia.* March 1990. ISBN 1-896459-53-6. ISSN 0707-3542.  
(HMRU 90:3)
- HHRU 90:2** *Proceedings of the Workshop on Priorities in Health Human Resources Research in Canada.* March 1990. (A. Kazanjian, K. Friesen). ISBN 1-896459-52-8.  
(HMRU 90:2)
- 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 Optometric Services, 1975-1988.* July 1989. (I. Pulcins, P. Wong Fung, C. Jackson, K. Kerluke, A. Kazanjian). ISBN 1-896459-50-1.  
(HMRU 89:4)
- HHRU 89:3** *Fee Practice Medical Service Expenditures Per Capita, and Full-Time-Equivalent Physicians in British Columbia, 1987-88.* August 1989. (A. Kazanjian, P. Wong Fung, M.L. Barer). ISBN 1-896459-49-8.  
(HMRU 89:3)
- HHRU 89:2** *Health Managers in B.C. Part I: Methods and Preliminary Findings From Survey of Chief Executive Officers.* July 1989. (A. Kazanjian, N. Pagliccia, C. Jackson). ISBN 1-896459-48-X.  
(HMRU 89:2)
- HHRU 89:1** *ROLLCALL UPDATE 88. A Status Report of Selected Health Personnel in the Province of British Columbia.* March 1989. ISBN 1-896459-47-1. ISSN 0828-9360.  
(HMRU 89:1)