

HEALTH PERSONNEL

IN CANADA

1991 TO 2000



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Canadian Institute for Health Information 377 Dalhousie Street Suite 200 Ottawa, Ontario K1N 9N8

Telephone: (613) 241-7860 Fax: (613) 241-8120

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- the participating universities and colleges, for providing education data for this publication;
- The Health Human Resources Strategies Division at Health Canada for provision of information on the legislative environment of health professions in Canada;
- Statistics Canada for population estimates and Labour Force Survey data;
- Human Resources Development Canada for occupational descriptions provided for each health occupation;
- the Publications and Translation departments at CIHI, for the timely and efficient production and printing of the publication; and
- the health professionals that care for the Canadian public. Without their co-operation, this publication would not be possible.

### **Preface**

The Canadian Institute for Health Information (CIHI) aims to improve the health of Canadians and the health care system by providing quality and timely health information. Presenting clear, objective data and data analyses enable informed decision-making and policy formulation by governments, researchers, and advocacy groups planning health services and health care delivery.

This edition is the second to be published by CIHI since 1995. Prior to that date, the Health Personnel in Canada publication was the responsibility of the Health Information Division at Health Canada. In this new release of *Health Personnel in Canada, 1991 to 2000*, CIHI has attempted to maintain continuity with previous editions, while providing additional information to enhance the value and utility of the publication. The current publication contains information on 20 health professions.

#### Introduction

The challenges associated with collecting data on regulated health care providers is considerable, evidenced by the fact that only a handful of health professional groups are currently able to collect standardized data that is comparable across Canada. For unregulated workers (formal health care providers not subject to any provincial/territorial regulations) the task is impossible and data simply does not exist because regulatory bodies do not exist to maintain membership lists. Without standardized, comparable data the utility of indicators such as counts of health professionals or professionals-to-population ratios are limited and subject to misinterpretation. Of the regulated health care provider groups there is more information available on physicians and registered nurses than on any other health provider group in Canada.

Health Personnel in Canada, 1991 to 2000 is a reference document produced by the Canadian Institute for Health Information (CIHI) to assist health services planning and research. By providing time-specific personnel information for a number of health occupations, this publication may be used by governments, academics, professional health organizations, and researchers to better understand Canadian health system employment trends. While general counts and population ratios are of value, they only provide part of the picture. Health human resource planning and research requires the consideration of a multiplicity of different factors, such as information on the activity levels of different health professionals and additional demographic and practice pattern information. For many of the health professional groups included in this publication, this information does not exist or does not exist in a format that is readily accessible and comparable across Canada.

More detailed information is provided where possible, from a variety of sources, including professional associations, regulatory bodies, individual educational institutions, and Statistics Canada.

For a fact-based compilation of current research, historical trends, and new data findings and analysis on what we know and don't know about Canada's health care providers, please download a copy of CIHI's report, *Canada's Health Care Providers* (available at www.cihi.ca).

Any questions or requests regarding this publication or health personnel data should be directed to:

Consultant, Health Human Resources
Canadian Institute for Health Information
377 Dalhousie Street, Suite 200
Ottawa, ON
K1N 9N8

Phone: (613) 241-7860 Fax: (613) 241-8120 e-mail: hpdb@cihi.ca http://www.cihi.ca

The primary purpose of Health Personnel in Canada is to provide a baseline indication of changes in the number of health professionals (selected occupations) over a ten year period. This publication contains information on 20 health occupations in Canada. Figure 1 identifies the 20 groups included in this publication, noted with a check mark  $(\checkmark)$ ; two additions, for which data have not been collected previously, are noted with an asterisk (\*).

Audiologists/Speech Pathologists		Opticians	
Biomedical Engineers		Optometrists	√
Chiropractors	√	Orderlies	
Dental Assistants		Osteopaths	
Dental Hygienists	√	Pharmacists	√
Dental Therapists		Physicians	√
Dentists	√	Physicists in Medicine	
Dietitians	√	Physiotherapists	√
Electroneurophysiology Technologists		Podiatrists	
Health Record Professionals	√	Psychologists	√
Health Service Executives	$\checkmark$	Public Health Inspectors	
Licensed Practical Nurses	$\checkmark$	Registered Nurses	√
Medical Laboratory Scientists		Registered Psychiatric Nurses	√ *
Medical Laboratory Technologists	√	Respiratory Therapists	√
Medical Radiation Technologists	1	Social Workers	√
Midwives	√ *	Veterinarians	
Occupational Therapists	√		

Figure 1. Health Occupations Included in *Health Personnel in Canada, 1991 to 2000* 

# Methodology

#### **Data Collection Process**

In 2000, CIHI began preparations for developing an updated version of the *Health Personnel in Canada* publication.

Health professional data for 1991 to 1997 were carried forward from the last edition of the *Health Personnel in Canada* publication. Data was requested from national and provincial/territorial professional organizations, governments, and educational institutions for:

- each of the professions for the years 1998 to 2000;
- professions where data was missing in the years 1991 to 2000; and
- data requiring verification and correction.

To begin the data collection process, CIHI acquired the names and addresses of potential data providers through a variety of sources. A primary list of national health organizations was located, which served as the starting point for most of the subsequent provincial contacts. Data collection was organized so that data were requested from national and provincial organizations first. Subsequent to this step, information requests were sent to universities and colleges providing professional health programs.

Information was requested from the various organizations and schools for the years 1998 to 2000 (in some cases earlier data dating back to 1991 was requested), as of December 31<sup>st</sup> of each year. Follow-up contact was made where possible. In some cases, no response was received from the organization or school; in other cases, the information was not available.

#### **Data Provided**

Due to a lack of data, not all of the occupational groups included in the 1992 publication are part of this edition. Not all professional organizations keep historical records, thus some organizations were only able to provide current year information. For others, there is no central regulatory body that collects yearly membership data. Where feasible, estimates have been obtained from individual organizations. As a result of missing data, 13 of the 31 health professions included in the 1992 edition have been removed from this publication. However, two groups for which data was previously unavailable have been included - data on midwives and registered psychiatric nurses. CIHI will be working with national and provincial organizations and educational institutions to ensure that information is captured and stored annually, with the intent of improving the comprehensiveness and accuracy of data in future editions. In addition, as legislation governing the licensing of health professional groups in Canada expands, it is anticipated that new health professional occupations will be included in the publication. Despite efforts to ensure the accuracy of data at time of publication, in some cases more appropriate data sources are discovered or updates issued by data providers. Consequently some data may be revised from previous publications. Data in the current iteration should be considered more accurate.

#### **Nunavut Data**

On April 1, 1999, the central and eastern portions of the Northwest Territories became the new territory of Nunavut. As of December 2000, licensing of health professionals seeking employment in the Nunavut Territories was conducted through Department of Health and Social Services in the Northwest Territories. As such, Northwest Territory data include individuals providing services in the Nunavut Territory. For some professions (physicians and registered nurses for example) Nunavut specific data does exist, however, for the purposes of this publication Nunavut and Northwest Territory data has been combined.

#### **Data Limitations**

Given the variety of data sources and the differences in the level of detail available from these sources, and the fact that much of this information was collected initially for specific administrative rather than statistical purposes, caution must be used in applying the data to particular analyses. For example, in an analysis of employment levels, use of data based on registration levels may overstate current active employment numbers when membership with a regulatory body is required for employment. Those professionals temporarily out of the work force, or out of the province or country, may maintain their registration to maintain continuity. Some of the regulatory bodies collect 'active' employment information, but not all do.

Similarly, when membership in a professional organization is voluntary, the number of health professionals may be underrepresented. If there is no obligation for a member of the health profession to register with the professional organization, a certain percentage will not join. As a result, the memberships vary between years, between groups, and between jurisdictions. The use of voluntary membership data as a proxy for the population of various professional groups is still necessary in some instances because an accurate source of the required information does not exist or was not available at time of printing.

In general, regulated health professional bodies are able to provide more complete and accurate data. In addition, health professional groups that have been regulated for a longer period of time tend to have more established data collection processes than groups that have become regulated recently. For these reasons, the groups included in this publication reflect the larger and more established occupations.

The number of graduates from various health-training programs may also be underestimated in the tables. For some professions, not all post-secondary institutions provided information regarding programs and graduates. These instances are clearly identified in the footnotes of the corresponding tables. In addition, the reference periods of the available data are not always uniform. In some cases, only estimates were available when this edition was prepared and these may be subject to future revisions.

The scope and complexity of the health professional regulatory environment across jurisdictions limit the ability to draw conclusions or provide value-added analysis. The most appropriate source of administrative data is derived from a situation where registration with a regulatory authority is a requirement for employment as a health professional.

Unfortunately this situation does not exist uniformly within professions or across jurisdictions. Of particular concern with time series comparisons is that numbers may be influenced when a health provider group evolves from an unregulated to a regulated profession. For example, if legislation in a province is passed requiring that midwives be registered with an association in a particular province, the numbers of midwives now counted by the association may rise dramatically as midwives in the province, formerly not required to join the association as a condition of employment, register to meet the requirements of the new legislation. Where issues have been identified with a particular data source, either through information provided by the data provider or through independent investigation, footnotes are provided. In the future, CIHI will endeavor to define and present the regulatory history for each profession in each jurisdiction in a more systematic manor. Until such time, however, inter-temporal inferences drawn from the descriptive analysis, figures and tables must be made with caution.

For planning purposes at the provincial, regional and health district level, more sensitive and appropriate data sources may be available. The Cooperative Health Human Resources Database (CHHRD), developed and maintained by the Health Human Resources Unit (HHRU) at the University of British Columbia is one such example. The CHHRD offers a well documented, historically based (data collected since 1973) source of health professional data (selected professions) in British Columbia, at a very discrete level of analysis (for more information please visit http://www.chspr.ubc.ca).

## **Data Sources and Collection**

## **Descriptions of Health Occupations**

Occupational descriptions have been provided for each type of health personnel. These descriptions have been adapted from Human Resources Development Canada's *National Occupational Classification* (see web site http://www.worklogic.com:81/noc/), with the permission of the Minister of Public Works and Government Services Canada, 2001. In some cases, descriptions have been further modified in consultation with specific health professional organizations. The descriptions are intended to provide general information regarding the health profession and may not include all specific activities undertaken by that profession. For some professions there may have been changes over time in the specific activities undertaken, scope and autonomy of practice. For example, Canadians no longer require physician referral in order to seek physiotherapy services. Over time, the physiotherapy profession in Canada has become autonomous as well as self-regulating. In addition, information regarding education requirements, licensure, and registration of health professionals is not provided.

Individuals interested in educational requirements should visit the Human Resources Development Canada *Canlearn* web site (http://canlearn.ca). This site provides a more complete picture of the universe of available Canadian educational programs and institutions for health professions.

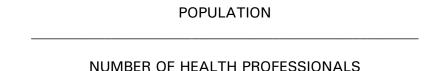
Those interested in licensure or registration information or a more complete understanding of a specific health profession should contact the relevant provincial or national organization.

#### **Population Data**

of service required.

Population per health professional data is based on population estimates from Statistics Canada. The population estimates reflect revisions based on the results of the 1996 Census, and as a result the population per health professional shown in the current publication differs from the figures provided in previous publications. Population figures for Canada and each province/territory are provided in Appendix A.

The computation for the population per health professional is calculated for each province/territory as follows:



The population per health professional data provides one means of measuring the relative growth of the health professional group. It does not provide an indication of whether or not there are sufficient or insufficient numbers of health professionals. Various factors influence whether the supply of health personnel is appropriate, such as: distribution and location of health personnel within a province/territory; type of personnel (e.g. specialists vs. family medicine physicians); access to hospitals, health care facilities, technology and other types of health personnel; needs of the population (e.g. demographic characteristics and health problems); level of service being provided by health personnel (e.g. full-time vs. part-time); age and gender of the health personnel; and societies perceptions on the levels

#### **Total Number of Health Personnel in Canada**

A comparative estimate of the total number of Health Personnel in Canada was derived from Statistics Canada's Labour Force Survey.

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada, which is representative of the Canadian non-institutional population 15 years of age and older. Survey coverage excludes residents of institutions (including long-term care health facilities), members of the Canadian armed forces, persons living on Indian Reserves and those in the Northwest Territories and the Yukon. The survey uses a reference week concept to measure labour market activity, and the reference week is typically the week containing the fifteenth day of the month. More information on the LFS can be found at http://www.statcan.ca/english/IPS/Data/71-543-GIE.htm.

The LFS data included in this publication is an annual average of 12 months of data.

#### **Estimation**

Where feasible, estimates were obtained from individual organizations. In circumstances where such estimates could not be obtained, and where appropriate, CIHI produced estimates. In all cases, CIHI estimates were prepared by applying the average Canadian growth-rate over the previous five years. In the tables, CIHI estimates are *italicized* and footnoted.

### **General Notes**

## **Data Definitions and Comparability**

Before making comparisons between health occupations, it is important to review the title of the table or chart, and to carefully read the footnotes. These provide information regarding the group or sub-group of health personnel that is captured in the table. For instance, a table including data for all members of a health personnel group (e.g. active, inactive, retired and honorary) will not be directly comparable to a table that includes only data on active members. CIHI has endeavored to indicate, where information was available, when registration with a health professional group became mandatory in order to practice. However, regulatory information is incomplete and caution must be exercised when comparing inter-temporal change at both the provincial/territorial and national level.

## **Data Suppression**

Protective privacy and confidentiality guidelines at CIHI prohibit the release of person or institute identifiable data; as a result, table cells with a population of less than five have been suppressed in this publication. In addition, where a value has been suppressed in a column of a table, a second value is suppressed in the same column to prevent the reader from determining the suppressed value by subtracting from the Canadian total. While this often results in a cell greater than five being suppressed, it ensures both individual anonymity and an accurate Canadian total. Consequently, the column sum will often not equal the Canadian total presented. In all cases, the Canadian total is accurate.

For more information regarding CIHI's privacy and confidentiality guidelines, please visit the CIHI web site at http://www.cihi.ca/weare/pcsmain.shtml.

# **Footnotes and Symbols**

Standard symbols and numerical presentations are used whenever possible in this report. The symbols include:

- .. Information not available
- \* Amount suppressed to protect confidentiality.
- Nil or zero
   Blank cells indicate that information does not exist for that particular cell.
   In Table 18.1, for example, data for the Yukon and the Northwest Territories are combined from 1991 through 1992.

The footnotes were added chronologically and therefore follow the sequence of the years, from left to right. Where the footnote is beside the province or institutional name, the information applies to all years in that row.

# **Health Personnel in Canada**

# Legislative/Regulatory Changes in the Health System

Table 1 illustrates those health occupations regulated by provincial legislation in Canada.

Table 1. Inter-Provincial Survey of Health Occupations with Provincial/Territorial Legislation

Health Profession	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.	Total
Dental Hygienists	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Dentists	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Licensed Practical	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Nurses/Registered Practical Nurses														
Optometrists	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Pharmacists	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Physicians <sup>1</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Registered Nurses	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Denturists	*		*	*	*	*	*	*	*	*	*	*	*	12
Psychologists	*	*	*	*	*	*	*	*	*	*		*	*	12
Chiropractors	*	*	*	*	*	*	*	*	*	*	*			11
Dietitians and Nutritionists	*	*	*	*	*	*	*	*	*	*				10
Occupational Therapists	*	*	*	*	*	*	*	*	*	*				10
Ophthalmic Dispensers/Opticians	*	*	*	*	*	*	*	*	*	*				10
Physical Therapists/	*	*	*	*	*	*	*	*	*	*	2			10
Physiotherapists														
Social Workers	*	*	*	*	*	*	*	*	*	*				10
Certified Dental Assistants	*	*	*	*			*	*	*	*				8
Dental Technicians/Technologists	*		*	*	*	*		*	*	*				8
Chiropodists/Podiatrists				*	*	*	*	*	*	*				7
Emergency Medical		*				*	*	*	*	*				6
Technicians/Health Emergency														
Assistants/Paramedics														
Hearing Aid	*		*		*		*	2	*	*				6
Practitioners/Acousticians														
Medical Radiation Technologists			*	*	*	*		*	*					6
Medical Laboratory Technologists			2	*	*	*		*	*					5
Midwives	2				*	*	*	2	*	*				5
Speech Language Pathologists and				*	*	*	*	*	2	2				5
Audiologists														
Dental Therapists	*							*			*	*		4
Naturopathic Physicians						*	*	*	2	*				4
Osteopathic Physicians						*	*		*	*				4
Psychiatric Nurses							*	*	*	*				4
Respiratory Therapists					*	*	*		*					4
Acupuncturists					*				*	*				3
Massage Therapists						*				*				2
Certified Combined Laboratory									*					1
Technologists														
TOTAL	19	16	19	21	24	26	25	25	28	26	10	10	9	

#### Notes

- 1. Includes both Family Physicians and Specialist Physicians
- 2. Legislation forthcoming

#### Source

Health Canada, Health Policy and Communications Branch September 2001

For health professional groups across Canada, many legislative and regulatory changes occurred, or began to occur, during this ten-year period. Prior to 1993, for instance, the Association of Medical Laboratory Technologists of Ontario maintained a register of medical laboratory technologists in Ontario; however, there was no requirement for medical laboratory technologists to be registered. In December 1993, the *Medical Laboratory Technology Act* (amended by O. Reg 542/95) was established with the requirement that all medical laboratory technologists practicing in Ontario be registered with the College of Medical Laboratory Technologists of Ontario.

Some of the legislative changes have resulted in part due to the restructuring of the health system. To some degree restructuring has meant changes in the scope of practice of many health professions. Another major influence on the legislation relating to health professionals has been the 1994 Agreement on Internal Trade (AIT). Many health professional groups are moving towards greater consistency in education, registration and other professional requirements in order to facilitate inter-provincial movement and to provide them with a stronger presence at the national table and in international activities. The following health occupations are subject to the AIT:

- Acupuncturists
- Audiologists/Speech Language Pathologists
- Chiropractors
- Dental Assistants
- Dental Hygienists
- Dental Specialties
- Dental Technicians/Technologists
- Dentists
- Denturists
- Dietitians/Nutritionists
- Hearing Aid Practitioners
- Licensed Practical Nurses
- Massage Therapists
- Medical Laboratory Technologists
- Medical Radiation Technologists

- Midwives
- Naturopathic Physicians
- Occupational Therapists
- Opticians
- Optometrists
- Paramedics
- Pharmacists
- Physicians
- Physiotherapists
- Podiatrists/Chiropodists
- Psychologists
- Registered Nurses
- Registered Psychiatric Nurses
- Respiratory Therapists
- Social Workers

For more information on the AIT, please visit the Internal Trade Secretariat website at www.intrasec.mb.ca.

#### **Total Number of Personnel**

The total number of health personnel in Canada is a difficult number to determine precisely. The 20 health occupations included in *Health Personnel in Canada, 1991 to 2000* represent some, but by no means all, of the health professions regulated to practice in Canada. In addition, estimating the number of health personnel in Canada based on only regulated health professions excludes unregulated health professions, and informal caregivers.

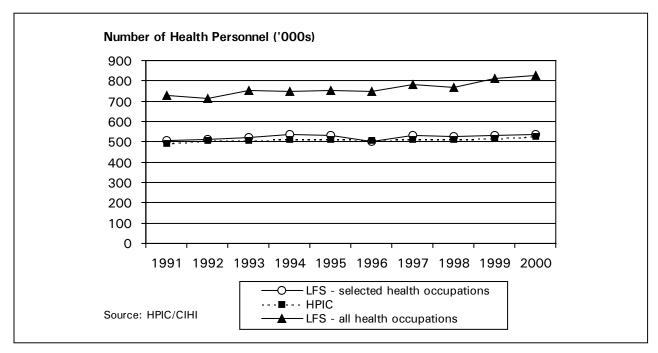


Figure 2. Total Number of Health Personnel in Canada, Labour Force Survey and Health Personnel in Canada data, 1991–2000

Figure 2 illustrates estimates of the total number of health personnel in Canada from two data sources: Health Personnel in Canada (HPIC) and the Labour Force Survey (LFS). In Figure 2, 'LFS—selected health occupations' represents Labour Force Survey estimates of health personnel employed in the 20 occupational groups included in this publication. 'LFS—all health occupations' represents Labour Force Survey estimates of health personnel employed in all health and health-related occupations. Appendix B lists the 1991 Standard Occupational Classification (SOC) codes included in the LFS data presented in Figure 2; Appendix C provides a detailed breakdown of all occupations included under 'Health Occupations' in the 1991 SOC Codes. A complete listing and description of SOC codes can be found on the Statistics Canada web site at http://www.statcan.ca/english/Subjects/Standard/soc/soc.htm.

The difference between 'LFS—selected health occupations' and 'LFS—all health occupations' represents those health professionals for whom information is not collected for the *Health Personnel in Canada* publication. As presented in Appendix C, this group includes occupations from all health categories; professional occupations such as veterinarians and audiologists, technical occupations such as cardiology technologists,

denturists, and assisting health occupations such as dental assistants and orderlies are not included in this publication. In addition, this publication does not include data on unregulated professions such as health care aides or kinesiologists.

HPIC counts of health personnel in Canada (HPIC in Figure 2) are very similar to the LFS estimates for the same time period (LFS—selected health occupations in Figure 2). For the HPIC data, the total number of health personnel in Canada has increased 6.7% over this ten-year period, from 494,184 in 1991 to 527,509 in 2000. For the same 20 groups, the Labour Force Survey data presents an increase of 5.6%, from 508,600 in 1991 to 536,900 in 2000.

The second set of Labour Force data (LFS—all health occupations in Figure 2), represents estimates of those employed in an expanded range of health occupations. From these data, the number of persons employed in health occupations increased 13.7% over this ten-year period, from 728,200 in 1991 to 827,700 in 2000.

# **Health Occupations**

## Chiropractors

#### Description

Chiropractors diagnose health disorders involving the body's structure, particularly the spine, and the functioning of the muscle and nervous systems. General duties of a chiropractor include: taking a patient's case history; conducting a physical examination; observing the patient; taking or ordering x-rays and other tests to diagnose the patient's condition; diagnosing disorders of the spine and other body joints; treating patients whose symptoms result from abnormal musculoskeletal conditions or joint mechanics through the corrective manipulation of the spinal column or other joints and through additional treatments such as heat, light and massage; and advising patients on corrective exercises, lifestyle and nutrition. Most chiropractors work in private practice.

#### **Analysis**

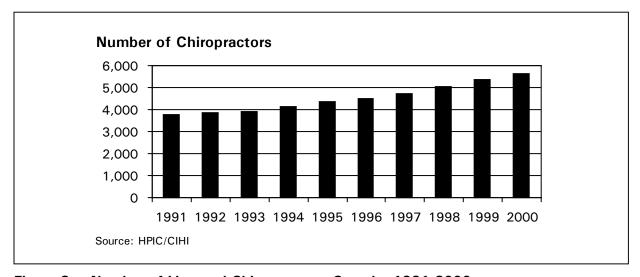


Figure 3. Number of Licensed Chiropractors, Canada, 1991-2000

As shown in Figure 3, the number of licensed chiropractors increased steadily from 1991 to 2000. There was a 48.7% increase in the number of licensed chiropractors in Canada over this ten-year period.

Table 2.1 shows the distribution of licensed chiropractors by province from 1991 to 2000. The distribution of chiropractors varies significantly across provinces, although this distribution has remained fairly constant within each province since 1991. In 2000, 48.6% of licensed chiropractors practiced in Ontario, a province with 38% of the Canadian population. Comparatively, only 2.8% of chiropractors practiced in Atlantic Canada, comprising 7.7% of the Canadian population.

The population per licensed chiropractor is shown in Figure 4 and Table 2.2. The increase in the number of licensed chiropractors across Canada has been greater than the population growth, as the population per licensed chiropractor has continued to decrease each year.

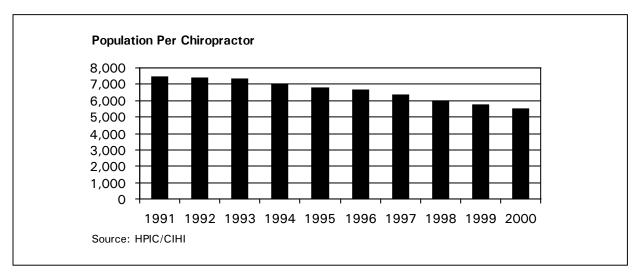


Figure 4. Population Per Licensed Chiropractor, Canada, 1991–2000

The number of graduates from the Canadian Memorial Chiropractic College in Ontario is shown in Table 2.3. From 1991 to 2000, there has been an increase of 18.5% in the number of graduates from this school. The second Canadian chiropractic school was established at the Université du Québec à Trois Rivières, with its first graduates completing in 1998. From 1998 to 2000, there has been an increase of 175% in the number of graduates from this school.

Table 2.1 Number of Licensed Chiropractors by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.1	11	12	17	20	20	20	22	26	33	39
P.E.I.	* 2	* 2	*	*	*	*	*	6	7	7
N.S.	22 2	23 2	23 2	33 <sup>2</sup>	29 <sup>2</sup>	30 <sup>2</sup>	35 <sup>2</sup>	44	50	62
N.B.	32 2	31 2	32	34	34	36	40	43	46	48
Que.	775	790	810	827	845	872	870	918	956	979
Ont <sup>-</sup>	1,822	1,830	1,846	1,999	2,117	2,171	2,293	2,424	2,550	2,708
Man.	138	147	152	159	170	173	184	176	192	202
Sask.	124 <sup>2</sup>	122 <sup>2</sup>	123	124	131	129	137	145	155	162
Alta.	375 <sup>2</sup>	400 <sup>2</sup>	400 <sup>2</sup>	436 <sup>2</sup>	447 <sup>2</sup>	472 <sup>2</sup>	499 <sup>2</sup>	573	620	683
B.C. <sup>3</sup>	485 <sup>2</sup>	510 <sup>2</sup>	510 <sup>2</sup>	519	551	576	647	685	721	734
Y.T.	* 2	* 2	* 2	* 2	* 2	* 2	* 2	9	11	9
N.W.T.										
Canada	3,788	3,869	3,917	4,155	4,350	4,485	4,737	5,049	5,341	5,633
			•	,			, ,			ource: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- 1. Until July 1, 1992 chiropractors in Newfoundland were not licensed. The figures from 1991-1992 are the number of practicing chiropractors.
- 2. Data is provided by the Canadian Chiropractic Association (CCA). The figure may be under represented, as membership with the CCA is voluntary.
- 3. The count includes regular members, new grads, senior members, and special members.

Table 2.2 Population Per Licensed Chiropractor by Province/Territory and Year, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	52,674	48,414	33,965	28,551	28,215	27,872	25,006	20,889	16,397	13,790
P.E.I.	*	*	*	*	*	*	*	22,883	19,775	19,868
N.S.	41,697	40,088	40,240	28,093	32,057	31,111	26,736	21,301	18,820	15,199
N.B.	23,337	24,144	23,446	22,107	22,127	20,931	18,857	17,525	16,428	15,776
Que.	9,140	9,043	8,877	8,736	8,591	8,360	8,406	7,992	7,700	7,542
Ont.	5,755	5,809	5,824	5,447	5,210	5,142	4,933	4,717	4,540	4,336
Man.	8,045	7,584	7,369	7,081	6,652	6,562	6,175	6,473	5,962	5,689
Sask.	8,074	8,226	8,193	8,161	7,758	7,912	7,470	7,078	6,612	6,300
Alta.	6,968	6,635	6,719	6,241	6,173	5,944	5,745	5,119	4,796	4,426
B.C.	7,060	6,913	7,115	7,201	6,959	6,812	6,160	5,856	5,615	5,555
Y.T.	*	*	*	*	*	*	*	3,455	2,795	3,355
N.W.T.										
Canada	7,424	7,362	7,353	7,010	6,768	6,633	6,343	5,998	5,717	5,468
									Sour	ce: HPIC/CIHI

#### Notes

- .. Information not available
- Amount suppressed to protect confidentiality
- Nil or zero

Table 2.3 Number of Graduates of Chiropractic Schools, by Year and School of Graduation, Canada, 1991–2000

School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
CMCC <sup>1</sup> , Toronto UQTR <sup>2</sup> , Trois-Rivieres	146	138	136	140	146	151	151	159 24	233 55	173 66
Canada	146	138	136	140	146	151	151	183	<b>288</b>	239

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Canadian Memorial Chiropractic College
- 2. Université du Québec à Trois Rivières; first graduating class occurred in 1998.

#### **Sources**

- Figure 3 Calculated from Table 2.1.
- Figure 4 Calculated from Table 2.2.
- Table 2.1

  1991–1997: Canadian Chiropractic Association, Prince Edward Island
  Chiropractic Association, New Brunswick Chiropractors' Association, Ordre
  des Chiropracticiens du Québec, College of Chiropractors of Ontario,
  Manitoba Chiropractors/Association, The Chiropractors' Association of
  Saskatchewan, British Columbia College of Chiropractors.

1998–2000: Newfoundland and Labrador Chiropractor Board, Prince Edward Island Chiropractic Association, Board of the Nova Scotia College of Chiropractors, New Brunswick Chiropractors' Association, Ordre des Chiropracticiens du Québec, College of Chiropractors of Ontario, Manitoba Chiropractors/Association, The Chiropractors' Association of Saskatchewan, College of Chiropractors of Alberta, British Columbia College of Chiropractors, Yukon Department of Justice.

- Table 2.2 Data calculated based on Table 2.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 2.3 Canadian Chiropractic Association

## **Dental Hygienists**

#### **Description**

Dental hygienists provide preventive dental services and instruct patients on how to care for their teeth and mouth. Dental hygienists work under the direction of a dentist to clean teeth, polish fillings, take x-rays and do other restorative and orthodontic procedures. General duties of a dental hygienist include: conducting an initial dental assessment and consulting with dentists on patient care; providing dental hygiene treatment and information related to the prevention of diseases and disorders of the teeth and mouth; taking dental impressions and x-rays; and removing stains and deposits from teeth to prevent tooth and root decay. Within their five primary areas of responsibility (clinical therapy, health promotion, education, administration and research) dental hygienists are employed in dentists' offices, hospitals and community health settings, clinics, educational institutions, government agencies and private industry.

#### **Analysis**

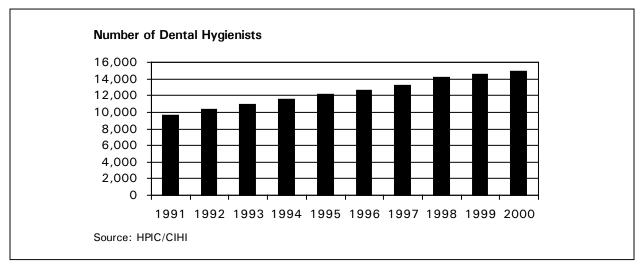


Figure 5. Number of Licensed Dental Hygienists, Canada, 1991–2000

As shown in Figure 5, the number of licensed dental hygienists has increased steadily from 1991 to 2000. This represents a 55.3% increase in the number of licensed dental hygienists over this ten-year period. Table 3.1 shows the distribution of licensed dental hygienists by province from 1991 to 2000. Provincially, the largest percentage increases over this ten-year period have occurred in Prince Edward Island (79.2%), Newfoundland (78.9%) and British Columbia (70.6%).

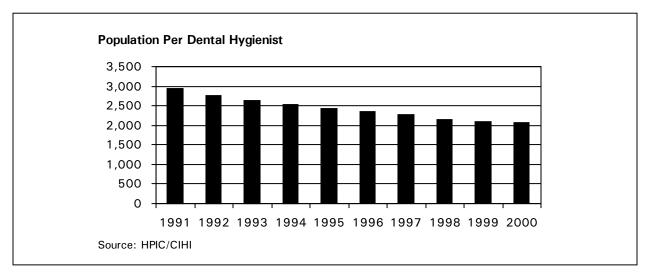


Figure 6. Population Per Licensed Dental Hygienist, Canada, 1991–2000

The population per licensed dental hygienist is shown in Figure 6 and in table 3.2. As a result of significant increases in the number of licensed dental hygienists, all provinces indicate a steady decrease in the population per dental hygienist rate.

The number of graduates of schools of dental hygiene has increased 60.0%, rising from 400 in 1991 to 640 in 2000. Caution must be exercised when interpreting this increase because not all schools of dental hygiene reported data. Additionally, in more recent years some schools have increased the length of the education/training program.

Table 3.1 Number of Licensed Dental Hygienists by Province/Territory of Licensure, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	38 1	44	47 <sup>2</sup>	51 <sup>2</sup>	54 <sup>2</sup>	56 <sup>2</sup>	58 <sup>2</sup>	69	69	68
P.E.I.	24 1	30	28	28	30	30	28	33	38	43
N.S.	329	355	318	334	374	396	404	407	420	412
N.B.	146	159	172 <sup>2</sup>	183 <sup>2</sup>	194 <sup>2</sup>	202 <sup>2</sup>	210 <sup>2</sup>	223	240	247
Que.	2,283	2,439	2,595	2,736	2,951	3,105	3,292	3,458	3,565	3,620
Ont.	4,186	4,506	4,890	5,069	5,170	5,392	5,637	6,227	6,322	6,540
Man.	428	455	458	469	498	513	517	534	550	562
Sask.	168	190	205 <sup>2</sup>	219 <sup>2</sup>	232 2	242 <sup>2</sup>	259 <sup>2</sup>	282	267	273
Alta.	930	1,000 1	903 <sup>3</sup>	974 <sup>3</sup>	1,046 <sup>3</sup>	1,101 <sup>3</sup>	1,168 <sup>3</sup>	1,213	1,251	1,305
B.C.	1,048	1,196	1,363	1,479	1,562	1,593	1,683	1,740	1,777	1,788
Y.T. & N.W.T.	9	11	14	15	22	25	27	27	26	36
Canada	9,589	10,385	10,993	11,557	12,133	12,655	13,284	14,213	14,525	14,894
									Sc	ource: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Estimate.
- 2. CIHI estimate.
- 3. The figure includes only those members who were actively practicing dental hygiene; it does not include registrants who were out of practice due to maternity or disability leaves during the year.

Table 3.2 Population Per Licensed Dental Hygienist by Province/Territory of Licensure, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	15,248	13,204	12,161	11,252	10,511	9,956	9,452	7,871	7,842	7,909
P.E.I.	5,442	4,389	4,749	4,800	4,518	4,551	4,888	4,161	3,643	3,234
N.S.	2,788	2,597	2,910	2,776	2,486	2,357	2,316	2,303	2,241	2,287
N.B.	5,115	4,707	4,373	4,099	3,878	3,724	3,586	3,379	3,149	3,066
Que.	3,103	2,929	2,771	2,641	2,460	2,348	2,221	2,122	2,065	2,040
Ont.	2,505	2,359	2,199	2,148	2,133	2,070	2,007	1,836	1,831	1,795
Man.	2,594	2,450	2,446	2,400	2,271	2,213	2,198	2,133	2,081	2,045
Sask.	5,959	5,282	4,915	4,618	4,384	4,221	3,951	3,639	3,838	3,739
Alta.	2,810	2,654	2,976	2,794	2,638	2,548	2,454	2,418	2,377	2,316
B.C.	3,267	2,948	2,662	2,527	2,455	2,463	2,368	2,305	2,278	2,280
Y.T. & N.W.T.	10,109	8,458	6,745	6,419	4,475	3,983	3,685	3,660	3,833	2,786
Canada	2,939	2,749	2,626	2,526	2,432	2,356	2,267	2,135	2,107	2,073
									Sou	rce: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 3.3 Number of Graduates of Dental Hygiene Schools, by Year and School of Graduation, Canada, 1991–2000<sup>1</sup>

	School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
N.S.											
	Dalhousie University	40	41	42	39	39	39	40	40	36	38
Que.											
	Collège Édouard-Monpetit	26	28	23	27	30	25	47	48	42	38
	John Abbott College	24	26	24	28	28	36	26	30	27	34
	Collège de l'Outaouais	19	20 <sup>2</sup>	22	21	17	14	20	20	22	19
	Cégep de Chicoutimi			19	26	30	27	29	31	32	30
	Cégep de Trois-Rivières	29	31	34	33	25	25	26	31	35	29
Ont.	· .										
· · · · ·	Cambrian - Sudbury	16 <sup>2</sup>	23	20	20	24 <sup>3</sup>	24	23	24	_ 9	29
	Canadore - North Bay	17	16	15	22	16	15	15	13	14	14
	Confederation - Thunder Bay	15 <sup>2</sup>	14	16	16	16	19	16	18	15	16
	Durham - Oshawa	23 2	24	23	21	23	24	22	17	23	23
	Algonquin CAAT - Ottawa	38	38	46	46	48	47	43	_ 6	37	49
	Cité collégiale - Ottawa			11	16	13	18	*	17	_ 5	14
	Fanshawe - London	16	16	18	18	17	18	25	22	31	22
	Georgian - Barrie	11	11	10	*	*	*	17	13	*	14
	Collège Boréal <sup>4</sup>	-	-	-	-	-	22	21	11	*	15
	Niagara College	-	42	20	31	33	32	_ 5	76 <sup>7</sup>	*	36
	George Brown College								67	65	65
	St. Clair College								32	30	26
Man.											
	University of Manitoba	26	23	22	23	28	25	26	24	25	26
Alta.											
	University of Alberta	42	39	47	63	62	60	48	39	38	40
B.C.				•							
2.0.	Camosun College	20 <sup>2</sup>	22 2		23	21	24	24	23	21	22
	Vancouver Community College	20	18	 21	18	19	19	19	16	19	21
	College of New Caledonia	18 <sup>2</sup>	20	20	20	18	14	23	19	20	20
	University of British Columbia	-	-		*	*	*	*	_ 8	-	-
	Canada	400	452	453	526	523	540	523	631	547	640 urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Not all schools in Canada are represented.
- 2. Estimate.
- 3. Figures up to 1995 include students registered in a bilingual program. 1995 was the last year for this program.
- 4. The program for Dental Hygienists began in September 1995, with the first graduates in 1996.
- 5. No graduating class due to a change from one-year to two-year program length.
- 6. Program entry requirements changed, requiring completion of Dental Assistant program and 1 year of work experience before entering Dental Hygiene program.
- 7. Represents double student intake in previous year.
- 8. Dental Hygiene program discontinued.
- 9. Program requirement changed to 2 year direct entry program after completion of Dental Assistant program.

#### Sources

- Figure 5 Calculated from data in Table 3.1.
- Figure 6 Calculated from data in Table 3.2.
- Table 3.1

  1991–2000: Dental Council of PEI, Provincial Dental Board of Nova Scotia,
  New Brunswick Dental Society, Ordre des Hygiénistes Dentaires du Québec,
  College of Dental Hygienists of Ontario, Manitoba Dental Association,
  Saskatchewan Dental Hygienists' Association, Alberta Dental Hygienists'
  Association, The College of Dental Hygienists of British Columbia, and the
  Governments of the Yukon and Northwest Territories.
  - 1991–1997: Newfoundland Dental Hygienists.
  - 1998-2000: Newfoundland Dental Board.
- Table 3.2 Data calculated based on Table 3.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 3.3 Individual schools, colleges and universities.

# **Dentists**

# **Description**

Dentists diagnose and treat disorders of the teeth and mouth. The main duties of dentists include: examining patients' teeth, gums, and surrounding tissue to diagnose disease and injury, and plan appropriate treatment; restoring and extracting diseased teeth; performing oral surgery, periodontal surgery and other treatments; cleaning teeth and instructing patients on oral hygiene; designing bridgework, fitting dentures and providing appliances to correct abnormal positioning of the teeth and jaws, or writing fabrication instructions or prescriptions for use by denturists and dental technicians; and supervising dental hygienists, dental assistants and other staff. Most dentists work in private practice clinics, hospitals, universities or public health facilities. Some dentists specialize in areas such as oral and maxillofacial surgery, orthodontics, paediatric dentistry, periodontics, endodontics, prosthodontics, oral pathology, oral radiology or public health dentistry.

### **Analysis**

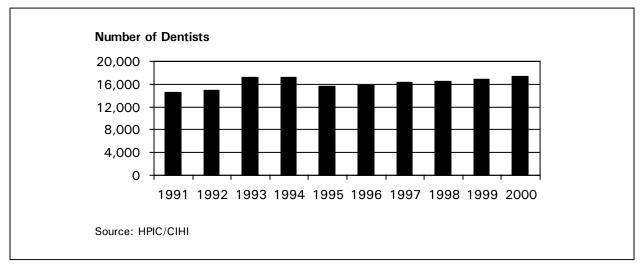


Figure 7. Number of Licensed Dentists, Canada, 1991–2000

Figure 7 shows the number of licensed dentists in Canada from 1991 to 2000. The number of licensed dentists in Canada has increased 19.1% in this ten-year period.

The provincial/territorial distribution of licensed dentists is shown in Table 4.1. The majority of provinces and territories experienced growth. Prince Edward Island (30.4%) and the Northwest Territories experienced a significant increase between 1991 and 2000 data, however, the number of licensed dentists in each jurisdiction is relatively small. Saskatchewan experienced a 4.7% decrease, while the number of licensed dentists practicing in the Yukon experienced no change. Significant growth in Québec (24.9%), Ontario (18.5%), Alberta (18.1%), and British Columbia (24.4%) contributed to the overall increase in the number of licensed dentists in Canada.

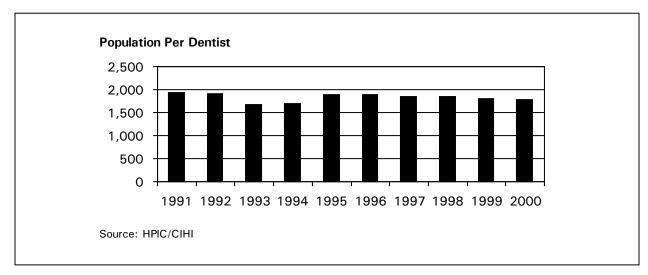


Figure 8. Population Per Licensed Dentist, Canada, 1991–2000

Figure 8 and Table 4.2 illustrate the population per licensed dentist in Canada. The 19.1% growth rate of licensed dentists experienced nationally in this reporting period exceeds the growth rate of the general population; as a result, the population per licensed dentist has decreased for Canada. At the provincial/territorial level, the population per licensed dentist has increased where the number of licensed dentists has decreased.

The total number of certified dentist specialists is shown in Table 4.3, with individual specialties highlighted in Tables 4.4 through 4.10. Overall, there has been a 12.3% increase in the number of dental specialists in Canada since 1991. Ontario and Québec (representing 62.0% of the Canadian population), have 66.7% of the dental specialists, while Alberta and British Columbia (representing 23.0% of the population) have 21.5% of the dental specialists.

The number of dental graduates, by year and by province, is shown in Table 4.11. There has been an overall decrease of 7.1% in the number of dental graduates. The number of graduates peaked in 1995 (554), and decreased to 459 by 2000.

Table 4.1 Number of Licensed Dentists by Province/Territory, Canada, 1991-2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	135	144	189	187	144	143	150	147	158	164
P.E.I.	46	49	59	59	48	48	51	53	57	60
N.S.	428	438	539	540	431	428	430	438	441	449
N.B.	240	237	284	280	247	257	252	256	260	264
Que.	3,187	3,294	3,966	3,973	3,707	3,779	3,816	3,886	3,922	3,981
Ont.	5,988	6,149	6,911	6,957	6,323	6,361	6,552	6,662	6,911	7,095
Man.	541	548	616	613	543	526	544	538	553	559
Sask.	365	355	411	412	343	351	345	351	349	348
Alta.	1,389	1,423	1,612	1,611	1,476	1,506	1,549	1,560	1,588	1,640
B.C.	2,138	2,187	2,519	2,539	2,276	2,354	2,479	2,524	2,586	2,659
Y.T.	18	17	17	15	9	8	13	15	16	18
N.W.T.	39	56	46	52	51	58	59	56	58	50
Canada	14,514	14,897	17,169	17,238	15,598	15,819	16,240	16,486	16,899	17,287
									Sou	rce: HPIC/CIHI

Data reflect total active licensed general practice and certified specialists. 1993 and 1994 data may contain inactive general practice dentists; the data are not comparable to the remainder of the time series and are subject to future revision (revised data was not available at the time of publication).

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.2 Population Per Licensed Dentist by Province/Territory, Canada, 1991–2000

<b>Provinces</b>	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	4,292	4,035	3,055	3,054	3,919	3,898	3,667	3,695	3,425	3,279
P.E.I.	2,839	2,687	2,254	2,278	2,824	2,844	2,684	2,591	2,429	2,318
N.S.	2,143	2,105	1,717	1,717	2,157	2,181	2,176	2,140	2,134	2,099
N.B.	3,112	3,158	2,642	2,684	3,046	2,932	2,993	2,944	2,907	2,868
Que.	2,223	2,169	1,813	1,819	1,958	1,929	1,916	1,888	1,877	1,855
Ont.	1,751	1,729	1,556	1,565	1,744	1,755	1,726	1,716	1,675	1,655
Man.	2,052	2,034	1,818	1,837	2,082	2,158	2,088	2,118	2,070	2,056
Sask.	2,743	2,827	2,452	2,456	2,963	2,908	2,966	2,924	2,937	2,933
Alta.	1,881	1,865	1,667	1,689	1,870	1,863	1,851	1,880	1,873	1,843
B.C.	1,602	1,612	1,441	1,472	1,685	1,667	1,608	1,589	1,566	1,533
Y.T.	1,630	1,776	1,764	2,020	3,499	4,016	2,456	2,073	1,922	1,677
N.W.T.	1,580	1,122	1,401	1,269	1,313	1,163	1,145	1,209	1,188	1,402
Canada	1,942	1,916	1,681	1,693	1,892	1,885	1,854	1,841	1,811	1,786
									Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.3 Total Number of Certified Dental Specialists by Province/Territory, Canada, 1991–2000<sup>1</sup>

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2,000
Nfld.	11	11	10	10	13	12	11	11	12	13
P.E.I.	6	6	5	5	5	5	*	*	*	*
N.S.	69	68	69	65	63	64	65	66	70	71
N.B.	18	20	23	22	23	23	24	28	28	24
Que.	339	339	359	355	364	379	377	377	379	372
Ont.	760	778	792	799	824	835	859	873	882	886
Man.	69	69	68	65	67	69	74	73	74	76
Sask.	41	43	39	36	33	41	41	43	36	34
Alta.	164	159	156	155	165	164	164	163	161	162
B.C.	203	201	204	203	218	233	263	247	240	243
Y.T. & N.W.T.	-	-	-	-	-	-	*	*	*	*
Canada	1,680	1,694	1,725	1,715	1,775	1,825	1,884	1,888	1,890	1,887
									Soi	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Table 4.3 represents summation of detailed dental specialties found in Tables 4.4 to 4.10.

Table 4.4 Number of Specialists Certified in Endontics by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	_	-	-	-	*	*	*	*	*	*
P.E.I.	-	-	-	-	-	-	-	-	-	-
N.S.	*	*	6	5	5	5	6	6	7	6
N.B.	-	-	*	*	*	*	*	*	*	*
Que.	26	25	21	21	22	23	19	19	20	20
Ont.	65	67	70	70	72	74	82	84	86	88
Man.	6	6	6	6	6	6	7	7	7	7
Sask.	*	*	*	*	*	*	*	*	*	*
Alta.	16	18	18	17	20	18	19	17	18	18
B.C.	19	18	19	19	20	23	29	28	27	27
Y.T. & N.W.T.	-	-	-	-	-	-	-	-	-	-
Canada	139	140	142	140	149	155	168	169	172	173
									Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.5 Number of Specialists Certified in Oral and Maxillofacial Surgery by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	*	*	*	*	*	*	*	*	*	*
P.E.I.	*	*	*	*	*	*	*	*	*	*
N.S.	13	12	12	13	12	12	14	12	15	16
N.B.	*	*	*	*	*	5	5	5	*	*
Que.	63	62	66	65	67	73	73	73	70	67
Ont.	145	148	146	147	151	152	156	156	157	160
Man.	12	11	12	10	11	11	15	13	11	10
Sask.	8	9	7	7	7	8	8	9	9	8
Alta.	20	21	21	21	21	22	21	22	20	21
B.C.	31	30	27	27	28	32	37	35	35	35
Y.T. & N.W.T.	-	-	-	-	-	-	-	-	-	-
Canada	298	299	297	296	303	319	332	329	326	324
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.6 Number of Specialists Certified in Orthodontics by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	*	*	*	*	*	*	*	*	*	*
P.E.I.	*	*	*	*	*	*	*	*	*	*
N.S.	19	18	18	18	15	16	15	15	16	16
N.B.	10	10	12	12	12	11	12	13	13	12
Que.	102	105	109	107	114	122	121	121	123	122
Ont.	238	243	240	241	245	251	272	283	283	282
Man.	22	25	21	20	20	20	20	22	22	22
Sask.	14	13	12	11	9	11	11	13	10	10
Alta.	51	53	51	51	58	58	56	53	55	57
B.C.	78	79	79	78	84	89	98	93	95	94
Y.T. & N.W.T.	-	-	-	-	-	-	-	-	-	*
Canada	543	555	548	544	563	584	611	619	623	622
									Sour	ce: HPIC/CIH

#### Notae

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.7 Number of Specialists Certified in Paediatric Dentistry by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	*	*	*	*	*	*	*	*	*	*
P.E.I.	*	*	*	*	*	*	*	*	*	*
N.S.	7	7	6	5	6	8	6	6	5	5
N.B.	*	*	*	*	*	*	*	*	*	*
Que.	43	41	43	44	43	43	45	44	44	41
Ont.	80	82	85	83	83	85	91	91	91	91
Man.	9	8	9	9	7	6	7	6	7	7
Sask.	*	*	*	*	*	*	*	*	*	*
Alta.	15	15	15	14	14	14	15	17	18	19
B.C.	18	19	18	18	19	19	20	19	18	19
Y.T. & N.W.T.	-	-	-	-	-	-	-	-	-	-
Canada	178	179	181	178	179	180	189	188	188	187
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.8 Number of Specialists Certified in Periodontics by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	*	*	*	*	*	*	*	*	*	*
P.E.I.	-	-	-	-	-	-	-	-	-	-
N.S.	13	15	15	13	13	10	12	12	10	11
N.B.	*	*	*	*	*	*	*	*	*	*
Que.	39	39	44	43	44	45	46	46	47	47
Ont.	128	132	126	128	140	144	143	145	148	148
Man.	11	11	8	8	9	12	12	11	13	12
Sask.	6	6	6	6	5	7	7	7	7	7
Alta.	22	22	21	22	23	23	26	27	27	24
B.C.	27	26	26	26	33	34	37	33	31	33
Y.T. & N.W.T.	-	-	-	-	-	-	-	-	-	-
Canada	250	258	251	251	273	280	288	287	289	286
									So	urce: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.9 Number of Specialists Certified in Prosthodontics by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.					-	-	_	-		_
P.E.I.	_	-	-	-	-	-	-	-	-	-
N.S.	9	10	10	9	10	11	11	13	15	15
N.B.	-	-	-	-	-	-	-	-	*	*
Que.	46	46	50	50	48	49	47	48	48	47
Ont.	51	53	55	58	58	55	56	56	58	57
Man.	*	6	6	*	*	*	6	6	6	7
Sask.	*	5	5	*	*	*	*	*	*	*
Alta.	22	22	21	20	20	20	19	19	17	17
B.C.	28	29	29	30	28	30	34	32	28	29
Y.T. & N.W.T. <sup>1</sup>	-	-	-	-	-	-	*	*	*	-
Canada	166	171	176	177	174	176	179	179	177	176
									Sou	rce: HPIC/CIH

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.10 Number of Certified Dental Specialists in Dental Public Health, Oral Pathology, and Oral Radiology, Canada, 1991–2000

Specialty	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Dental Public Health	53	53	64	66	69	68	66	66	64	66
Oral Pathology	31	31	44	42	44	41	33	35	36	37
Oral Radiology	13	13	22	21	21	22	17	16	15	16
Total	97	97	130	129	134	131	116	117	115	119
									Sou	rce: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 4.11 Total Number of Dental Graduates by Year and School of Graduation, Canada, 1991–2000

	Schools	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
N.S.											
	Dalhousie University	27	34	37	37	40	39	38	35	31	42
Que.											
	McGill University	37	30	37	35	34	28	31	24	26	24
	Université de Montréal	83	82	91	110	108	103	92	84	81	87
	Université Laval	54	40	62	44	67	53	51	52	45	43
Ont.											
	University of Toronto	93	105	83	99	95	94	77	65	78	79
	University of Western Ontario	40	40	55	56	64	59	61	53	55	57
Man.											
	University of Manitoba	24	28	23	29	30	30	25	22	23	26
Sask.											
	University of Saskatchewan	17	19	19	22	26	21	20	20	22	22
Alta.											
	University of Alberta	82	94	53	50	38	34	35	37	31	33
B.C.											
	University of British Columbia	37	38	41	44	52	53	47	40	43	46
	Total	494	510	501	526	554	514	477	432	435	459
										Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

### **Sources**

Figure 7 Calculated from data in Table 4.1.

Figure 8 Calculated from data in Table 4.2.

Table 4.1 The Canadian Dental Association.

Table 4.2 Data calculated based on Table 4.1 and population estimates from Statistics Canada shown in Appendix A.

Tables 4.3–4.10 The Canadian Dental Association.

Table 4.11 The Canadian Dental Association, from the individual universities.

# **Dietitians**

# **Description**

Dietitians plan, organize, conduct and supervise programs in nutrition, diet and food service in a variety of settings. Their duties typically include: developing, administering and supervising nutrition and food preparation and service programs in hospitals, nursing homes, schools, company cafeterias or similar settings; providing nutrition counselling and consulting to health professionals, dietetic interns, community groups, government, media and individuals; planning, evaluating and conducting nutrition education programs; and developing educational materials related to nutrition. They are employed in a wide range of settings including educational institutions, hospitals, nursing homes, government and industry.

### **Analysis**

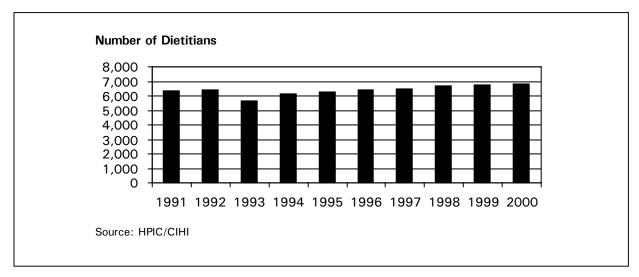


Figure 9. Numbered of Registered Dietitians, Canada, 1991–2000

Figure 9 and Table 5.1 show the number of registered dietitians in Canada. Except for Québec, registration prior to 1993 is with the Canadian Dietetic Association, not necessarily provincial associations. There have been some changes in registration across Canada that may account for fluctuations between years, particularly the apparent decrease in 1993. For instance, the College of Dietitians of Ontario began registering dietitians in 1994. In fact, most of the decline seen nationally from 1992 to 1993 is due to this different data provider for Ontario dietitian information.

Overall, from 1991 to 2000 the number of registered dietitians increased by 8.4% in Canada.

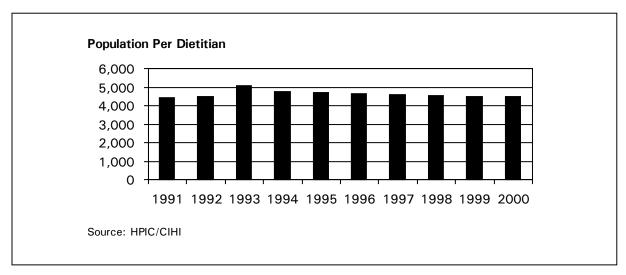


Figure 10. Population Per Registered Dietitian, Canada, 1991–2000

The population per registered dietitian figures are illustrated in Figure 10 and Table 5.2.

Table 5.3 represents the number of graduates from an accredited Baccalaureate of Science level program who either graduated from a fully integrated program (one that includes practicums as part of the education process) or applied for internship to the Dietitians of Canada, prior to registering with a provincial regulatory authority. It is currently mandatory for Baccalaureate of Science graduates who have no practical experience, to apply for internship with Dietitians of Canada. Graduates of the Masters level program may register with the provincial regulatory authority upon completion of the degree. Since 1998, the first year for which data is available, there has been an average of 329 graduates per year.

Table 5.1 Number of Registered Dietitians<sup>1</sup> by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	97	105	105	101	99	101	102	115	118	123
P.E.I. <sup>2</sup>	48	45	45 <sup>3</sup>	45 <sup>3</sup>	47	47	46	49	50	50
N.S.	351	355	305	310	322	318	316	357	386	374
N.B.	209	224	210 <sup>3</sup>	210 <sup>3</sup>	210 <sup>3</sup>	211	217	249	247	250
Que.	1,800 <sup>3</sup>	1,803	1,858	1,896	1,924	1,892	1,893	1,848	1,856	1,901
Ont.	2,225	2,269	1,477	1,858 <sup>4</sup>	1,929	2,047	2,145	2,142	2,153	2,202
Man.	244	245	258	261	263	269	275	282	268	265
Sask.	189	187	165	176	182	179	191	206	222	224
Alta.	531	540	495	498	468	498	520	656	635	619
B.C. <sup>5</sup>	625	617	757	774	817	835	812	812	846	845 <sup>6</sup>
Y.T. & N.W.T.	9	7								9 7
Canada	6,328	6,397	5,675	6,129	6,261	6,397	6,517	6,716	6,781	6,862
									S	ource: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- Prior to 1993 registration is with the Canadian Dietetic Association, not necessarily provincial associations, except for Québec.
- 2. P.E.I. began registering dietitians April 1, 1995.
- 3. Estimate.
- 4. The decrease illustrated in 1993 reflects a transitional period in the regulatory environment for dieticians in Ontario, from voluntary membership to licensure with the College of Dietitians of Ontario as a condition of employment in 1994. The College of Dietitians of Ontario began registering dietitians on January 1, 1994.
- 5. BC uses the title "registered dietitian/nutritionist" while other provinces use the title "registered dietitian."
- 6. Seven dietitians in the Yukon Territory are registered in BC and are included in the BC count.
- Figure only includes the dietitians practicing in the Northwest Territories who are registered members of Dietitians of Canada.

Table 5.2 Population Per Registered Dietitian by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	5,973	5,533	5,499	5,654	5,700	5,519	5,393	4,723	4,586	4,372
P.E.I.	2,721	2,926	2,955	2,986	2,884	2,905	2,975	2,802	2,769	2,782
N.S.	2,614	2,597	3,034	2,991	2,887	2,935	2,961	2,625	2,438	2,520
N.B.	3,573	3,341	3,573	3,579	3,583	3,571	3,476	3,026	3,060	3,029
Que.	3,935	3,962	3,870	3,811	3,773	3,853	3,863	3,970	3,966	3,884
Ont.	4,713	4,685	7,279	5,861	5,717	5,454	5,273	5,338	5,377	5,332
Man.	4,550	4,550	4,341	4,313	4,300	4,220	4,131	4,040	4,271	4,337
Sask.	5,297	5,366	6,107	5,750	5,584	5,702	5,358	4,982	4,616	4,557
Alta.	4,921	4,915	5,429	5,464	5,896	5,633	5,513	4,471	4,683	4,883
B.C.	5,479	5,714	4,794	4,829	4,694	4,699	4,908	4,940	4,785	4,825
Y.T. & N.W.T.	10,109	13,292								3,355
Canada	4,454	4,463	5,086	4,763	4,713	4,661	4,621	4,519	4,513	4,499
									Sou	rce: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality

- Nil or zero

Table 5.3 Number of Graduates of Accredited Dietetics/Nutrition Programs<sup>1</sup>, by Province/Territory of Residence, Canada, 1991–2000

Provinces	1998	1999	2000
Nfld.		*	5
P.E.I.		*	*
N.S.		26	27
N.B.		14	14
Que.		125	135
Ont.		58	59
Man.		15	16
Sask.		17	18
Alta.		36	40
B.C.		18	19
Y.T.			*
N.W.T.			
Canada	330	317	339
		So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Figures include interns and graduates of fully-integrated programs; graduates of the Masters level program are not included.

### **Sources**

- Figure 9 Calculated from data in Table 5.1.
- Figure 10 Calculated from data in Table 5.2.
- Table 5.1 1991–1992: The Canadian Dietetic Association & La Corporation professionnel des diététistes du Québec.

1993–2000: Provincial Dietitians Associations (Prince Edward Island Dietitians Registration Board, Newfoundland Dietetic Association, Nova Scotia Dietetic Association, New Brunswick Association of Dietitians, Ordre professionnel des diététistes du Québec, College of Dietitians of Ontario, Manitoba Association of Registered Dietitians, Saskatchewan Dietetic Association, Alberta Registered Dietitians Association, British Columbia Dietitians' & Nutritionists' Association).

- Table 5.2 Data calculated based on Table 5.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 5.3 Dietitians of Canada.

# Health Record Professionals (Administrators/Technicians)

# **Description**

Health record professionals are trained and certified in health information management and include both health record administrators and health record technicians.

Health record administrators are responsible for planning, directing and controlling the departments responsible for records management. Their duties can include: directing and advising staff engaged in providing records management; planning, administering and controlling budgets for contracts, equipment and supplies; preparing reports; and interviewing, hiring and training staff.

Health records technicians generally work for health record administrators and their duties include: classifying, coding, cross-referencing and storing health records and related information; maintaining indexes for classification systems; operating information retrieval systems and responding to requests for health record information; preparing medical, social and administrative statistics; and applying knowledge of medical terminology, physiology and treatments.

### **Analysis**

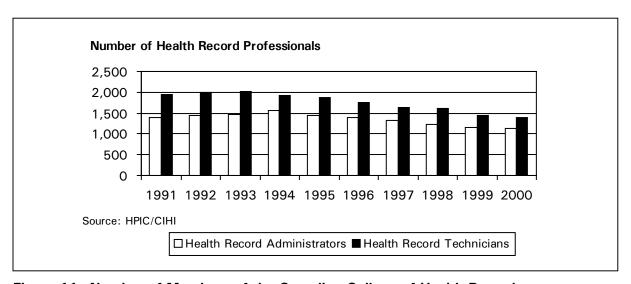


Figure 11. Number of Members of the Canadian College of Health Record Administrators/Canadian Health Record Association, Canada, 1991–2000

Membership in the Canadian College of Health Record Administrators/Canadian Health Record Association is voluntary in all provinces, and is therefore not necessarily an accurate representation of the total number of professionals. For health record administrators (HRAs), membership in the College results in a 'Certificant' designation, while for health record technicians (HRTs), membership results in an 'Associate' designation.

As shown in Figure 11 and Table 6.1, membership of health record administrators and health record technicians in the Canadian College of Health Record Administrators/ Canadian Health Record Association increased between 1991 and 1993, and steadily decreased in following years. Between 1991 and 2000 there was a 24.2% overall decrease in the number of health record professionals belonging to the Association. This drop consists of a 19.5% decrease in the number of health record administrators, and a 27.5% decrease in the number of health record technicians. All provinces and territories have experienced overall decreases in the recorded number of health records professionals in 2000, compared with 1991 figures.

The population per health record professional (including both administrators and technicians) is shown in Table 6.2. For Canada as a whole, and in most provinces, the numbers of health record technicians has not kept up with the population growth, resulting in a greater population per health record professional rate in 2000 than in 1991.

Table 6.3 illustrates that since 1991, there has been a decrease of 78.8% in the number of HRA graduates who become Certificants in the Canadian Health Record Association. Comparable information for health record technicians is shown in Table 6.4. In the same time period, there has been a 58.8% reduction in the number of HRT graduates becoming Associates in the Canadian Health Record Association. It should be noted that the numbers who go on to become Certificants or Associates are not necessarily equivalent to the annual number of graduates from each of the educational institutions. Graduates of HRA or HRT educational programs are not required to write the national exam in order to work in the field; however, some employers may require it as a condition for employment. Program closures at the college-level, in preparation for anticipated shift to university degree-level programs (a change which did not materialize), may have impacted the size of the graduating pool attempting to achieve Certificant or Associate status in more recent years.

Table 6.1 Total Number of Certificants and Associates who were Members of the Canadian College of Health Record Administrators/Canadian Health Record Association<sup>1</sup> by Province/Territory of Residence, Canada, 1991–2000

Provinces	3	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.		55	56	50	50	52	56	51	49	42	42
	Health Record Administrators	15	15	15	15	17	16	16	15	15	15
	Health Record Technicians	40	41	35	35	35	40	35	34	27	27
P.E.I.		19	18	19	19	21	20	15	13	16	17
	Health Record Administrators	6	6	7	9	9	9	7	6	7	6
	Health Record Technicians	13	12	12	10	12	11	8	7	9	11
N.S.		210	208	216	212	202	198	184	180	173	167
	Health Record Administrators	92	93	93	96	95	93	90	91	90	86
	Health Record Technicians	118	115	123	116	107	105	94	89	83	81
N.B.		109	118	119	109	111	111	99	99	99	103
	Health Record Administrators	36	40	45	38	42	40	35	36	38	43
	Health Record Technicians	73	78	74	71	69	71	64	63	61	60
Que.		94	108	100	104	99	105	57	37	28	26
	Health Record Administrators	80	96	88	93	91	98	49	31	24	23
	Health Record Technicians	14	12	12	11	8	7	8	6	*	*
Ont.		1,333	1,408	1,445	1,415	1,404	1,324	1,267	1,153	1,131	1,086
	Health Record Administrators	496	517	512	509	507	485	472	429	426	410
	Health Record Technicians	837	891	933	906	897	839	795	724	705	676
Man.		157	161	170	160	165	154	129	120	110	116
	Health Record Administrators	31	33	36	37	33	31	28	24	24	23
	Health Record Technicians	126	128	134	123	132	123	101	96	86	93
Sask.		268	265	269	270	267	262	262	265	259	259
	Health Record Administrators	119	119	124	128	131	131	133	137	131	131
	Health Record Technicians	149	146	145	142	136	131	129	128	128	128
Alta.		599	622	595	642	503	461	442	484	324	308
	Health Record Administrators	248	258	255	341	220	208	198	186	148	140
	Health Record Technicians	351	364	340	301	283	253	244	298	176	168
B.C.		456	468	480	472	455	431	434	413	388	376
	Health Record Administrators	258	266	285	285	276	270	281	267	245	233
	Health Record Technicians	198	202	195	187	179	161	153	146	143	143
Y.T. & N	.W.T.	26	25	20	22	24	21	25	22	21	22
	Health Record Administrators	9	10	8	9	11	10	10	11	10	9
	Health Record Technicians	17	15	12	13	13	11	15	11	*	*
Canada		3,326	3,457	3,483	3,475	3,303	3,143	2,965	2,835	2,591	2,522
	Health Record Administrators	1,390	1,453	1,468	1,560	1,432	1,391	1,319	1,233	1,158	1,119
	Health Record Technicians	1,936	2,004	2,015	1,915	1,871	1,752	1,646	1,602	1,433	1,403
										So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Membership to the CCHRA/CHRA is voluntary across all provinces/territories.

Table 6.2 Population Per Certificant or Associate Member of the Canadian College of Health Record Administrators/Canadian Health Record Association by Province/Territory of Residence, Canada, 1991–2000

Provin	ices	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.		10,535	10,375	11,548	11,420	10,852	9,954	10,787	11,084	12,883	12,805
	Health Record Administrators	38,627	38,732	38,494	38,068	33,195	34,840	34,383	36,208	36,073	35,853
	Health Record Technicians	14,485	14,170	16,497	16,315	16,123	13,936	15,718	15,974	20,040	19,918
P.E.I.		6,874	7,315	6,998	7,073	6,454	6,827	9,124	10,561	8,652	8,181
	Health Record Administrators	21,767	21,946	18,995	14,932	15,059	15,170	19,552	22,883	19,775	23,180
	Health Record Technicians	10,046	10,973	11,081	13,439	11,294	12,412	17,108	19,614	15,381	12,643
N.S.		4,368	4,433	4,285	4,373	4,602	4,714	5,086	5,207	5,439	5,643
	Health Record Administrators	9,971	9,914	9,952	9,657	9,786	10,036	10,397	10,299	10,456	10,957
	Health Record Technicians	7,774	8,018	7,525	7,992	8,688	8,889	9,955	10,531	11,337	11,634
N.B.		6,851	6,343	6,305	6,896	6,778	6,788	7,619	7,612	7,633	7,352
	Health Record Administrators	20,744	18,712	16,672	19,780	17,913	18,838	21,551	20,932	19,887	17,611
	Health Record Technicians	10,230	9,596	10,139	10,586	10,903	10,613	11,786	11,961	12,389	12,621
Que.		75,354	66,146	71,903	69,471	73,323	69,425	128,299	198,278	262,898	283,973
	Health Record Administrators	88,541	74,414	81,708	77,688	79,769	74,384	149,245	236,654	306,714	321,013
	Health Record Technicians	505,948	595,312	599,194	656,813	907,377	1,041,375	914,128	1,222,713	*	*
Ont.		7,867	7,550	7,440	7,696	7,855	8,432	8,927	9,917	10,236	10,812
	Health Record Administrators	21,142	20,562	20,998	21,394	21,753	23,018	23,964	26,654	27,176	28,639
	Health Record Technicians	12,528	11,931	11,523	12,019	12,295	13,306	14,228	15,794	16,422	17,370
Man.		7,072	6,925	6,589	7,036	6,853	7,371	8,807	9,494	10,406	9,907
	Health Record Administrators	35,815	33,784	31,114	30,427	34,266	36,618	40,576	47,469	47,695	49,966
	Health Record Technicians	8,812	8,710	8,359	9,153	8,567	9,229	11,249	11,867	13,310	12,357
Sask.		3,736	3,787	3,746	3,748	3,806	3,895	3,906	3,873	3,957	3,941
	Health Record Administrators	8,413	8,433	8,127	7,906	7,758	7,791	7,694	7,491	7,823	7,791
	Health Record Technicians	6,719	6,873	6,950	7,126	7,473	7,791	7,933	8,018	8,007	7,974
Alta.		4,362	4,267	4,517	4,238	5,486	6,086	6,485	6,060	9,178	9,814
	Health Record Administrators	10,537	10,286	10,539	7,979	12,543	13,488	14,477	15,769	20,092	21,592
	Health Record Technicians	7,445	7,291	7,904	9,040	9,751	11,089	11,748	9,843	16,895	17,993
B.C.		7,509	7,533	7,560	7,919	8,428	9,103	9,183	9,713	10,434	10,844
	Health Record Administrators	13,272	13,254	12,733	13,114	13,894	14,532	14,183	15,025	16,524	17,500
	Health Record Technicians	17,293	17,453	18,610	19,987	21,423	24,370	26,048	27,476	28,311	28,513
Y.T. 8	k N.W.T.	3,499	3,722	4,722	4,376	4,102	4,742	3,980	4,492	4,746	4,558
	Health Record Administrators	10,109	9,304	11,804	10,698	8,950	9,957	9,949	8,985	9,966	11,142
	Health Record Technicians	5,352	6,203	7,869	7,406	7,573	9,052	6,633	8,985	*	*
Canad	la	8,474	8,258	8,288	8,400	8,934	9,487	10,156	10,706	11,812	12,241
	Health Record Administrators	20,276	19,648	19,663	18,712	20,607	21,437	22,829	24,616	26,430	27,589
	Health Record Technicians	14,557	14,246	14,325	15,243	15,772	17,020	18,294	18,946	21,358	22,004
		1	1		1		ĺ	1	1	l	Source: HPIC/CI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 6.3 Number of Health Record Administrator Graduates who became Certificants<sup>1</sup>, by Year and School of Graduation, Canada, 1991–2000

School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
N.S.										
School of Health Record Science <sup>2</sup>	*	5	*	5	8	*	9	*	*	-
Que.										
College Ahuntsic	31	19	21	21	16	19	*	*	*	
College LaFleche		34	22	28	27	23	5	6	*	*
College de l'Assomption			-	-	-	6	*	-	-	
Ont.										
Algonquin CAAT	15	11	8	13	22	13	13	*	- 4	-
George Brown CAAT	13	8	8	15	10	10	12	7	16	8
Sask.										
SIAST	*	9	8	8	11	8	8	10	7	7
Alta.										
N.A.I.T.	15	10	16	17	13	*	-	- 4	-	-
B.C.										
Douglas College	17	14	14	6	8	12	13	12	*	*
Progression Associate to Certificant <sup>3</sup>	17	29	*							
Canada	118	139	104	113	115	97	65	40	27	25
									Sou	rce: HPIC/CIH

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Includes only those graduates who applied to the CCHRA/CHRA during the year of graduation and who were accepted as Certificants. It is not necessarily equivalent to the annual number of graduates of each institute.
- 2. Name later changed to Queen Elizabeth II Health Sciences Centre.
- 3. Program of self-study, followed by a Certificant-level examination.
- 4. Discontinued program.

Table 6.4 Number of Health Record Technician Graduates who became Associates<sup>1</sup>, by Year and School of Graduation, Canada, 1991–2000

Schools	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
N.S.										
School of Health Record Science <sup>2</sup>	*	*	*	*	*	*	-	*	- 4	-
Ont.										
Algonquin CAAT, Ottawa	8	*	5	*	*	*	*	- 4	-	-
Niagara CAAT, Welland	19	17	15	9	14	7	-	-	*	-
Fanshawe CAAT, London	17	8	9	8	6	5	8	- 4	-	-
George Brown CAAT, Toronto	13	9	12	14	10	10	*	*	-	*
Confederation College		9	8	7	7	6	12	*	*	-
Man.										
Red River Community College	13	17	17	12	10	10	-	13	-	16
Sask.										
SIAST	*	5	*	*	*	*	-	8	*	*
Alta.										
S.A.I.T.	20	19	18	19	14	18	12	9	6	13
N.A.I.T.			-	-	-	*	_ 4	-	-	-
B.C.										
B.C.I.T.	8	8	3							
Douglas College			8	9	*	*	- 4	-	-	-
Canadian Healthcare Association	137	152	107	12	53	39	46	41	42	64
Canada	238	250	204	101	126	106	82	75	54	98
									Sou	rce: HPIC/CIH

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Includes only those graduates who applied to the CCHRA/CHRA during the year of graduation and who were accepted as Associates. It is not necessarily equivalent to the annual number of graduates of each institute.
- 2. Name later changed to Queen Elizabeth II Health Sciences Centre.
- 3. In 1993, the program transferred from B.C.I.T. to Douglas College.
- 4. Discontinued program.

### **Sources**

- Figure 11 Calculated from data in Table 6.1.
- Table 6.1 Canadian College of Health Record Administrators/Canadian Health Record Association.
- Table 6.2 Data calculated based on Table 6.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 6.3 Canadian College of Health Record Administrators/Canadian Health Record Association.
- Table 6.4 Canadian College of Health Record Administrators/Canadian Health Record Association.

# **Health Service Executives**

# **Description**

Health service executives administer, manage and operate health care delivery organizations. Their duties include: developing objectives for the organization; developing or approving policies and programs; selecting or approving the selection of middle management and other executive staff; coordinating the work of departments, divisions or regions; and representing the organization in negotiations or other official functions.

### Analysis

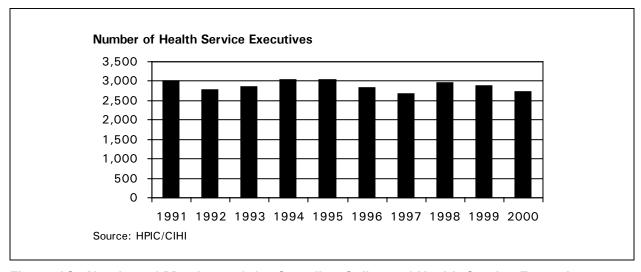


Figure 12. Number of Members of the Canadian College of Health Service Executives, Canada, 1991–2000

Membership to the College is voluntary and therefore does not necessarily include all health executives in Canada. As shown in Figure 12, the number of health executive members in 2000 decreased 10.0% from 1991. However, the change in membership is not consistent and there is considerable variability over the years. Membership peaked in 1994, and by 2000 membership had decreased to a level equivalent to 1992.

Table 7.1 highlights the members of the Canadian College of Health Services Executives by province for the years 1991 to 2000. In 2000, only Ontario showed an increase (5.5%) from 1991.

The population per health executive with membership to the Canadian College of Health Service Executives is presented in Table 7.2.

Table 7.1 Number of Members<sup>1</sup> of the Canadian College of Health Service Executives, by Province/Territory of Membership, Canada, 1991–2000

Provinces	1991	1992	1993 <sup>2</sup>	1994	1995	1996	1997	1998	1999	2000
Nfld.	100	97	100	100	96	81	70	68	60	51
P.E.I.	22	22	23	17	17	15	12	9	5	6
N.S.	138	121	125	136	135	119	109	114	118	115
N.B.	112	108	111	104	96	87	72	72	62	58
Que.	138	135	139	183	160	136	124	132	143	133
Ont.	1,390	1,270	1,307	1,438	1,525	1,485	1,385	1,578	1,539	1,467
Man.	127	125	129	131	128	115	115	129	120	107
Sask.	181	145	149	135	127	127	117	137	135	115
Alta.	433	408	420	377	346	297	299	331	312	296
B.C.	377	356	366	388	377	356	349	370	349	338
Y.T. & N.W.T.				32	26	25	23	23	29	30
Canada	3,018	2,787	2,868	3,041	3,033	2,843	2,675	2,963	2,872	2,716
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- Excludes Student Affiliates, Foreign Affiliates, Inactive Members, Honorary Fellows, Honorary Members, and Members
  of Indefinite Status.
- CIHI estimate.

Table 7.2 Population Per Member<sup>1</sup> of the Canadian College of Health Service Executives, by Province/Territory of Membership, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	5,794	5,989	5,784	5,710	5,878	6,882	7,859	7,987	9,018	10,545
P.E.I.	5,937	5,985	5,872	7,905	7,972	9,102	11,405	15,255	27,686	23,180
N.S.	6,647	7,620	7,432	6,817	6,886	7,843	8,585	8,222	7,975	8,194
N.B.	6,668	6,930	6,750	7,227	7,837	8,661	10,476	10,466	12,189	13,056
Que.	51,328	52,917	51,751	39,481	45,369	53,600	58,976	55,578	51,477	55,514
Ont.	7,544	8,371	8,225	7,573	7,232	7,518	8,167	7,246	7,523	8,004
Man.	8,742	8,919	8,707	8,594	8,834	9,871	9,879	8,831	9,539	10,740
Sask.	5,531	6,921	6,752	7,496	8,002	8,036	8,747	7,491	7,591	8,875
Alta.	6,035	6,505	6,400	7,217	7,975	9,446	9,587	8,861	9,531	10,212
B.C.	9,083	9,903	9,904	9,633	10,172	11,021	11,419	10,842	11,600	12,063
Y.T. & N.W.T.				963	1,026	1,229	1,421	1,453	1,661	1,966
Canada	9,308	10,210	10,031	9,599	9,729	10,488	11,257	10,243	10,657	11,367
									So	urce: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Excludes Student Affiliates, Foreign Affiliates, Inactive Members, Honorary Fellows, Honorary Members, and Members of Indefinite Status.

### Sources

- Figure 12 Calculated from data in Table 7.1.
- Table 7.1 Canadian College of Health Service Executives.
- Table 7.2 Data calculated based on Table 7.1 and population estimates from Statistics Canada shown in Appendix A.

# **Licensed Practical Nurses**

# **Description**

Licensed practical nurses provide nursing care for patients and assist registered nurses, physicians and other health care professionals. Their duties include: taking patients' blood pressure, temperature and pulse; distributing medication to patients; changing patients' dressings; bathing and dressing patients; assisting registered nurses with procedures such as respiratory therapy, intravenous (I.V.) therapy, applying sterile compresses and removing sutures; and monitoring patients' progress and reporting changes to registered nurses, doctors and other health team members. Licensed practical nurses work in a variety of settings including hospitals, clinics, doctors' offices, industry, private homes, and community health centres.

### **Analysis**

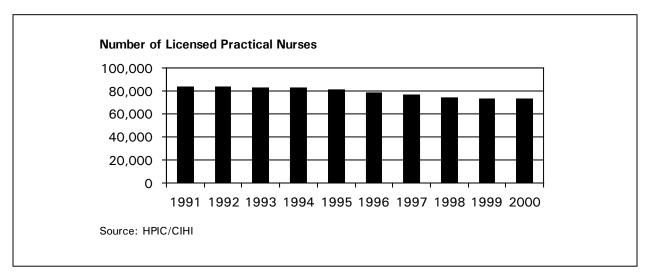


Figure 13. Number of Licensed Practical Nurses, Canada, 1991–2000

The term licensed practical nurses is used exclusively in all provinces/territories with the exception of Prince Edward Island, New Brunswick and the Yukon Territory, where the title 'nursing assistant' remains in use. Figure 13 illustrates the number of licensed practical nurses (LPNs) in Canada from 1991 to 2000. During this period there was little variation in the number of LPNs from 1991 to 1995, but there was a 2.9% decrease in the number of LPNs in Canada between 1995 and 1996. Table 8.1 shows that in 2000 there were more than 10,000 fewer LPNs in Canada than in 1991, a reduction of 13.1%.

Despite an overall decrease in the number of LPNs in Canada, five provinces/territories experienced a slight increase during this ten-year period. Yukon Territory experienced 24.1% growth, while New Brunswick (19.7%), Newfoundland (3.4%), Prince Edward Island (2.9%), and the Northwest Territories (0.9%), also witnessed an increase in LPN counts.

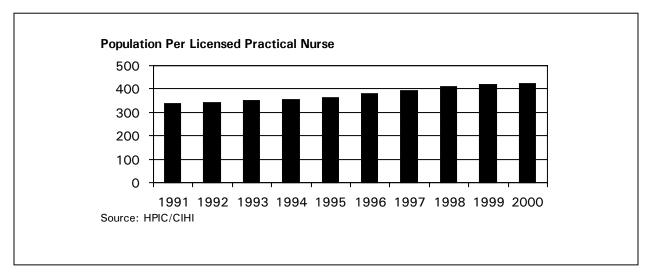


Figure 14. Population Per Licensed Practical Nurse, Canada, 1991–2000

The population per LPN is shown in Figure 14 and Table 8.2. Due to the overall decline in the number of LPNs nationally, the population per licensed practical nurse has grown significantly, increasing 25.9% over the period from 1991 to 2000.

There are more than 100 different institutions across Canada offering education/training programs for LPNs, making collection of data at the institution level problematic. As a result, currently, counts of graduates are provided by the licensing bodies in each province/territory. These counts are not equivalent to the number of graduates of all institutions offering education/training programs for LPNs within a province/territory, in a given year. Rather, this data reflects the number of LPNs that have completed an education/training program and obtained initial registration (first time registering to write the LPN exam) with a particular licensing body, within the given year. This methodology may undercount the actual number of graduating LPNs within a province/territory, as some LPNs may graduate in one province/territory and seek initial licensure in another. In addition, this methodology may introduce double counting of LPNs seeking initial licensure within more than one jurisdiction after graduation. CIHI is investigating alternative/complimentary sources of LPN education data for inclusion in future iterations of this publication.

The number of graduates by province and year, is shown in Table 8.3. There appears to be considerable variability in the number of graduates produced on a year-to-year basis throughout Canada (see above methodological considerations). A significant drop in graduates (21.3%) was experienced between 1993 and 1994, however, the numbers increase 32.9% between 1999 and 2000. The increase in graduates in recent years may be a result of higher enrolment in pre-existing programs, as well as new institutions offering programs.

Table 8.1 Number of Licensed Practical Nurses<sup>1</sup> by Province/Territory of Licensure, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	2,810	2,817	2,751	2,853	2,833	2,838	2,797	2,809	2,859	2,905
P.E.I.	616	630	631	634	597	586	631	621	621	634
N.S.	3,308	3,320	3,283	3,248	3,244	3,160	3,220	3,209	3,214	3,266
N.B.	2,223	2,334	1,968	2,003	2,243	2,427	2,517	2,575	2,656	2,662
Que.2	19,693	19,667	19,688	19,519	19,283	18,572	18,082	16,617	16,405	16,246
Ont.	35,612	35,516	35,877	36,593	36,066	35,392	34,623	33,781	33,141	33,071
Man.	3,806	3,657	3,086	2,864	2,737	2,580	2,488	2,582	2,483	2,540
Sask.	2,713	2,682	2,616	2,535	2,405	2,277	2,187	2,144	2,154	2,057
Alta.	6,530 <sup>3</sup>	6,545	6,378	6,196	5,562	4,963	4,723	4,272	4,186	4,358
B.C.	6,379	6,390	6,254	5,841	5,871	5,667	5,385	4,964	5,092	4,987
Y.T. <sup>4</sup>	54	56	66	78	80	76	74	66	62	67
N.W.T.	111	135		89	96	101	103	111	110	112
Canada	83,855	83,749	82,598	82,453	81,017	78,639	76,830	73,751	72,983	72,905
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Figures represent total registrants, regardless of activity/employment status.
- The profession of nursing assistant is a restricted profession but has no exclusive field of activity. It may be that in Québec there are some persons occupied with similar functions, without always using the title of nursing assistant and without being members of the corporation.
- 3. Beginning in 1991, practical nurses in Alberta had to log a minimum of 1,000 hours of work over the previous 4 years to qualify as "Licensed", therefore the numbers decrease in subsequent years.
- 4. A Yukon license is not required if a Canadian nursing assistant is eligible for licensure, or is licensed elsewhere in Canada.

Table 8.2 Population Per Licensed Practical Nurse by Province/Territory of Licensure, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	206	206	210	200	199	196	197	193	189	185
P.E.I.	212	209	211	212	227	233	222	221	223	219
N.S.	277	278	282	285	287	295	291	292	293	289
N.B.	336	321	381	375	335	310	300	293	285	284
Que.	360	363	365	370	376	393	404	441	449	454
Ont.	294	299	300	298	306	315	327	338	349	355
Man.	292	305	363	393	413	440	457	441	461	452
Sask.	369	374	385	399	423	448	468	479	476	496
Alta.	400	405	421	439	496	565	607	687	710	694
B.C.	537	552	580	640	653	692	740	808	795	818
Y.T.	543	539	454	388	394	423	432	471	496	451
N.W.T.	555	466		741	698	668	656	610	626	626
Canada	336	341	349	354	364	379	392	412	419	423
									Sou	rce: HPIC/CIHI

#### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality

- Nil or zero

Table 8.3 Number of Graduates<sup>1</sup> of Provincially Approved Licensed Practical Nursing Programs, by Province/Territory of Graduation and Initial Licensure, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	149	70	76	99	114	155	102	104	75	119
P.E.I.	26	32	29	28	_ 2	_ 2	30	22	27	27
N.S.	208	200	209	190	212	178	136	119	136	158
N.B.	57	66	69	58	179	251	183	130	147	218
Que.	368	488	508	481	448	532	498	424	283	337
Ont.	1,704	1,868 <sup>3</sup>	1,674	1,179	1,218	1,171	1,139	1,194	1,025	1,397
Man.	151	122	84	48	27	29	9 4	34	46	95
Sask.	57	49	42	31	27	28	31	38	57	100 5
Alta.	343	350	262	197	71	62	155	174	208	246
B.C.	129	123	114	102	113	120	124	115	115	115
Y.T.	-	-	-	-	-	-	-	-	-	-
N.W.T.	7	6	-	-	-	-	-	-	-	5
Canada	3,199	3,374	3,067	2,413	2,409	2,526	2,407	2,354	2,119	2,817
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Counts of graduates are provided by the licensing body in each province/territory. These counts are not equivalent to the number of graduates of all institutions offering education/training programs for LPNs within a province/territory, in a given year. Rather, this data reflects the number of LPNs that have completed an education/training program and obtained initial registration (first time registering) with a particular licensing body, within the given year. This methodology may undercount the actual number of graduating LPNs within a province/territory, as some LPNs may graduate in one province/territory and seek initial licensure in another. In addition, this methodology may introduce double counting of LPNs seeking initial licensure within more than one jurisdiction after graduation. CIHI is investigating alternative/complimentary sources of LPN education data for inclusion in future iterations of this publication.
- 2. No training program was available in P.E.I. for the years 94/95 and 95/96.
- 3. The increase reflects higher enrolment in pre-existing programs, as well as new institutions offering programs.
- 4. Partial cancellation of programs occurred.
- 5. Increased program offerings within province.

## **Sources**

- Figure 13 Calculated from data in Table 8.1.
- Figure 14 Calculated from data in Table 8.2.
- Table 8.1

  1991–1992: Council for Nursing Assistants, Nursing Assistants Registration Board, the Department of Health, Newfoundland; Department of Health, Prince Edward Island; Board of Registration of Nursing Assistants, Nova Scotia and the Nova Scotia Practical Nurses Licensing Board, Association of New Brunswick Registered Nursing Assistants, Ordre des infirmières et infirmiers auxiliaires du Québec, College of Nurses of Ontario, College of Licensed Practical Nurses of Manitoba, Saskatchewan Association of Licensed Practical Nurses, College of Licensed Practical Nurses of British Columbia, Yukon Territory Registrar for Nursing Assistants (Justice Service Division), Northwest Territories Registrar for Certified Nursing Assistants (Health and Social Services).

1993–2000: Data supplied by provincial organizations (Newfoundland Council for Licensed Practical Nurses, Prince Edward Island Nursing Assistant Registration Board, Nova Scotia Practical Nurses Licensing Board, Association of New Brunswick Registered Nursing Assistants, Ordre des infirmières et infirmiers auxiliaires du Québec, College of Nurses of Ontario, College of Licensed Practical Nurses of Manitoba, Saskatchewan Association of Licensed Practical Nurses, College of Licensed Practical Nurses of Alberta, College of Licensed Practical Nurses of British Columbia, Yukon Territory Registrar for Nursing Assistants (Justice Service Division), Northwest Territories Registrar for Certified Nursing Assistants (Health and Social Services).

- Table 8.2 Data calculated based on Table 8.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 8.3 Data supplied by provincial organizations (see above Table 8.1).

# **Medical Laboratory Technologists**

# **Description**

Medical Laboratory Technologists perform laboratory tests that assist physicians and other health professionals in the diagnosis and treatment of patients. The duties of a Medical Laboratory Technologist include: performing and interpreting diagnostic tests on blood, tissue, and body fluids; cultivating, isolating and identifying bacteria, fungi, viruses, and parasites which invade the body; counting blood cells, recognizing abnormalities and reporting changes which have taken place in blood cells; determining blood type and crossmatching for transfusions; and arranging tissue in sections, staining and preparing specimens for examination under the microscope. Most medical laboratory technologists work in hospitals or government laboratories, private medical clinics, public health clinics or blood transfusion service labs.

## **Analysis**

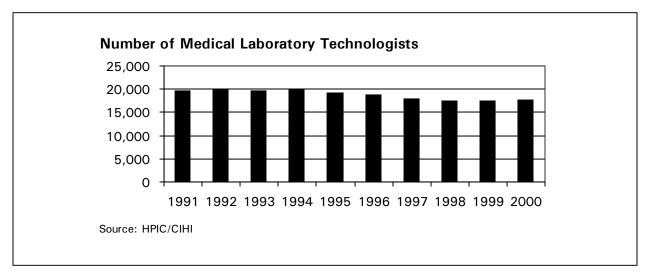


Figure 15. Number of Active Certified Members of Medical Laboratory Technology Associations, Canada, 1991–2000

Figure 15 and Table 9.1 illustrate the number of active certified medical laboratory technologists (MLTs) in Canada for 1991 to 2000.

As shown in Figure 15, there were small fluctuations in the members of Medical Laboratory Technologists Associations between 1991 and 1994. A downward trend emerged in 1995, but slightly increased again in 2000. Membership with the Canadian Society for Medical Laboratory Science (CSMLS) is voluntary and membership requirement with the provincial body varies across the country. As of the year 2000, registration with the provincial organization (society or college) is mandatory in only four provinces: Ontario, Quebec, Saskatchewan, and New Brunswick. Alberta is in the process of instating mandatory registration with its provincial body.

As shown in Table 9.1, the number of members of medical laboratory technology associations decreased 9.2% from 1991 to 2000, with the sharpest decline occurring between 1996 and 1997.

Provincially, the most significant decline was experienced in Nova Scotia (19.2%), Saskatchewan (18.3%), and British Columbia (16.2%); however, several provinces and territories experienced a moderate increase in the number of MLT memberships: Newfoundland (16.8%), New Brunswick (4.8%), and the Yukon and Northwest Territories (15.4%).

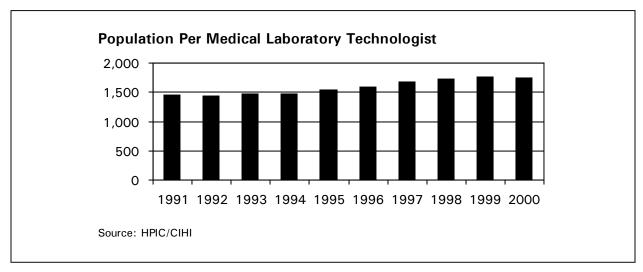


Figure 16. Population Per Active Certified Member of Medical Laboratory Technology Associations, Canada, 1991–2000

The population per active certified member of MLT associations is shown in Figure 16 and Table 9.2. As expected, the population per MLT rose steadily after 1994. While in 1991 there was one MLT for every 1,445 Canadians, by 2000 the ratio was 1:1,742, an increase of 20.6%. With its large population and significant decline in memberships, Québec's population per MLT figure for 2000 is the largest in Canada.

The total number of medical laboratory technologists is presented in Table 9.3, although the voluntary nature of the CSMLS under-represents the actual number of practicing MLTs.

Table 9.4 presents the number of graduates eligible to write the Canadian Society for Medical Laboratory Science MLT Certification exam. Though membership in the CSMLS is voluntary, graduates must pass the Certification exam to practice in Canada. Considering the declining number of MLT memberships during this time period, the observed decrease in the number of graduates is expected; from 1991 to 2000, the number declined by 59.6%.

Table 9.1 Number of Active Certified Members of Medical Laboratory Technology Associations, by Province/Territory of Registration, Canada, 1991-2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	273	277	267	299	304	325	318	313	329	319
P.E.I.	115	114	116	108	104	107	102	104	103	105
N.S.	925	917	897	869	847	799	773	750	754	747
N.B. <sup>1</sup>	588	604	642	647	649	649	606	597	599	616
Que.2	2,376	2,500	2,464	2,424	2,383	2,366	2,469	2,606	2,694	2,724
Ont. <sup>3</sup>	7,932	7,727	7,510	8,242	8,247	8,139	7,684	7,351	7,166	7,023
Man.	1,085	1,084	1,083	1,069	1,039	1,010	974	926	938	952
Sask.4	1,142	1,145	1,103	1,026	998	951	946	927	954	933
Alta. <sup>5</sup>	2,150	2,620	2,615	2,300	1,800	1,812	1,462	1,432	1,450	1,843
B.C.	2,884	2,941	2,915	2,848	2,771	2,630	2,538	2,457	2,409	2,416
Y.T. & N.W.T.	39	39	47	45	48	46	47	45	48	45
Canada	19,509	19,968	19,659	19,877	19,190	18,834	17,919	17,508	17,444	17,723
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. New Brunswick data for the years 1993 and 1996-2000 is provided by the New Brunswick Society of Medical Laboratory Technologists (NBSMLT), a regulatory authority in which licensure is mandatory for practice in New Brunswick; individuals permitted registration under a legislative 'grandfather' clause are not included in these counts.
- 2. Quebec data is provided by the Ordre professionnel des technologistes medicaux du Québec (OPTMQ), the provincial regulatory authority since 1973.
- 3. Ontario data from 1994 to 2000 is provided by the College of Medical Laboratory Technologists of Ontario, a regulatory authority in which licensure is mandatory for practice in Ontario.
- 4. Saskatchewan data from 1996 to 2000 is provided by the Saskatchewan Society of Medical Laboratory Technologists, a regulatory authority in which licensure is mandatory for practice in Saskatchewan.
- 5. Although the Alberta Society of Medical Laboratory Technologists (ASMLT) is a professional organization in which licensure is voluntary, imminent legislation for mandatory licensure has led to the ASMLT providing more representative statistics regarding the number of MLTs in Alberta. Consequently, Alberta data for the year 1991 and from 1994 to 2000 is provided by the ASMLT.

Table 9.2 Population Per Active Certified Member of Medical Laboratory Technology Associations, by Province/Territory of Registration, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	2,122	2,097	2,163	1,910	1,856	1,715	1,730	1,735	1,645	1,686
P.E.I.	1,136	1,155	1,146	1,244	1,303	1,276	1,342	1,320	1,344	1,325
N.S.	992	1,005	1,032	1,067	1,098	1,168	1,211	1,250	1,248	1,261
N.B.	1,270	1,239	1,169	1,162	1,159	1,161	1,245	1,262	1,262	1,229
Que.	2,981	2,857	2,918	2,981	3,046	3,081	2,962	2,815	2,732	2,710
Ont.	1,322	1,376	1,432	1,321	1,337	1,372	1,472	1,556	1,616	1,672
Man.	1,023	1,028	1,034	1,053	1,088	1,124	1,166	1,230	1,220	1,207
Sask.	877	876	914	986	1,018	1,073	1,082	1,107	1,074	1,094
Alta.	1,215	1,013	1,028	1,183	1,533	1,548	1,961	2,048	2,051	1,640
B.C.	1,187	1,199	1,245	1,312	1,384	1,492	1,570	1,633	1,681	1,688
Y.T. & N.W.T.	2,333	2,386	2,009	2,140	2,051	2,165	2,117	2,196	2,076	2,228
Canada	1,445	1,430	1,468	1,469	1,538	1,583	1,680	1,734	1,755	1,742
									So	urce: HPIC/CIHI

#### Notes

- .. Information not available
- Amount suppressed to protect confidentiality

Nil or zero

Table 9.3 Total Number of Members of Medical Laboratory Technology Associations<sup>1</sup> by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	304	310	340	393	397	415	395	394	375	360
P.E.I.	126	126	126	121	118	119	117	111	113	113
N.S.	1,050	1,058	1,100	1,102	1,050	980	956	904	876	854
N.B. <sup>2</sup>	588	604	655	647	649	662	619	609	610	627
Que.3	2,179	2,095	2,275	2,194	2,296	2,074	1,891	1,668	1,523	1,418
Ont.4	8,988	8,838	9,212	8,449	8,645	8,628	8,291	7,922	7,758	7,568
Man.	1,199	1,209	1,258	1,241	1,259	1,183	1,135	1,063	1,038	1,043
Sask. <sup>5</sup>	1,314	1,310	1,356	1,353	1,270	1,070	1,052	1,038	1,069	1,030
Alta. <sup>6</sup>	2,967	3,014	3,197	2,839	2,430	2,012	1,886	1,740	1,610	1,413
B.C.	3,204	3,268	3,423	3,416	3,299	3,131	3,015	2,864	2,769	2,803
Y.T. & N.W.T.	51	49	59	57	60	57	57	55	57	50
Canada	21,350	21,892	22,608	21,503	20,930	20,423	19,568	18,998	18,809	19,015
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- Due to the voluntary nature of the CSMLS, the totals presented here are not representative of the total Medical Laboratory Technologists workforce in any given province.
- New Brunswick data for the years 1993 and 1996-2000 is provided by the New Brunswick Society of Medical Laboratory Technologists (NBSMLT), a regulatory authority in which licensure is mandatory for practice in New Brunswick; figures include grandfathered members.
- 3. Québec data is provided by the Ordre professionnel des technologistes medicaux du Québec (OPTMQ), the provincial regulatory authority since 1973.
- 4. Ontario data from 1994 to 2000 is provided by the College of Medical Laboratory Technologists of Ontario, a regulatory authority in which licensure is mandatory for practice in Ontario.
- 5. Saskatchewan data from 1996 to 2000 is provided by the Saskatchewan Society of Medical Laboratory Technologists, a regulatory authority in which licensure is mandatory for practice in Saskatchewan.
- Although the Alberta Society of Medical Laboratory Technologists (ASMLT) is a professional organization in which
  licensure is voluntary, imminent legislation for mandatory licensure has led to the ASMLT providing more representative
  statistics regarding the number of MLTs in Alberta. Consequently, Alberta data for the year 1991 and from 1994 to
  2000 is provided by the ASMLT.

Table 9.4 Number of CSMLS General Certificate Exam Candidates<sup>1</sup> of Medical Laboratory Technology, by Province/Territory of Graduation, Canada, 1991–2000

Province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	33	35	*	*	16	21	18	23	22	20
N.S.	38	42	29	30	25	27	-	-	-	-
N.B.	16	18	20	17	9	14	14	8	8	11
Que.	248	220	182	217	204	204	210	254	203	206
Ont.	273	249	224	185	154	155	151	89	55	43
Man.	28	26	36	28	22	23	20	-	-	-
Sask.	40	45	44	49	31	20	*	-	14	-
Alta.	123	121	72	69	43	34	27	19	24	29
B.C.	62	70	58	72	51	16	34	15	-	13
No formal program <sup>2</sup>			*	*	5	11	*	30	6	26
Total	861	826	682	691	560	525	488	438	332	348
									Sc	ource: HPIC/CIHI

#### Notes

- Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Includes candidates writing the national exam for the first time.
- Includes foreign-trained students deemed eligible to write the Canadian Society for Medical Laboratory Science Certification exam.

### Sources

- Figure 15 Calculated from data in Table 9.1.
- Figure 16 Calculated from data in Table 9.2.
- Table 9.1 The Canadian Society of Medical Laboratory Science, College of Medical Laboratory Technologists of Ontario, Alberta Society of Medical Laboratory Technologists, New Brunswick Society of Medical Laboratory Technologists, Saskatchewan Society of Medical Laboratory Technologists, Ordre professionnel des technologistes medicaux du Québec.
- Table 9.2 Data calculated based on Table 9.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 9.3 The Canadian Society of Medical Laboratory Science, College of Medical Laboratory Technologists of Ontario, Alberta Society of Medical Laboratory Technologists, New Brunswick Society of Medical Laboratory Technologists, Saskatchewan Society of Medical Laboratory Technologists, Ordre professionnel des technologistes medicaux du Québec.
- Table 9.4 The Canadian Society of Medical Laboratory Science.

# **Medical Radiation Technologists**

# **Description**

Medical radiation technologists (MRTs) operate diagnostic imaging, radiographic and radiation therapy equipment to produce images of body structures and administer radiation treatment for the diagnosis and treatment of injury and disease. Their duties include: operating X-ray, radiographic, ultrasound, and fluoroscopic equipment, C.T. scanners, magnetic resonance and mammography units to produce radiographs or images of body structures for the diagnosis by radiologists of disease or injury; participating in radiation treatment planning; recording and processing patient data; addressing radiation safety issues for patients and staff; collaborating as team members with other health care providers; and performing scheduled maintenance and minor emergency repairs on radiographic equipment. Medical radiation technologists are usually employed in hospitals, cancer treatment centres, clinics, and radiological laboratories. They may specialize in radiological technology, nuclear medicine, radiation therapy, or magnetic resonance disciplines.

## **Analysis**

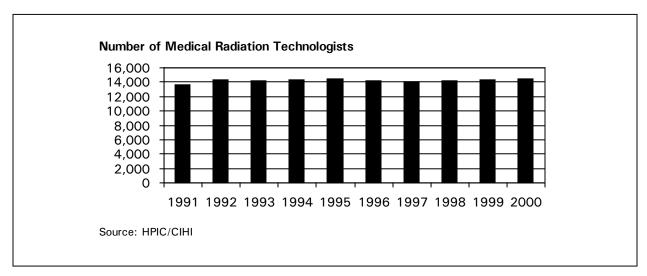


Figure 17. Number of Members of Associations for Medical Radiation Technologists, Canada, 1991–2000

As shown in Figure 17, there have been small variations from year to year in the number of members of Medical Radiation Technologists Associations from 1991 to 2000. Membership with the Canadian Association of Medical Radiation Technologists is not mandatory for practice in all provinces; therefore, the numbers presented in Table 10.1 are not fully representative of the number of MRTs in Canada.

Table 10.1 shows the breakdown of MRTs by province/territory for the years 1991 to 2000. Three provinces had significant increases in the number of registered MRTs during that time period: Newfoundland (32.3%), New Brunswick (27.4%), and British Columbia

(22.2%). A decrease in the number of registered MRTs was experienced in Nova Scotia (5.5%) and Manitoba (1.0%).

Table 10.2 shows the population for each MRT, by province, for the years 1991 to 2000.

The figures in Table 10.3 depict the number of candidates that wrote and passed the national exam, which is administered by the Canadian Association of Medical Radiation Technologists (CAMRT). Quebec is the only province that has its own exam. One of the requirements for Medical Radiation Technologists entering the workforce in Canada is to successfully complete the CAMRT exam or the Quebec exam. There is a reciprocal agreement between the CAMRT and Quebec, which allows candidates who successfully complete either exam to practice in Canada.

Table 10.1 Number of Members of Associations for Medical Radiation Technologists<sup>1</sup> by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	198	250	263	265	271	262	265	262	262	262
P.E.I.	66	64	70	65	66	66	65	71	70	68
N.S.	532	537	540	532	530	506	524	518	510	503
N.B.	368	378	410	429	446	454	447	464	468	469
Que.	3,420 <sup>2</sup>	3,470 <sup>3</sup>	3,606	3,678	3,730	3,685	3,577	3,569	3,604	3,679
Ont.	5,306	5,747	5,423	5,396	5,384	5,260	5,197	5,257	5,263	5,306
Man.	607	619	620	640	658	652	617	630	610	601
Sask.	415	404	405	427	419	419	414	420	421	440
Alta.	1,369	1,374	1,416	1,363	1,353	1,315	1,324	1,380	1,385	1,456
B.C.	1,403	1,482	1,502	1,557	1,582	1,613	1,668	1,668	1,681	1,715
Y.T. & N.W.T.										
Canada	13,684	14,325	14,255	14,352	14,439	14,232	14,098	14,239	14,274	14,499
									S	ource: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1 Membership in Québec refers to l'Ordre des techniciens en radiologie du Québec; membership for the rest of Canada refers to the Canadian Association of Medical Radiation Technologists.
- 2. Estimate.
- 3. Count was from March 31, 1992. Non-active members were excluded.

Table 10.2 Population Per Member of Associations for Medical Radiation Technologists, by Province/Territory of Residence, Canada, 1991-2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	2,926	2,324	2,195	2,155	2,082	2,128	2,076	2,073	2,065	2,053
P.E.I.	1,979	2,057	1,900	2,067	2,054	2,069	2,106	1,934	1,978	2,045
N.S.	1,724	1,717	1,714	1,743	1,754	1,845	1,786	1,809	1,845	1,873
N.B.	2,029	1,980	1,830	1,752	1,687	1,660	1,687	1,624	1,615	1,615
Que.	2,071	2,059	1,994	1,964	1,946	1,978	2,044	2,056	2,042	2,007
Ont.	1,976	1,850	1,982	2,018	2,048	2,122	2,176	2,175	2,200	2,213
Man.	1,829	1,801	1,807	1,759	1,719	1,741	1,841	1,808	1,877	1,912
Sask.	2,412	2,484	2,488	2,370	2,426	2,436	2,472	2,443	2,434	2,320
Alta.	1,909	1,931	1,898	1,996	2,040	2,133	2,165	2,125	2,147	2,076
B.C.	2,441	2,379	2,416	2,400	2,424	2,432	2,389	2,405	2,408	2,377
Y.T. & N.W.T.										
Canada	2,053	1,986	2,018	2,027	2,037	2,088	2,129	2,125	2,137	2,122
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 10.3 Number of Graduates of Medical Radiation Technology, by Province/Territory of Residence, Canada, 1991–2000

Province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	16	10	10	11	12	16	14	10	13	13
P.E.I.	6	-	6	-	6	-	*	6	-	-
N.S.	24	31	26	25	20	22	*	11	7	10
N.B.	13	18	21	23	15	13	15	10	9	22
Que.1	94	130	154	151	189	165	144	153	96	110
Ont.	210	302	249	257	223	199	244	253	218	189
Man.	28	28	29	31	27	32	28	8	23	22
Sask.	23	28	26	23	22	22	20	13	18	8
Alta.	63	68	73	62	55	64	45	40	45	52
B.C.	40	49	58	66	61	51	61	57	66	72
N.P. <sup>2</sup>	-	-	-	-	-	-	-	-	10	77
Total	517	664	652	649	630	584	583	561	505	575
									Sou	rce: HPIC/CIHI

#### Notes

- 1. Quebec data for 1991-2000 from OTRQ
- 2. N.P. denotes non-provincial candidates that may reside in the territories or out of country

## **Sources**

- Figure 17 Calculated from data in Table 10.1.
- Table 10.1 1991–1992: Canadian Association of Medical Radiation Technologists and Ordre des techniciens en radiologie du Québec;
  - 1993–2000: Canadian Association of Medical Radiation Technologists and Ordre des Technologues en Radiologie du Québec.
- Table 10.2 Data calculated based on Table 10.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 10.3 Canadian Association of Medical Radiation Technologists and Ordre des technologues en radiologie du Québec

# **Midwives**

# **Description**

Midwives provide full-course care to women and their babies during pregnancy, labour, birth and the post-natal period. They are employed in hospitals, birthing centres and private practice.

### **Analysis**

Currently, midwives are regulated in five provinces: Ontario, British Columbia, Alberta, Quebec, and Manitoba. In these regulated provinces, a midwife must be registered with the provincial regulatory body in order to practice. In provinces/territories where regulation does not exist, practising midwives may have had training and experience in foreign countries, and/or received their license in one of the regulated provinces in Canada and/or received education/training in Canada through informal means. Midwifery has been practised by unregulated personnel in Canada for many years and the data presented may undercount the number of personnel actively practising midwifery in provinces/territories where regulation requiring licensure as a condition of employment is not in place. Newfoundland is the only province that does not allow midwifery practice.

Table 11.1 illustrates the number of active midwives in Canada from 1994 to 2000. Between 1994 and 2000, the number of midwives practising in Canada grew from 132 to 358, a 171.2% increase. Some of this increase reflects regulatory changes (i.e. the institution of mandatory membership in order to practice) rather than actual increases in the number of midwives.

At the provincial level, the number of practicing midwives has been fluctuating from year to year. Of the five regulated provinces, Ontario, Quebec, Manitoba, and British Columbia have experienced consistent increases in the number of practicing midwives. From 1994 to 2000, the Ontario numbers have increased by 160.3%. Since becoming regulated in 1998, the number of active midwives in British Columbia has increased by 24.5%; in Quebec, the numbers increased by 12.7% since becoming regulated in 1999; while in Manitoba, the numbers increased by 257.1% since becoming regulated in 2000.

Meanwhile in Nova Scotia, the 1997 count may have been reduced as a result of the non-profitable unregulated climate, which strained the economic necessities of midwives and caused them to focus their attentions to other professions or to practice elsewhere. Similarly, in New Brunswick the unregulated environment may be a disincentive in attracting midwives to practise in the province.

Table 11.2 shows the number of graduates from the program at three universities in Canada for the years 1996 to 2000. The drop in the number of graduates at the three universities is due to the change from a two-year program to a three-year program. New programs were started as of the Fall of 2001 at the University of Trois-Rivieres in Quebec, and at the University of British Columbia in British Columbia.

Table 11.1 Number of Active Midwives, Canada, 1994-2000

Provinces	1994	1995	1996	1997	1998	1999	2000
Nfld.	-	-	-	-	_	-	-
P.E.I.	*	*	*	*	*	-	-
N.S.				15			*
N.B.	-	-	-	-	-	-	-
Que. <sup>1</sup>	20 7	35 <sup>7</sup>	37 <sup>7</sup>	38 <sup>7</sup>	43 7	55	62
Ont. <sup>2</sup>	68	70	87	115	136	165	177
Man. <sup>3</sup>	7 7	5 <sup>7</sup>	5 <sup>7</sup>	5 <sup>7</sup>	7 7	7 7	25
Sask.	5	6	6	6	5	*	*
Alta.4	28 <sup>7</sup>	28 7	28 <sup>7</sup>	27 <sup>7</sup>	24	23	20
B.C. <sup>5</sup>					49 <sup>8</sup>	53 <sup>8</sup>	61 <sup>8</sup>
Y.T. & N.W.T. <sup>6</sup>	*	*	*	*	*	*	6
Canada	132	148	167	210	268	312	358
						So	ource: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Quebec became regulated in 1999.
- 2. Ontario became regulated in 1994.
- 3. Manitoba became regulated in 2000.
- 4. Alberta became regulated in 1998.
- 5. British Columbia became regulated in 1998.
- 6. Includes Nunavut count.
- 7. Estimate.
- 8. Includes conditional registrants.

Table 11.2 Number of Graduates of Midwifery Programs, by School, Canada, 1996-2000

School	1996	1997	1998	1999	2000 <sup>1</sup>
Laurentian University	5	6	*	5	*
McMaster University	6	10	11	11	*
Ryerson Polytechnic University	8	6	*	12	*
Total	19	22	24	28	7
				Sc	urce: HPIC/CIHI

## Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. No graduates in this year due to a change in the length of the program in 1998 from a 2-year to a 3-year program.

## Sources

Table 11.1 Data provided by the Canadian Association of Midwives from provincial associations.

Newfoundland & Labrador Association of Midwives, Prince Edward Island Association of Midwives, Association of Nova Scotia Midwives, Midwives Association of New Brunswick, L'Ordre de sage-femmes, College of Midwives of Ontario, College of Midwives of Manitoba, Midwives Association of Saskatchewan, Midwifery Alberta Health and Wellness, College of Midwives of British Columbia.

Table 11.2 Individual universities.

# **Occupational Therapists**

## **Description**

Occupational therapists (OTs) help rehabilitate developmentally and physically disabled people by planning and carrying out individually designed programs involving them in activities such as personal care, work, education or recreation. Occupational therapists duties include: observing patients and consulting physicians' prognoses to assess patients' emotional and physical capacities; developing treatment programs which may include manual and creative arts, industrial and vocational skills and recreational activities; implementing the treatment programs with the patient; evaluating patients' progress; maintaining clinical and statistical records; advising on health risks in the workplace; participating in programs, such as pre-retirement programs, to prevent physical or mental health problems; and conducting research in occupational therapy. Occupational therapists are generally employed in health care institutions, clinics, schools, social agencies, or in private practice. Some occupational therapists specialize in working with a specific age group, or with clients who have a specific disability such as arthritis, burns or schizophrenia.

## **Analysis**

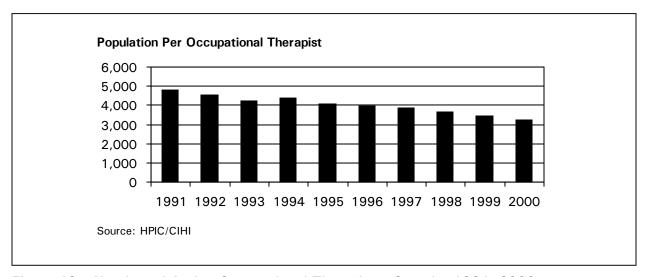


Figure 18. Number of Active Occupational Therapists, Canada, 1991–2000

Figure 18 shows the number of active occupational therapists by province for 1991 to 2000. Significant increases are attributed in part to changes in regulatory requirements in a number of provinces, resulting in an overall growth of 62.0% in Canada over this ten-year period. As shown in Table 12.1, significant increases were experienced in Newfoundland (168.6%), Saskatchewan (105.6%), Quebec (95.4%), Manitoba (88.4%), New Brunswick (87.3%), Nova Scotia (82.7%). In Canada, the number of active occupational therapists increased from 5,854 in 1991 to 9,485 in 2000.

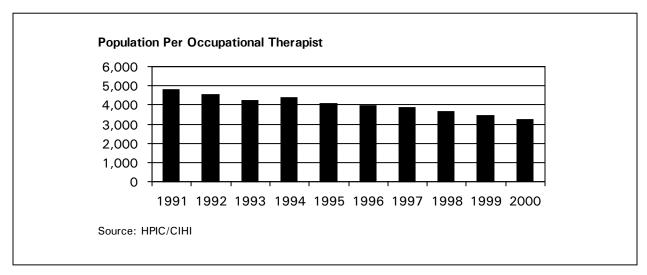


Figure 19. Population Per Active Occupational Therapist, Canada, 1991–2000

The population per active occupational therapist is shown in Figure 19 and in Table 12.2. As expected, the population per therapist has decreased significantly over this period.

The number of graduates of occupational therapy programs in Canada is presented in Table 12.3. Between 1991 and 2000, the number of graduates increased 53.8%.

Table 12.1 Number of Active Occupational Therapists by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	51	54	80	81	93	103	108	111	136	137
P.E.I.	22	26	29 <sup>2</sup>	33 <sup>2</sup>	36 <sup>2</sup>	39 <sup>2</sup>	41 <sup>2</sup>	24	30	34
N.S.	133	154	173 <sup>2</sup>	194 <sup>2</sup>	215 <sup>2</sup>	172	187 <sup>2</sup>	194	217	243
N.B.	110	128	147	162	158	153	172	186	208	206
Que.	1,340 <sup>1</sup>	1,558	1,666	1,821	1,968	2,087	2,192	2,348	2,487	2,618
Ont.	2,400 4	2,495	2,802 <sup>2</sup>	2,400 <sup>1</sup>	2,641	2,781	2,858	3,021	3,215	3,382
Man.	224	265	245	250	324	329	343	366	398	422
Sask.	108	113	127 <sup>2</sup>	124	136	146	172	177	184	222
Alta.	643 <sup>4</sup>	662	659	660	674	707	722	787	894	974
B.C. <sup>3</sup>	812	857	921	960	1,015	1,029	1,040	1,129	1,114	1,234
Y.T. <sup>3</sup>	5	5	7	5	6	10	7	9	7	6
N.W.T. <sup>3</sup>	6	7	7	8	9	8	9	10	9	7
Canada	5,854	6,324	6,863	6,698	7,275	7,564	7,851	8,362	8,899	9,485
									Soi	urce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Estimate.
- 2. CIHI estimate.
- 3. Data provided by the Canadian Association of Occupational Therapists for the years 1991-1997.
- 4. Data provided by the Canadian Association of Occupational Therapists.

Table 12.2 Population Per Active Occupational Therapist by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	11,361	10,759	7,218	7,050	6,068	5,412	5,094	4,893	3,979	3,926
P.E.I.	5,937	5,064	4,553	4,104	3,765	3,492	3,354	5,721	4,614	4,091
N.S.	6,897	5,987	5,351	4,780	4,324	5,426	5,004	4,831	4,336	3,878
N.B.	6,789	5,847	5,104	4,640	4,762	4,925	4,385	4,051	3,633	3,676
Que.	5,286	4,585	4,316	3,968	3,689	3,493	3,336	3,124	2,960	2,820
Ont.	4,369	4,261	3,836	4,537	4,176	4,014	3,958	3,785	3,601	3,472
Man.	4,957	4,207	4,572	4,503	3,490	3,450	3,312	3,113	2,876	2,723
Sask.	9,270	8,881	7,939	8,161	7,473	6,990	5,950	5,798	5,570	4,598
Alta.	4,064	4,009	4,078	4,123	4,094	3,968	3,970	3,727	3,326	3,104
B.C.	4,217	4,114	3,940	3,893	3,778	3,813	3,832	3,553	3,634	3,304
Y.T.	5,869	6,038	4,285	6,059	5,248	3,212	4,562	3,455	4,393	5,032
N.W.T.	10,273	8,979	9,205	8,248	7,440	8,431	7,507	6,773	7,656	10,012
Canada	4,814	4,514	4,206	4,358	4,056	3,942	3,836	3,630	3,439	3,255
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 12.3 Number of Graduates of B.Sc. Programs for Occupational Therapy, by Year and School of Graduation, Canada, 1991–2000

	School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
N.S.											
	Dalhousie University	30	30	32	35	35	35	36	36	44	50
Que.		136	166	173	191	200	194	200	130	176	165
	McGill University	44	46	51	64	75	56	69	54	56	47
	Université de Montréal	53	73	63	73	73	74	75	64	69	65
	Université Laval	39	47	59	54	52	64	56	12	51	53
Ont.		118	109	166	201	215	233	267	233	223	233
	University of Ottawa			18	32	22	28	20	33	21	33
	Queen's University	16	23	33	41	32	38	36	35	37	36
	University of Toronto	70	52	51	49	63	67	104	63	63	62
	McMaster University			30	31	56	54	64	58	57	59
	University of Western Ontario	32	34	34	48	42	46	43	44	45	43
Man.											
	University of Manitoba	20	27	30	26	31	30	29	29	31	30
Alta.											
	University of Alberta	46	48	64 <sup>1</sup>	80 <sup>2</sup>	75	75	77	70	76	69
B.C.											
	University of British Columbia	29	33	30	34	34	37	31	34	39	36
	Total	379	413	495	567	590	604	640	532	589	583
							1	1	1	Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Increased student intake quota.
- 2. Saskatchewan Agreement quota increased; figure also includes students under the CIDA/Indonesian Grant.

### Sources

- Figure 18 Calculated from data in Table 12.1.
- Figure 19 Calculated from data in Table 12.2.
- Table 12.1

  1991–2000: Data supplied by provincial associations (Newfoundland and Labrador Occupational Therapy Board, PEI Occupational Therapist Registration Board, College of Occupational Therapists of Nova Scotia, New Brunswick Association of Occupational Therapists, Ordre des ergothérapeutes du Québec, College of Occupational Therapists of Ontario, Association of Occupational Therapists of Manitoba, Saskatchewan Society of Occupational Therapists, Alberta Association of Registered Occupational Therapists, British Columbia Society of Occupational Therapists, Association of Yukon Occupational Therapists, and NWT Occupational Therapists Association) and the Canadian Association of Occupational Therapists.
- Table 12.2 Data calculated based on Table 12.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 12.3 Data provided by individual universities (Dalhousie University, McGill University, Université de Montréal, Université Laval, University of Ottawa, Queen's University, University of Toronto, McMaster University, University of Western Ontario, University of Manitoba, University of Alberta, University of British Columbia).

# **Optometrists**

## **Description**

Optometrists examine patients' eyes and prescribe treatment when there is a problem. The duties of an optometrist include: diagnosing the presence of vision problems, eye disease or other abnormal conditions by using special tests and instruments; prescribing treatment (excluding surgery) to conserve, improve and correct vision and other ocular disorders; prescribing and fitting eyeglasses and contact lenses; counselling patients on contact lens use and care, visual hygiene, lighting arrangements, working distances and safety factors; and referring patients to ophthalmologists or other physicians and surgeons when appropriate (optometrists may prescribe eye medications to treat eye diseases in provinces where there is enabling legislation). Optometrists work in private practice and in clinics and community health centres. Many optometrists dispense the lenses they prescribe to patients. Some optometrists specialize in areas such as in fitting visual aids for people who are partially blind, fitting contact lenses or correcting special vision problems.

## **Analysis**

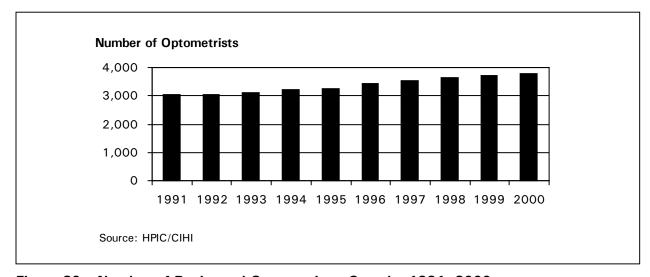


Figure 20. Number of Registered Optometrists, Canada, 1991–2000

Figure 20 illustrates the number of registered optometrists in Canada from 1991 to 2000. During this ten-year period the number increased 23.7%, from 3,057 in 1991 to 3,780 in 2000. Data in Table 13.1 indicate the most significant provincial/territorial increases were experienced in British Columbia and Alberta, where the number of registered optometrists increased by 57.2% and 42.6%, respectively.

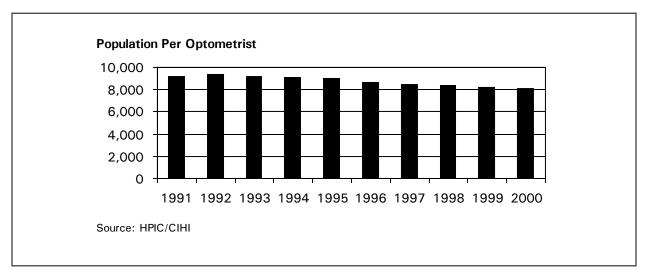


Figure 21. Population Per Registered Optometrist, Canada, 1991–2000

The population per registered optometrist is shown in Figure 21 and in Table 13.2. There is a slight reduction in the population per optometrist across Canada, but the ratio varies between provinces and territories.

Table 13.3 shows the number of active registered optometrists by province/territory and by year. From 1991 to 2000, the number of active registered optometrists increased 25.0% in Canada.

Table 13.4 shows the number of graduates from the two existing optometry programs in Canada for the years 1991 to 2000. The number of graduates has fluctuated slightly each year, although 1993 produced the largest number of graduates (113) over the ten year period.

Table 13.1 Number of Registered Optometrists by Province/Territory of Registration, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	35	37	36	36	39	40	37	35	33	35
P.E.I.	10	10	11	11	11	11	12	*	*	*
N.S.	77	80	67	66	66	68	70	75	78	78
N.B.	91	95	97 <sup>1</sup>	99 <sup>1</sup>	100 <sup>1</sup>	102 <sup>1</sup>	105 <sup>1</sup>	101	101	91
Que.	1,111	1,065	1,124	1,159	1,170	1,194	1,206	1,223	1,231	1,245
Ont.	980	1,006	1,026	1,043	1,046	1,103	1,165	1,194	1,240	1,268
Man.	86	90	89	89	91	89	87	86	91	92
Sask.	101	98	98	101	106	110	112	111	111	109
Alta.	249	228	263	273	288	305	309	323	333	355
B.C.	311	343	319	333	341	416	446	465	476	489
Y.T.	*	*						*	*	*
N.W.T.	*	*								
Canada	3,057	3,056	3,130	3,210	3,258	3,438	3,549	3,632	3,714	3,780
									So	urce: HPIC/CIHI

- .. Information not available
- Amount suppressed to protect confidentiality
- Nil or zero
- 1. CIHI estimate.

Table 13.2 Population Per Registered Optometrist by Province/Territory of Registration, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	16,555	15,702	16,039	15,862	14,469	13,936	14,868	15,518	16,397	15,366
P.E.I.	13,060	13,168	12,088	12,217	12,321	12,412	11,405	*	*	*
N.S.	11,914	11,525	13,814	14,046	14,086	13,725	13,368	12,497	12,064	12,081
N.B.	8,206	7,879	7,746	7,615	7,493	7,388	7,177	7,490	7,456	8,322
Que.	6,376	6,708	6,397	6,234	6,204	6,105	6,064	5,999	5,980	5,930
Ont.	10,700	10,567	10,478	10,441	10,544	10,121	9,709	9,577	9,336	9,260
Man.	12,910	12,387	12,585	12,650	12,426	12,755	13,059	13,247	12,579	12,492
Sask.	9,912	10,240	10,283	10,019	9,588	9,278	9,137	9,246	9,233	9,364
Alta.	10,494	11,640	10,218	9,967	9,581	9,198	9,277	9,081	8,930	8,515
B.C.	11,010	10,279	11,376	11,224	11,245	9,432	8,936	8,627	8,505	8,338
Y.T.	*	*						*	*	*
N.W.T.	*	*								
Canada	9,219	9,342	9,193	9,065	9,026	8,644	8,456	8,339	8,221	8,149
									Soi	urce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 13.3 Number of Active Registered Optometrists by Province/Territory of Practice, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	30	33	32	32	34	34	36	35	33	33
P.E.I.	10	10	11	11	11	11	10	*	*	*
N.S.	65	68	67	66	66	68	68	69	77	70
N.B.	77	79	80 <sup>1</sup>	<i>81</i> <sup>1</sup>	83 <sup>1</sup>	85 <sup>1</sup>	88	89	92	92
Que.	1,082	1,036	1,048 <sup>1</sup>	1,067 <sup>1</sup>	1,086 <sup>1</sup>	1,119	1,057	1,176	1,186	1,198
Ont.	836	857	885	914	941	1,001	1,050	1,082	1,130	1,178
Man.	79	82	80	79	80	81	80	83	89	89
Sask.	101	98	98	101	106	110	108	111	111	109
Alta.	219	216	219 <sup>1</sup>	222 <sup>1</sup>	226 <sup>1</sup>	232 <sup>1</sup>	261	273	303	310
B.C.	239	250	253 <sup>1</sup>	257 <sup>1</sup>	262 <sup>1</sup>	298	316	335	355	338
Y.T.	*	*						*	*	*
N.W.T.	*	*								
Canada	2,744	2,734	2,773	2,831	2,896	3,039	3,074	3,267	3,392	3,431
									Soi	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. CIHI estimate.

Table 13.4 Number of Graduates of Optometry Programs, by Year and School of Graduation, Canada, 1991–2000

School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Université de Montréal										
B.Sc. (O.D.)	35	44	47	41	40	40	36	39	39	39
M.Sc.			-	-	*	*	*	*	*	*
University of Waterloo										
B.Sc. (O.D.)	60	60	61	60	60	60	58	61	59	56
M.Sc.			*	*	*	*	*	5	*	*
Doctorate			*	*	-	*	*	*	-	*
Total	95	104	113	108	110	105	97	109	108	104
									So	urce: HPIC/CIHI

## Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

## Sources

- Figure 20 Calculated from data in Table 13.1.
- Figure 21 Calculated from data in Table 13.2.
- Table 13.1 1991–1992: Canadian Association of Optometrists, Governments of the Yukon and Northwest Territories.

1993–1997: data supplied by provincial organizations (Newfoundland Association of Optometrists, PEI Optometrists Association, Nova Scotia Association of Optometrists, Ordre des optométristes du Québec, Ontario Association of Optometrists, Manitoba Association of Optometrists, the Saskatchewan Association of Optometrists, Alberta College of Optometrists, and Board of Examiners in Optometry-British Columbia).

1998–2000: Data provided by the Canadian Association of Optometrists.

- Table 13.2 Data calculated based on Table 13.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 13.3 1991–1992: Canadian Association of Optometrists, Governments of the Yukon and Northwest Territories.

1993–2000: data supplied by provincial organizations (Newfoundland Association of Optometrists, PEI Optometrists Association, Nova Scotia Association of Optometrists, New Brunswick Association of Optometrists, Association des optométristes du Québec, Ontario Association of Optometrists, Manitoba Association of Optometrists, the Saskatchewan Association of Optometrists, Alberta College of Optometrists, and Board of Examiners in Optometry—British Columbia); Ordre des optométristes du Québec.

Table 13.4 1991–1997: Data provided by Statistics Canada.

1998–2000: Data provided by the Université de Montréal and University of Waterloo.

## **Pharmacists**

## **Description**

Pharmacists prepare and dispense prescription drugs, ensure proper storage and handling of drugs, provide advice to customers and medical personnel on the administration, uses and effects of prescription and non-prescription drugs, check prescriptions for overdoses and drug interactions and keep records of dispensed drugs and health care services.

Duties of a pharmacist can include: checking prescriptions for proper dosage; compounding prescribed pharmaceutical products; dispensing prescribed pharmaceuticals to customers or to other health care professionals; advising customers and other health care professionals on the administration, uses and effects of the medication, drug incompatibilities and contra-indications; maintaining medication profiles of customers including registry of poisons and narcotic and controlled drugs; ensuring proper storage of vaccines, serums, biologicals and other pharmaceutical products to prevent deterioration; ordering and maintaining a stock of pharmaceutical supplies; advising customers on selection and use of non-prescription medication; participating in basic research work for the development of new drugs; formulating new drug products developed by medical researchers; testing new drug products; co-ordinating clinical investigations of new drugs; controlling the quality of drug products during production; developing informational materials concerning the uses and properties of particular drugs; and evaluating labeling, packaging and advertising of drug products.

Pharmacists generally specialize as community, hospital or industrial pharmacists. Community pharmacists own or work in community pharmacies, while hospital pharmacists work as staff pharmacists or as part of a team of health care professionals serving individual patients. Industrial pharmacists participate in the research, development, manufacturing, and sales of pharmaceutical products.

## **Analysis**

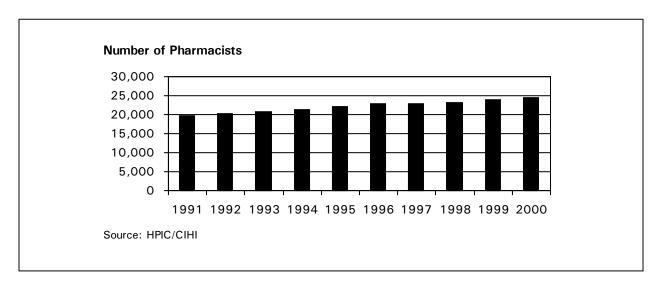


Figure 22. Number of Licensed Pharmacists, Excluding Non-Practicing and Honorary Pharmacists and Certified Clerks, Canada, 1991–2000

The number of licensed pharmacists in Canada, excluding non-practicing and honorary pharmacists and certified clerks, is illustrated in Figure 22.

Over this ten-year period the number of licensed practicing pharmacists grew by 23.8% in Canada. All provinces and territories, with the exception of Manitoba, Saskatchewan and the Northwest Territories experienced greater than 19% increase over the period from 1991 to 2000. Table 14.1 shows that the largest proportional increases occurred in Prince Edward Island (40.0%).

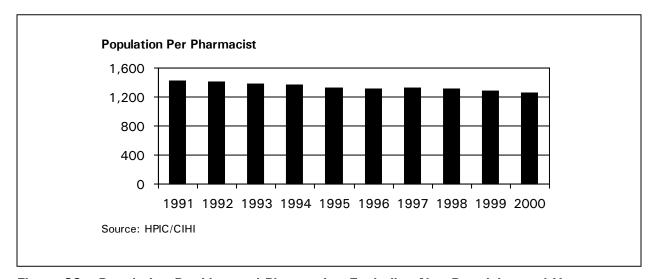


Figure 23. Population Per Licensed Pharmacist, Excluding Non-Practicing and Honorary Pharmacists and Certified Clerks, Canada, 1991–2000

The population per licensed practicing pharmacist is illustrated in Figure 23 and in Table 14.2. The population per licensed pharmacist rate has steadily decreased in all provinces and territories since 1991.

Table 14.3 shows the number of licensed pharmacists including those who are non-practicing, honorary members and certified clerks. The percent increase in total licensed pharmacists is similar in pattern to the increase witnessed in Table 14.1 with the exception of Manitoba, British Columbia and the Northwest Territories which observed decreases in total licensure between 1991 and 2000. The non-practicing, honorary and certified component of total licensure counts introduces considerable year-over-year variability.

The number of graduates of pharmacy programs in Canada is shown in Table 14.4. Between 1991 and 2000, there was a 6.1% increase in the number of graduates of Canadian schools of pharmacy. Although gender breakdown of pharmacy graduates was not available in 2000, from 1991 to 1999 (for the years where complete graduate data are available) approximately 60% of graduates of Canadian schools of pharmacy are female.

Table 14.1 Number of Licensed Pharmacists, Excluding Non-Practicing and Honorary Pharmacists and Certified Clerks, by Province/Territory of Practice, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	414	444	455	445	484	483	489	491	534	514
P.E.I.	85	97	104	101	112	111	113	109	112	119
N.S.	707	737	740	761	788	828	818	907	932	940
N.B.	430	435	493	477	478	511	533	539	564	570
Que.	4,742	4,586	4,718	4,860	5,342	5,387	5,148	5,096	5,457	5,670
Ont.	6,772	7,136	7,345	7,531	7,666	7,852	7,928	8,070	8,238	8,490
Man.	819	826	858	846	858	914	906	875	940	899
Sask.	975	980	983	1,013	1,043	1,049	1,080	1,081	1,100	1,108
Alta.	2,354	2,516	2,515	2,538	2,545	2,609	2,686	2,784	2,816	2,904
B.C.	2,473	2,548	2,645	2,747	2,812	2,946	3,032	3,147	3,223	3,248
Y.T.	13	12	26	37	27	30	30	20	22	26
N.W.T.	26	28	19	24	42	47	36	45	47	30
Canada	19,810	20,345	20,901	21,380	22,197	22,767	22,799	23,164	23,985	24,518
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 14.2 Population Per Licensed Pharmacist, Excluding Non-Practicing and Honorary Pharmacists and Certified Clerks, by Province/Territory of Practice, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	1,400	1,308	1,269	1,283	1,166	1,154	1,125	1,106	1,013	1,046
P.E.I.	1,537	1,357	1,279	1,331	1,210	1,230	1,211	1,260	1,236	1,169
N.S.	1,298	1,251	1,251	1,218	1,180	1,127	1,144	1,033	1,010	1,002
N.B.	1,737	1,721	1,522	1,576	1,574	1,475	1,415	1,398	1,340	1,329
Que.	1,494	1,558	1,524	1,487	1,359	1,353	1,421	1,440	1,349	1,302
Ont.	1,548	1,490	1,464	1,446	1,439	1,422	1,427	1,417	1,405	1,383
Man.	1,356	1,350	1,305	1,331	1,318	1,242	1,254	1,302	1,218	1,278
Sask.	1,027	1,024	1,025	999	974	973	948	949	932	921
Alta.	1,110	1,055	1,069	1,072	1,084	1,075	1,067	1,054	1,056	1,041
B.C.	1,385	1,384	1,372	1,361	1,364	1,332	1,314	1,275	1,256	1,255
Y.T.	2,257	2,516	1,154	819	1,166	1,071	1,064	1,555	1,398	1,161
N.W.T.	2,371	2,245	3,391	2,749	1,594	1,435	1,877	1,505	1,466	2,336
Canada	1,423	1,403	1,381	1,365	1,329	1,310	1,321	1,310	1,276	1,259
									Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality

- Nil or zero

Table 14.3 Number of Licensed Pharmacists, Including Non-Practicing and Honorary Pharmacists and Certified Clerks, by Province/Territory of Practice, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	458	476	491	486	529	526	524	530	572	546
P.E.I.	95	97	107	104	114	114	115	115	117	125
N.S.	871	788	849	874	899	902	844	907	984	970
N.B.	545	498	596	555	549	578	570	573	604	618
Que.	4,860	5,265	4,988	5,222	5,716	5,761	5,631	5,096	5,852	5,988
Ont.	7,854	8,083	8,169	8,326	8,479	8,543	8,615	8,727	8,884	9,113
Man.	1,031	1,032	1,075	1,088	1,022	1,100	1,093	875	1,101	899
Sask.	1,354	1,369	1,367	1,413	1,421	1,428	1,506	1,128	1,127	1,506
Alta.	2,940	3,049	3,060	3,125	3,134	3,132	3,148	3,193	3,182	3,255
B.C.	3,312	3,392	3,552	3,850	3,987	3,960	4,451	3,147	3,971	3,248
Y.T.	13	12	26	37	27	30	30	29	22	26
N.W.T.	30	32	19	24	49	47	36	45	47	30
Canada	23,363	24,093	24,299	25,104	25,926	26,121	26,563	24,365	26,463	26,324
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 14.4 Number of Degree Graduates of Schools for Pharmacy, by Gender, Year, and School of Graduation, Canada, 1991–2000

School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 <sup>3</sup>
Memorial University	33	31	31	32	33	29	34	31	36	38
Males	11	12	12	12	17	13	17	13	21	
Females	22	19	19	20	16	16	17	18	15	
Dalhousie University	63	63	63	60	67	63	69	62	62	66
Males	21	18	18	15	23	19	19	21	20	
Females	42	45	45	45	44	44	50	41	42	
Université Laval	97	98	98	94	96	114	120	103	121	145
Males	26	30	30	25	33	37	37	28	24	
Females	71	68	68	69	63	77	83	75	74	
Université de Montréal	125	101	101	112	105	136	107	115	123	149
Males	37	29	29	31	31	53	37	39	45	
Females	88	72	72	81	74	83	70	76	78	
University of Toronto <sup>1</sup>	158	149	149	146	159	161	_ 2	129	109	122
Males	65	57	57	57	65	65	-	38	33	
Females	93	92	92	89	94	96	-	91	76	
University of Manitoba	49	46	46	46	44	28	49	49	46	42
Males	26	19	19	22	24	8	27	20	16	
Females	23	27	27	24	20	20	22	29	30	
University of Saskatchewan	68	74	74	67	73	76	78	74	71	74
Males	31	31	31	27	37	31	23	21	27	
Females	37	43	43	40	36	45	55	53	44	
University of Alberta 1	115	102	102	105	102	101	98	96	99	104
Males	54	46	46	59	47	42	31	35	28	
Females	61	56	56	46	55	59	67	61	71	
University of British Columbia 1	118	107	107	102	108	119	119	122	130	136
Males	50	58	58	52	53	48	41	50	49	
Females	68	49	49	50	55	71	78	72	81	
Total	826	771	771	764	787	827	674	781	797	876
									Sou	rce: HPIC/CIHI

- . Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Includes graduates from Master's degree program.
- 2. No graduating class of 1997 due to a change in program length.
- 3. Distribution by gender not available in 2000.

## Sources

- Figure 22 Calculated from data in Table 13.1.
- Figure 23 Calculated from data in Table 13.2.
- Table 14.1 1991–1992: Canadian Pharmaceutical Association, Government of the Yukon, Government of the Northwest Territories.
  - 1993-1994: Canadian Pharmaceutical Association.
  - 1995–2000: National Association of Pharmacy Regulatory Authorities.
- Table 14.2 Data calculated based on Table 13.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 14.3 1991–1992: Canadian Pharmaceutical Association, Government of the Yukon, Government of the Northwest Territories.
  - 1993-1994: Canadian Pharmaceutical Association.
  - 1995–2000: National Association of Pharmacy Regulatory Authorities.
- Table 14.4 The Pharmacy Examining Board of Canada.

# **Physicians**

## **Description**

Physicians prevent and treat human illness and injury through surgery, diagnosis, prescription and therapy. The general duties of physicians include: examining patients, ordering laboratory tests, X-rays and other diagnostic procedures and consulting with other medical practitioners to evaluate patients' health; prescribing and administering medications and treatments; and advising patients on health care. Physicians train specifically as family physicians or as specialists in laboratory, surgical or medical specialties and activities will vary depending on the type of practice. Many physicians work in private practice, although others are employed in hospitals, community health centres and clinics, laboratories, or government.

## **Analysis**

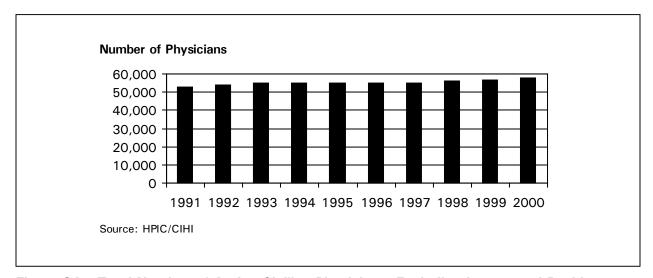


Figure 24. Total Number of Active Civilian Physicians, Excluding Interns and Residents, Canada, 1991–2000

The number of active civilian physicians in Canada, excluding interns and residents, is illustrated in Figure 24 and Table 15.1. The total number of active civilian physicians in Canada has increased from 52,726 in 1991 to 57,803 in 2000, an increase of 9.6%.

All provinces experienced an increase in the number of physicians over this ten-year period, with largest proportional increases occurring in British Columbia (19.1%), Alberta (15.4%) and New Brunswick (15.4%).

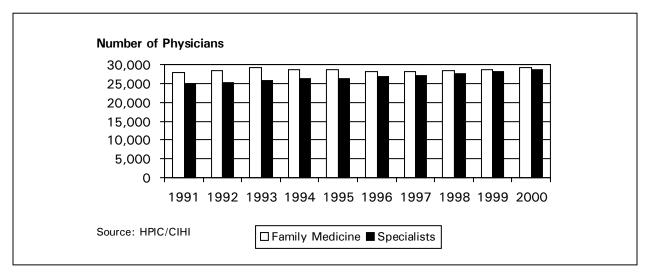


Figure 25. Number of Active Civilian Physicians, Excluding Interns and Residents, by Physician Type, Canada, 1991–2000

A breakdown of physician type (family medicine or specialist) is illustrated in Figure 25 and in Tables 15.4 and 15.5, respectively.

The number of family medicine physicians in Canada increased 4.5% between 1991 (27,868) and 2000 (29,113). However, the number of family medicine physicians began to decline in 1993, not increasing again (relative to the previous year) until 1998. Conversely, the number of specialists in Canada rose steadily over this ten-year period, from 24,858 in 1991 to 28,690 in 2000, an increase of 15.4%. The increase in the number of specialists, coupled with the recent decline in the number of family medicine physicians, has led to an approximate fifty-fifty ratio between the number of family physicians and the number of specialists practicing in Canada.

The total number of active civilian physicians, *including* interns and residents, is shown in Table 15.3. Due to the reduction of a number of training positions available for interns and residents in the early 1990s in Canada, the 8.5% growth shown in Table 15.3 is less than the growth of Table 15.1, which excludes interns and residents from the totals.

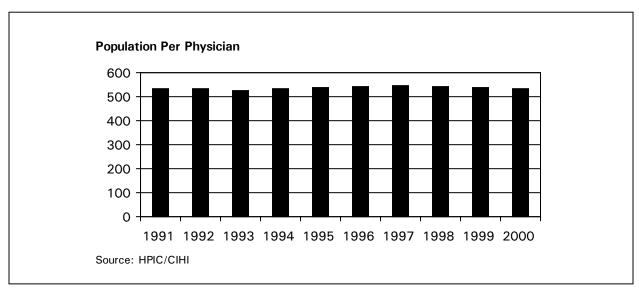


Figure 26. Population Per Active Civilian Physician, Excluding Interns and Residents, by Physician Type, Canada, 1991–2000

Figure 26 and Table 15.2 illustrate the population per active civilian physician, excluding interns and residents. From 1993 to 1997, the growth rate of the Canadian population exceeded the growth rate in the total number of Canadian physicians; consequently, the population per active civilian physician rose each year between 1993 and 1997. However, between 1997 and 2000, this trend appears to be reversing with the growth rate in the total number of Canadian physicians exceeding the growth rate in the population. As a result, by 2000, the population per physician ratio has fallen to a level similar to that found in 1991.

The number and percent distribution of active civilian physicians are identified by place of M.D. graduation in Table 15.6. The percentage of physicians who are graduates of foreign universities has declined for both family physicians and for specialists. Whereas in 1991 the percentage of foreign-educated physicians was 25.8%, this percentage has decreased to 22.9% in 2000.

The number of graduates from Canadian medical schools is shown in Table 15.7. Decisions made in the early 1990s to reduce the number of positions in medical schools has contributed to a decrease in the number graduates in the late 1990s. In 2000 there were 11.4% fewer medical graduates than in 1991.

Table 15.1 Total Number of Active Civilian Physicians<sup>1</sup> Excluding Interns and Residents, by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	909	890	969	968	940	924	931	926	925	927
P.E.I.	174	173	179	178	176	170	165	175	180	178
N.S.	1,759	1,758	1,856	1,774	1,731	1,744	1,763	1,828	1,868	1,898
N.B.	1,008	1,021	1,054	1,074	1,107	1,121	1,126	1,151	1,162	1,153
Que.	14,223	14,518	14,826	15,002	15,151	15,232	15,306	15,472	15,582	15,770
Ont.	20,056	20,403	20,738	20,525	20,407	20,209	20,194	20,460	20,701	21,176
Man.	1,992	1,983	2,007	1,973	1,978	1,968	2,008	2,014	2,049	2,082
Sask.	1,503	1,485	1,499	1,541	1,524	1,472	1,472	1,529	1,568	1,567
Alta.	4,344	4,428	4,576	4,546	4,481	4,468	4,509	4,755	4,962	5,014
B.C.	6,670	6,940	7,231	7,258	7,338	7,502	7,617	7,746	7,812	7,943
Y.T.	38	38	39	42	44	47	50	45	41	41
N.W.T.	50	61	61	63	63	61	66	62	64	54
Canada	52,726	53,698	55,035	54,944	54,940	54,918	55,207	56,163	56,914	57,803
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. The data reflect figures as of December 31, 2000 and include physicians in clinical and non-clinical practice. Data exclude interns and residents and a small number of physicians who are not licensed to provide clinical practice and who have requested to the Southam Medical Group that their data not be published. As a result of enhancements in the methodology used to compile the data for this publication, historical figures presented in the report will differ slightly from figures previously published (by approximately 0.3%, depending on year). In addition, there may be differences in data published in CIHI reports on physician counts and other sources due to variations in methodologies used to define physicians and reporting periods.

Table 15.2 Population Per Active Civilian Physician Excluding Interns and Residents, by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	637	653	596	590	600	603	591	587	585	580
P.E.I.	751	761	743	755	770	803	829	785	769	781
N.S.	522	524	499	523	537	535	531	513	504	496
N.B.	741	733	712	700	680	672	670	655	650	657
Que.	498	492	485	482	479	479	478	474	472	468
Ont.	523	521	518	531	540	552	560	559	559	554
Man.	557	562	558	571	572	577	566	566	559	552
Sask.	666	676	672	657	667	693	695	671	654	651
Alta.	602	599	587	599	616	628	636	617	599	603
B.C.	513	508	502	515	523	523	523	518	518	513
Y.T.	772	794	769	721	716	683	639	691	750	736
N.W.T.	1,233	1,030	1,056	1,047	1,063	1,106	1,024	1,092	1,077	1,298
Canada	535	532	524	531	537	543	545	540	538	534
									Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality

- Nil or zero

Table 15.3 Total Number of Active Civilian Physicians Including Interns and Residents, by Province/Territory, Canada, 1991–2000<sup>1</sup>

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	1,089	1,084	1,163	1,168	1,148	1,133	1,145	1,125	1,117	1,101
P.E.I.	174	173	179	178	176	170	165	175	180	178
N.S.	2,114 <sup>2</sup>	2,110 <sup>2</sup>	2,208	2,127	2,126	2,093	2,113	2,172	2,226	2,268
N.B.	1,008	1,021	1,054	1,074	1,107	1,121	1,126	1,151	1,162	1,153
Que.	16,195	16,452	16,784	17,015	17,227	17,322	17,306	17,542	17,641	17,761
Ont.	22,497	22,926	23,240	23,042	22,917	22,702	22,620	22,854	23,071	23,525
Man.	2,329	2,326	2,333	2,297	2,311	2,281	2,314	2,328	2,358	2,393
Sask.	1,713	1,703	1,692	1,748	1,734	1,679	1,680	1,734	1,777	1,773
Alta.	5,010	5,097	5,268	5,248	5,203	5,199	5,228	5,481	5,693	5,749
B.C.	7,172	7,428	7,736	7,773	7,864	8,030	8,135	8,268	8,321	8,458
Y.T.	38	38	39	42	44	47	50	45	41	41
N.W.T.	50	61	61	63	63	61	66	62	64	54
Canada	59,389	60,419	61,757	61,775	61,920	61,838	61,948	62,937	63,651	64,454
									Sou	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. The data reflect figures as of December 31, 2000 and include physicians in clinical and non-clinical practice. Unless otherwise noted, data exclude residents and a small number of physicians who are not licensed to provide clinical practice and who have requested to the Southam Medical Group that their data not be published. As a result of enhancements in the methodology used to compile the data for this publication, historical figures presented in the report will differ slightly from figures previously published (by approximately 0.3%, depending on year). In addition, there may be differences in data published in CIHI reports on physician counts and other sources due to variations in methodologies used to define physicians and reporting periods.
- 2. Includes interns and residents of New Brunswick and Prince Edward Island.

Table 15.4 Total Number of Active Civilian Family Medicine Physicians<sup>1</sup> Excluding Interns and Residents, by Province/Territory, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	589	561	640	635	606	565	568	560	556	571
P.E.I.	104	105	107	105	100	99	95	100	103	105
N.S.	981	969	1,043	958	930	923	923	947	955	952
N.B.	600	605	632	639	660	662	657	675	686	679
Que.	7,016	7,211	7,413	7,414	7,524	7,553	7,554	7,679	7,745	7,821
Ont.	10,365	10,546	10,734	10,329	10,208	9,900	9,769	9,796	9,795	9,974
Man.	1,063	1,041	1,045	1,007	1,010	990	1,002	1,011	1,044	1,062
Sask.	946	930	945	948	931	878	868	896	944	932
Alta.	2,413	2,459	2,558	2,503	2,452	2,397	2,375	2,511	2,620	2,608
B.C.	3,717	3,895	4,100	4,043	4,080	4,143	4,186	4,258	4,256	4,339
Y.T.	34	34	36	37	39	40	43	39	35	35
N.W.T.	40	50	49	50	48	49	52	47	45	35
Canada	27,868	28,406	29,302	28,668	28,588	28,199	28,092	28,519	28,784	29,113
									Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality

- Nil or zero

Includes general practice, family medicine and emergency family medicine. Data exclude interns and residents and a small number of physicians who are not licensed to provide clinical practice and who have requested to the Southam Medical Group that their data not be published. Unless otherwise noted, data exclude residents and a small number of physicians who are not licensed to provide clinical practice and who have requested to the Southam Medical Group that their data not be published. As a result of enhancements in the methodology used to compile the data for this publication, historical figures presented in the report will differ slightly from figures previously published (by approximately 0.3%, depending on year). In addition, there may be differences in data published in CIHI reports on physician counts and other sources due to variations in methodologies used to define physicians and reporting periods.

Table 15.5 Total Number of Active Civilian Specialists Excluding Interns and Residents<sup>1</sup>, by Province/Territory, Canada, 1991-2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	320	329	329	333	334	359	363	366	369	356
P.E.I.	70	68	72	73	76	71	70	75	77	73
N.S.	778	789	813	816	801	821	840	881	913	946
N.B.	408	416	422	435	447	459	469	476	476	474
Que.	7,207	7,307	7,413	7,588	7,627	7,679	7,752	7,793	7,837	7,949
Ont.	9,691	9,857	10,004	10,196	10,199	10,309	10,425	10,664	10,906	11,202
Man.	929	942	962	966	968	978	1,006	1,003	1,005	1,020
Sask.	557	555	554	593	593	594	604	633	624	635
Alta.	1,931	1,969	2,018	2,043	2,029	2,071	2,134	2,244	2,342	2,406
B.C.	2,953	3,045	3,131	3,215	3,258	3,359	3,431	3,488	3,556	3,604
Y.T.	4	4	3	5	5	7	7	6	6	6
N.W.T.	10	11	12	13	15	12	14	15	19	19
Canada	24,858	25,292	25,733	26,276	26,352	26,719	27,115	27,644	28,130	28,690
									Sou	rce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Specialty classification based on most recent certified specialty. The data reflect figures as of December 31, 2000 and include physicians in clinical and non-clinical practice. Data exclude interns and residents and a small number of physicians who are not licensed to provide clinical practice and who have requested to the Southam Medical Group that their data not be published. As a result of enhancements in the methodology used to compile the data for this publication, suppression of data to protect confidentiality is not required; however, historical figures presented in the report will differ slightly from figures previously published (by approximately 0.3%, depending on year). In addition, there may be differences in data published in CIHI reports on physician counts and other sources due to variations in methodologies used to define physicians and reporting periods.

Table 15.6 Counts and Percent Distribution of Active Civilian Physicians<sup>1</sup>, Excluding Interns and Residents, by Place of M.D. Graduation, Canada, 1991–2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Family Medicine Physicians <sup>2</sup>	27,868	28,406	29,302	28,668	28,588	28,199	28,092	28,519	28,784	29,113
Grads of Canadian Universities	21,054	21,663	22,448	22,038	22,112	21,861	21,826	22,164	22,363	22,593
Grads of Foreign Universities	6,773	6,716	6,829	6,609	6,461	6,321	6,226	6,291	6,314	6,348
Unknown Place of Graduation	41	27	25	21	15	17	40	64	107	172
Specialists <sup>3</sup>	24,858	25,292	25,733	26,276	26,352	26,719	27,115	27,644	28,130	28,690
Grads of Canadian Universities	18,028	18,397	18,779	19,219	19,372	19,724	20,121	20,666	21,205	21,773
Grads of Foreign Universities	6,830	6,895	6,954	7,056	6,979	6,995	6,994	6,977	6,924	6,912
Unknown Place of Graduation	-	-	-	1	1	-	-	1	1	5
Total Active Physicians	52,726	53,698	55,035	54,944	54,940	54,918	55,207	56,163	56,914	57,803
Grads of Canadian Universities	39,082	40,060	41,227	41,257	41,484	41,585	41,947	42,830	43,568	44,366
Grads of Foreign Universities	13,603	13,611	13,783	13,665	13,440	13,316	13,220	13,268	13,238	13,260
Unknown Place of Graduation	41	27	25	22	16	17	40	65	108	177
Family Madiaina Dhamiaina 2	52.9	52.9	53.2	52.2	52.0	51.3	50.9	50.8	50.6	E0.4
Family Medicine Physicians <sup>2</sup>	39.9		40.8				39.5	39.5	39.3	<b>50.4</b> 39.1
Grads of Canadian Universities	12.8	40.3 12.5	40.8 12.4	40.1 12.0	40.2 11.8	39.8 11.5	39.5 11.3	39.5 11.2	39.3 11.1	11.0
Grads of Foreign Universities Unknown Place of Graduation	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3
									-	
Specialists <sup>3</sup>	47.1	47.1	46.8	47.8	48.0	48.7	49.1	49.2	49.4	49.6
Grads of Canadian Universities	34.2	34.3	34.1	35.0	35.3	35.9	36.4	36.8	37.3	37.7
Grads of Foreign Universities	13.0	12.8	12.6	12.8	12.7	12.7	12.7	12.4	12.2	12.0
Unknown Place of Graduation	-	-	-	0.0	0.0	-	-	0.0	0.0	0.0
Total Active Physicians	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grads of Canadian Universities	74.1	74.6	74.9	75.1	75.5	75.7	76.0	76.3	76.6	76.8
Grads of Foreign Universities	25.8	25.3	25.0	24.9	24.5	24.2	23.9	23.6	23.3	22.9
Unknown Place of Graduation	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3
	1				l				Sou	rce: HPIC/CIH

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. The data reflect figures as of December 31, 2000 and include physicians in clinical and non-clinical practice. Data exclude interns and residents and a small number of physicians who are not licensed to provide clinical practice and who have requested to the Southam Medical Group that their data not be published. As a result of enhancements in the methodology used to compile the data for this publication, suppression of data to protect confidentiality is not required; however, historical figures presented in the report will differ slightly from figures previously published (by approximately 0.3%, depending on year). In addition, there may be differences in data published in CIHI reports on physician counts and other sources due to variations in methodologies used to define physicians and reporting periods.
- 2. Includes general practice, family medicine and emergency family medicine.
- 3. Specialty classification based on most recent certified specialty.

Table 15.7 Number of Graduates of Canadian Medical Schools, by Year and School of Graduation, Canada, 1991–2000

School	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.													
Memorial University	55	54	56	58	59	51	55	63	54	55	57	59	60
N.S.													
Dalhousie University	94	97	90	91	81	83	86	83	85	81	87	81	90
Que.	578	537	526	515	558	508	512	545	524	520	510	500	464
Université Laval	137	125	121	119	145	112	112	129	128	132	133	148	108
Université de Sherbrooke	103	85	95	86	89	94	97	92	101	91	96	90	87
Université de Montréal	186	173	162	158	170	158	158	178	158	161	154	148	160
McGill University	152	154	148	152	154	144	145	146	137	136	127	114	109
Ont.	605	587	593	604	597	611	587	607	586	510	532	528	530
University of Ottawa	74	77	78	83	77	84	75	90	78	80	87	79	84
Queen's University	73	70	71	73	72	72	74	71	71	73	78	73	75
University of Toronto	244	236	245	251	246	248	242	253	242	174	167	181	167
McMaster University	105	102	99	98	98	102	90	100	100	89	107	97	103
University of Western Ontario	109	102	100	99	104	105	106	93	95	94	93	98	101
Man.													
University of Manitoba	89	93	86	76	82	81	79	85	76	69	68	71	74
Sask.													
University of Saskatchewan	57	57	54	54	55	64	64	55	62	55	54	50	58
Alta.	185	174	190	183	196	189	191	181	180	169	174	180	179
University of Alberta	120	104	116	115	123	117	121	111	113	112	103	108	105
University of Calgary	65	70	74	68	73	72	70	70	67	57	71	72	74
B.C.													
University of British Columbia	118	123	113	123	121	115	112	120	118	118	122	125	123
Canada	1,781	1,722	1,708	1,704	1,749	1,702	1,686	1,739	1,685	1,577	1,604	1,594	1,578 ce: HPIC/CIHI

- .. Information not available
- Amount suppressed to protect confidentiality
- Nil or zero

## **Sources**

Figure 24	Calculated from data in Table 15.1
Figure 25	Calculated from data in Tables 15.4 and 15.5.
Figure 26	Calculated from data in Table 15.2
Table 15.1	Southam Medical Database, Canadian Institute for Health Information.
Table 15.2	Data calculated based on Table 15.1 and populations from Statistics Canada shown in Appendix A.
Table 15.3	Southam Medical Database, Canadian Post-MD Education Registry (CAPER).
Tables 15.4-15.6	Southam Medical Database, Canadian Institute for Health Information.
Table 15.7	Association of Canadian Medical Colleges (ACMC).

# **Physiotherapists**

## **Description**

Physiotherapists, also known as physical therapists, plan and institute treatment programs directed at: improving and maintaining functional independence and physical performance; preventing and managing pain, physical impairments, disabilities and limits to participation; and promoting fitness, health and wellness. Physiotherapist duties include: assessment, diagnosis, and evaluation, focusing primarily on the musculoskeletal, neurological and cardiorespiratory systems; working with clients to plan and carry out individually designed programmes that may include, but are not limited to, therapeutic exercise and work hardening, manual therapy including manipulation, electrotherapy, education, and health promotion; maintaining accurate statistical and clinical records; and conducting research in physiotherapy. Physiotherapists work with clients of all ages in a variety of settings including health clinics, hospitals, rehabilitation centres, outpatient physiotherapy clinics, sport facilities, home care programmes, child development centres, long term care facilities, community health centres and research programmes. Many physiotherapists are self-employed.

## **Analysis**

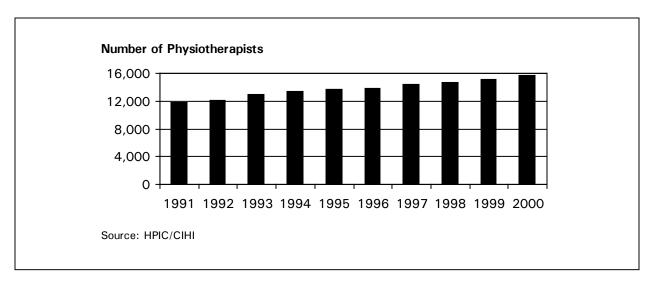


Figure 27. Number of Physiotherapists Registered with the Canadian Alliance of Physiotherapy Regulators, Canada, 1991–2000

The number of registered physiotherapists from 1991 to 2000 in Canada is illustrated in Figure 27.

Physiotherapists must be registered with a provincial regulatory body in order to practice in that province. Since 1991, there has been a yearly increase in the number of registered physiotherapists in Canada, resulting in an increase of 32.5% from 1991 to 2000. Individual provinces have also experienced significant growth in the number of registered physiotherapists, as shown in Table 16.1.

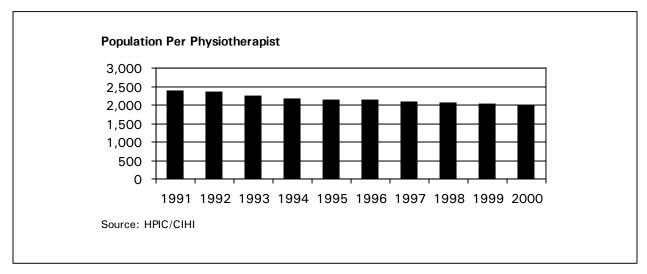


Figure 28. Population Per Physiotherapist Registered with the Canadian Alliance of Physiotherapy Regulators, Canada, 1991–2000

The population per registered physiotherapist is illustrated in Figure 28 and in Table 16.2. The rate of increase of physiotherapists has been greater than the population growth rate, resulting in lower population per physiotherapist figures across the country.

The number of active registered physiotherapists for the years 1991 to 2000 is shown in Table 16.3. At the national level, the number of registered physiotherapists increased 32.5% over this nine-year period, while provincial increases range from 21.9% (Alberta) to 68.6% (Newfoundland).

The number of graduates of physiotherapy programs is shown in Table 16.4. The number of physiotherapy graduates has increased 21.2% between 1991 and 2000.

Table 16.1 Number of Physiotherapists Registered with the Canadian Alliance of Physiotherapy Regulators by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	121	140	142	164	170	177	154	180	187	199
P.E.I.	32	31	33	35	44	49	42	50	45	47
N.S.	341	365	373	374	382	401	411	424	453	453
N.B.	240	273	330	319	321	344	368	386	392	411
Que.	2,427	2,378	2,679	2,797	2,943	3,003	3,077	3,137	3,215	3,370
Ont.	4,509	4,676	4,918	4,894	4,977	5,051	5,100	5,264	5,371	5,486
Man.	421	456	476	448	457	483	498	495	519	556
Sask.	337	350	350	385	407	414	457	491	504	527
Alta.	1,408	1,481	1,589	1,600	1,595	1,610	1,691	1,718	1,778	1,829
B.C.	1,958	1,969	2,007	2,398	2,451	2,368	2,558	2,607	2,658	2,762
Y.T.			16							
N.W.T.	9	13	16							
Canada	11,803	12,132	12,929	13,414	13,747	13,900	14,356	14,752	15,122	15,640
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

Table 16.2 Population Per Registered Physiotherapist by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	4,789	4,150	4,066	3,482	3,319	3,149	3,572	3,017	2,894	2,702
P.E.I.	4,081	4,248	4,029	3,840	3,080	2,786	3,259	2,746	3,076	2,959
N.S.	2,690	2,526	2,481	2,479	2,434	2,327	2,277	2,211	2,077	2,080
N.B.	3,112	2,742	2,274	2,356	2,344	2,190	2,050	1,952	1,928	1,842
Que.	2,919	3,004	2,684	2,583	2,467	2,427	2,377	2,339	2,290	2,191
Ont.	2,326	2,273	2,186	2,225	2,216	2,210	2,218	2,172	2,155	2,140
Man.	2,637	2,445	2,353	2,513	2,474	2,350	2,281	2,302	2,206	2,067
Sask.	2,971	2,867	2,879	2,628	2,497	2,465	2,239	2,090	2,033	1,937
Alta.	1,856	1,792	1,691	1,701	1,730	1,742	1,695	1,707	1,672	1,653
B.C.	1,749	1,791	1,808	1,559	1,565	1,657	1,558	1,539	1,523	1,476
Y.T.			1,875							
N.W.T.	6,848	4,835	4,027							
Canada	2,385	2,351	2,233	2,169	2,139	2,138	2,091	2,051	2,017	1,967
									Soi	urce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality

Nil or zero

Table 16.3 Number of Active Physiotherapists Registered with the Canadian Alliance of Physiotherapy Regulators, by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	118	138	136	159	167	164	151	180	187	199
P.E.I.	32	31	33	35	44	48	39	47	45	47
N.S.	333	340	333	340	352	373	409	422	409	421
N.B.	238	265	281 <sup>2</sup>	300	312	290	315	367	361	398
Que.	2,363	2,259	2,500	2,642 <sup>2</sup>	2,771 <sup>2</sup>	2,865 <sup>2</sup>	2,920	2,964	2,995	3,199
Ont.	3,908	4,241	4,447	4,571	4,685	4,727	4,743 <sup>3</sup>	4,953	5,087	5,063
Man. 1	392	413	431	445	452	448	458	462	479	530
Sask.	337	350	350	385	407	408	457	491	504	527
Alta.	1,339	1,403	1,451	1,422	1,268	1,281	1,377	1,430	1,510	1,632
B.C.	1,760	1,911	2,026 <sup>2</sup>	2,103	2,093	2,093	2,238	2,258	2,329	2,335
Y.T.			16							
N.W.T.	7	12	14	15 <sup>2</sup>	16 <sup>2</sup>	16 <sup>2</sup>	16 <sup>2</sup>			
Canada	10,827	11,363	12,017	12,417	12,566	12,713	13,123	13,574	13,906	14,351
									So	urce: HPIC/CIH

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Some physiotherapists may be practicing in two or more provinces. All physiotherapists working in Manitoba are residents of the province.
- 2. CIHI estimate.
- Estimate.

Table 16.4 Number of Graduates of B.Sc. Programs for Physiotherapy, by Year and School of Graduation, Canada, 1991–2000

School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
N.S.										
Dalhousie University	53	46	47	47	49	45	48	48	48	45
Que.	173	179	173	191	195	191	172	105	157	168
McGill University	69	70	76	78	71	77	49	48	56	52
Université de Montréal	43	49	45	54	59	56	56	49	48	58
Université Laval	61	60	52	59	65	58	67	8 <sup>1</sup>	53	58
Ont.	125	228	187	216	262	278	259	324	253	255
University of Ottawa		34	27	25	43	48	36	40	35	36
Queen's University	27	25	22	32	38	42	46	40	38	39
University of Toronto	67	68	76	69	71	67	63	120 <sup>2</sup>	63	64
McMaster University		66	30	29	51	61	56	60	59	59
University of Western Ontario	31	35	32	61	59	60	58	64	58	57
Man.										
University of Manitoba	27	31	28	31	29	32	31	28	33	29
Sask.										
University of Saskatchewan	29	30	29	32	29	28	29	30	30	32
Alta.										
University of Alberta	77	62	67	66	66	66	61	62	63	61
B.C.										
University of British Columbia	30	32	36	34	35	34	36	36	36	33
Canada	514	608	567	617	665	674	636	633	620	623

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Program credits changed from 96 to 106.
- Graduated two classes (one from the classic 4-year curriculum and the other from the evidence-based 3-year curriculum).

## Sources

- Figure 27 Calculated from data in Table 16.1.
- Figure 28 Calculated from data in Table 16.2.
- Table 16.1 Canadian Alliance of Physiotherapy Regulators.
- Table 16.2 Data calculated based on Table 16.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 16.3 Canadian Alliance of Physiotherapy Regulators.
- Table 16.4 Individual universities (McGill University, University of Montreal, Laval University, University of Ottawa, Queen's University, McMaster University, University of Western Ontario, University of Toronto, University of Manitoba, Dalhousie University, University of British Columbia, University of Alberta, University of Saskatchewan) and Statistics Canada.

# **Psychologists**

## **Description**

Psychologists diagnose psychological and emotional disorders and help their patients cope with their disorders. Duties can include: providing counseling and therapy for their clients; administering tests and questionnaires; performing research; consulting with other health care professionals; designing treatment programs; conducting experiments; and interviewing and counseling individuals, groups or families. Psychologists work in private practice or in institutions such as clinics, correctional facilities, hospitals, rehabilitation centres, schools and universities. Psychologists may specialize in areas such as clinical psychology or experimental psychology.

## **Analysis**

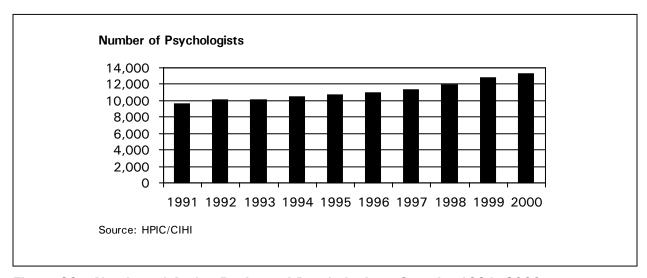


Figure 29. Number of Active Registered Psychologists, Canada, 1991–2000

Figure 29 illustrates the number of active registered psychologists in Canada from 1991 to 2000. Table 17.1 demonstrates that, with the exception of Prince Edward Island, all provinces/territories experienced an increase in the number of active registered psychologists during this ten-year period.

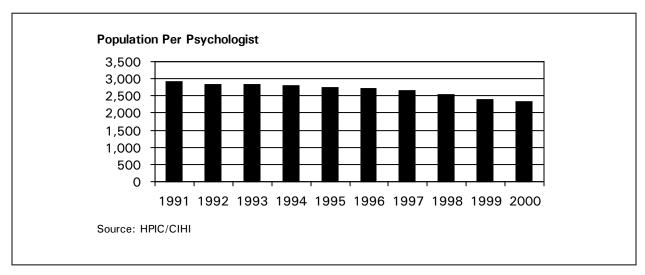


Figure 30. Population Per Active Registered Psychologist, Canada, 1991–2000

The population per active registered psychologist is shown in Figure 30 and in Table 17.2. In 2000, Québec and the Northwest Territories had the lowest figures in Canada.

Table 17.1 Number of Active Registered Psychologists<sup>1</sup> by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Nfld.	23	26 <sup>2</sup>	27 <sup>3</sup>	28 <sup>3</sup>	29 <sup>3</sup>	<i>30</i> <sup>3</sup>	31 <sup>3</sup>	185	186	195	
P.E.I.	30	30	13	14	14	15	15	19	22	21	
N.S.	172	165	142	216	218	217	229	233	350	369	
N.B.	154	186	195 <sup>3</sup>	202 <sup>3</sup>	209 <sup>3</sup>	215 <sup>3</sup>	219 <sup>3</sup>	241	186	256	
Que.	4,915	5,210	5,413	5,490 <sup>2</sup>	5,586 <sup>2</sup>	5,714	5,862	6,199	6,386	6,584	
Ont.	1,920	2,060 <sup>2</sup>	2,023	2,092	2,176	2,190	2,281	2,281	2,543	2,595	
Man.	110 <sup>2</sup>	130	136 <sup>3</sup>	141 <sup>3</sup>	146 <sup>3</sup>	150 <sup>3</sup>	153 <sup>3</sup>	140	149	156	
Sask. 4	67	71	75 <sup>3</sup>	77 <sup>3</sup>	71 <sup>3</sup>	76 <sup>3</sup>	70 <sup>3</sup>	70	73 <sup>3</sup>	74	
Alta. 5	1,489 <sup>6</sup>	1,486	1,224 <sup>2</sup>	1,261 <sup>2</sup>	1,296 <sup>2</sup>	1,345 <sup>2</sup>	1,412	1,466	1,788	1,847	
B.C.	731	757	871	886	937	977	1,010	1,043	1,035	1,068	
Y.T.	5	7	7 3	8 <sup>3</sup>	8 <sup>3</sup>	8 <sup>3</sup>	8 <sup>3</sup>	8 <sup>3</sup>	8 <sup>3</sup>	8 <sup>3</sup>	
N.W.T.	11	7	25	30	34	37	38	38	45	53	
Canada	9,627	10,135	10,152	10,446	10,724	10,974	11,328	11,923	12,771	13,226	
									Source: HPIC/C		

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- "Active" refers to self-employed, or employed by agencies, e.g. hospitals or clinics. Excluded are students, foreign
  affiliates, retired, abroad and honorary members (exceptions are footnoted). Some psychologists are employed outside
  the health field.
- 2. Estimate.
- 3. CIHI estimate.
- 4. Saskatchewan data includes only doctoral level psychologists. Data may undercount the number of practicing psychologists in Saskatchewan.
- 5. Alberta figures for 1999 and 2000 include active and inactive.
- 6. Includes 1,251 residents in Alberta.

Table 17.2 Population Per Active Registered Psychologist by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Nfld.	25,192	22,345	21,157	20,181	19,329	18,582	17,957	2,936	2,909	2,758	
P.E.I.	4,353	4,389	10,228	9,599	9,681	9,102	9,124	7,226	6,292	6,623	
N.S.	5,333	5,588	6,518	4,292	4,264	4,301	4,086	4,023	2,689	2,554	
N.B.	4,849	4,024	3,843	3,713	3,602	3,511	3,442	3,127	4,063	2,958	
Que.	1,441	1,371	1,328	1,316	1,300	1,276	1,248	1,183	1,153	1,121	
Ont.	5,462	5,160	5,314	5,205	5,068	5,098	4,959	5,013	4,553	4,525	
Man.	10,093	8,576	8,208	7,958	7,747	7,568	7,417	8,137	7,682	7,367	
Sask.	14,943	14,134	13,521	13,096	14,314	13,429	14,619	14,661	14,039	13,793	
Alta.	1,755	1,786	2,196	2,158	2,129	2,086	2,030	2,001	1,663	1,637	
B.C.	4,684	4,657	4,166	4,218	4,092	4,016	3,946	3,846	3,912	3,818	
Y.T.	5,869	4,313	4,082	3,977	4,006	3,977	3,871	3,887	3,844	3,774	
N.W.T.	5,603	8,979	2,577	2,200	1,969	1,823	1,778	1,782	1,531	1,322	
Canada	2,928	2,817	2,843	2,794	2,752	2,717	2,658	2,546	2,397	2,334	
									Source: HPIC/C		

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero

### Sources

- Figure 29 Calculated from data in Table 17.1.
- Figure 30 Calculated from data in Table 17.2.
- Table 17.1

  1991–1992: Government of Newfoundland and Labrador, Psychologists Association of Prince Edward Island, Nova Scotia Board of Examiners in Psychology, Collège des psychologues du Nouveau-Brunswick, Corporation professionnelle des psychologues du Québec, Ontario Board of Examiners in Psychology, Psychological Association of Manitoba, Saskatchewan Psychological Association, Psychologists Association of Alberta, British Columbia Psychological Association, Government of the Yukon Territory, Government of the Northwest Territories, and Stanton Yellowknife Hospital.
  - 1993 2000: Newfoundland Board of Examiners in Psychology, Prince Edward Island Psychologists Registration Board, Nova Scotia Board of Examiners in Psychology, College of Psychologists of New Brunswick, College of Psychologists of Ontario, Ordre des psychologues du Québec, Psychological Association of Manitoba, Saskatchewan Psychological Association, College of Alberta Psychologists, College of Psychologists of BC, Department of Health and Social Services, Government of the Northwest Territories.
- Table 17.2 Data calculated based on Table 17.1 and population estimates from Statistics Canada shown in Appendix A.

# **Registered Nurses**

## Description

Registered nurses (RNs) provide direct nursing care to patients, deliver health education programs and provide consultative services regarding issues relevant to the practice of nursing. Their duties include: consulting with other members of the health care team to assess, plan, implement and evaluate patient care; administering medications and treatments as prescribed by a physician; monitoring, recording and reporting symptoms and changes in patients' conditions; operating or monitoring medical apparatus or equipment; assisting in surgery and other medical procedures; and supervising registered practical nurses, nursing assistants and other nursing staff. Nurses are employed in a variety of settings such as doctors' offices, hospitals, nursing homes, extended-care facilities, rehabilitation centres, clinics, private companies and government. They may also be self-employed. Many registered nurses specialize in areas such as surgery, obstetrics care, psychiatric care, critical care, paediatrics, geriatrics, community health, occupational health, emergency care, rehabilitation or oncology.

## **Analysis**

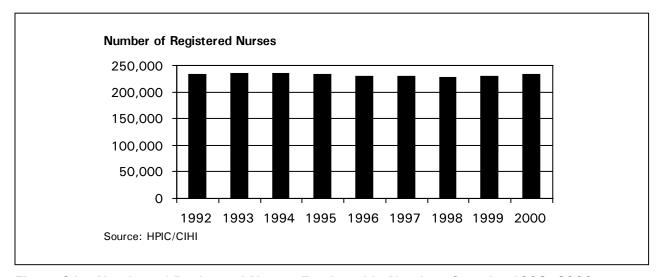


Figure 31. Number of Registered Nurses Employed in Nursing, Canada, 1992–2000

Figure 31 illustrates the number of registered nurses employed in nursing in Canada. From 1992 to 2000, the number of registered nurses (RNs) employed in nursing in Canada remained relatively unchanged, decreasing 0.6%, to a 2000 total of 232,412. At the provincial/territorial level, the number of RNs employed in nursing increased in every province and territory, except for Nova Scotia, Ontario, Manitoba, and Saskatchewan.

Table 18.1 presents the number of RNs in Canada by employment status and province of registration. From 1992 to 2000, the total number of RNs in Canada decreased 3.3%, from 263,265 to 254,628; this table includes registered nurses employed in nursing, employed in other than nursing, not employed and those that did not provide an indication of employment status.

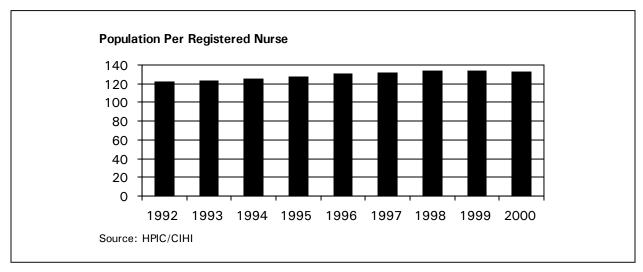


Figure 32. Population Per Registered Nurse Employed in Nursing, Canada, 1992–2000

The population per registered nurse employed in nursing is illustrated in Figure 32 and in Table 18.2.

The employment status (full-time, part-time or not stated) of registered nurses employed in nursing is presented in Table 18.3. From 1992 to 2000, the proportion of nurses employed in nursing and indicating that they worked part-time has increased 29.9%. Caution must be exercised when interpreting this increase as there is considerable year-over-year variability, in particular the proportion of "Not Stated" values (the proportion of registered nurses employed in nursing that did not provide responses for full-time/part-time status was 4.5% in 1992, and less than 0.1% in 2000).

The number of graduates from nursing education programs is shown in Table 18.4. As not all schools reported in any given year, the data is incomplete. In addition, many diploma programs have been discontinued across Canada since 1988, as baccalaureate programs are increasingly sought as minimum entry to nursing practice. With the exception of a significant decrease in 1993, the number of baccalaureate nursing graduates has increased each year.

Table 18.1 Number of Registered Nurses by Employment Status<sup>1</sup> and Province/Territory of Registration, Canada, 1991–2000<sup>2</sup>

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.										
Employed in Nursing	4,953	5,064	5.145	5,178	5,203	5,261	5,210	5,340	5,264	5,394
Employed in other than Nursing	28	*	42	58	*	45	25	13	11	8
Not Employed	320	275	323	318	382	443	178	103	74	55
Not stated		*			*	13				7
Total	5,301	5,372	5,510	5,554	5,647	5,762	5,413	5,456	5,349	5,464
P.E.I.										
Employed in Nursing	1,221	1,244	1,247	1,162	1,195	1,340	1,281	1,277	1,232	1,255
Employed in other than Nursing	*	14	8	*	*	8	14	16	13	10
Not Employed	30	21	21	24	28	44	46	42	10	20
Not stated	*	8		*	*	6	17	17	6	9
Total	1,265	1,287	1,276	1,190	1,233	1,398	1,358	1,352	1,261	1,294
N.S.										
Employed in Nursing	9,019	9,128	9,129	9,157	8,863	8,738	8,587	8,525	8,615	8,699
Employed in other than Nursing	40	59	46	33	64	99	54	28	22	18
Not Employed	409	393	359	319	372	390	315	312	249	219
Not stated	20	5	10	33	25	29				
Total	9,488	9,585	9,544	9,542	9,324	9,256	8,956	8,865	8,886	8,936
N.B.										
Employed in Nursing	7,136	7,349	7,521	7,610	7,545	7,458	7,412	7,456	7,710	7,376
Employed in other than Nursing	35	29	26	24	19	72	103	82	59	8
Not Employed	249	211	156	145	150	375	413	393	205	136
Not stated	747	606	608	645	691	60	65	21	9	397
Total	8,167	8,195	8,311	8,424	8,405	7,965	7,993	7,952	7,983	7,917
Que.										
Employed in Nursing		57,330	59,860	61,218	62,058 4	57,291 <sup>4</sup>	59,160	56,825	57,980	58,750
Employed in other than Nursing		390	382	430	513				-	505
Not Employed		1,148	904	790	705		15			618
Not stated		3,339	2,016	1,655	1,579	7,635	7,244	6,819	7,122	3,691
Total	60,667 <sup>3</sup>	62,207	63,162	64,093	64,855	64,926	66,419	63,644	65,102	63,564
Ont.										
Employed in Nursing	80,912	86,089	84,343	81,301	79,410	80,198	78,067	78,825	78,197	81,679
Employed in other than Nursing	4,465	5,280	8,676	7,193	5,111	5,517	5,201	5,325	4,993	3,833
Not Employed	8,019	8,508	5,940	7,813	7,555	8,250	5,362	7,921	7,382	3,019
Not stated	10,491	2,394	2,587	4,630	6,219	5,362	8,655	3,359	5,339	7,253
Total	103,887	102,271	101,546	100,937	98,295	99,327	97,285	95,430	95,911	95,784
1			l	l		ı	l		S	ource: HPIC/CIHI

Table 18.1 Number of Registered Nurses by Employment Status<sup>1</sup> and Province/Territory of Registration, Canada, 1991–2000<sup>2</sup> (cont'd)

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Man.										
Employed in Nursing	10,128	10,251	10,258	10,083	10,216	10,490	10,510	10,185	10,211	10,051
Employed in other than Nursing	218	131	162	165	110	104	133	97	50	236
Not Employed	78	124	70	53	38	103	121	123	40	
Not stated	314	344	425	33	22	260	265	258	74	
Total	10,738	10,850	10,915	10,334	10,386	10,957	11,029	10,663	10,375	10,287
Sask.										-
Employed in Nursing	8,394	8,698	8,390	8,491	8,447	8,508	8,456	8,455	8,553	8,543
Employed in other than Nursing	41	55	72	94	109	107	97	*	*	*
Not Employed	244	231	209	242	195	163	153	149	171	101
Not stated	104	134	155	220	93	177	104	*	*	*
Total	8,783	9,118	8,826	9,047	8,844	8,955	8,810	8,673	8,778	8,689
Alta.	.,		.,.		-,-		.,.			.,
Employed in Nursing	22,197	21,461	21,835	21,860	21,287	20,751	21,428	21,988	22,044	22,172
Employed in other than Nursing	364	324	259	418	487	506	428	176	104	25
Not Employed	879	1.840	1.712	1,647	1,185	1,361	1,269	663	494	201
Not stated	655	312	342	343	635	738	534	370	422	1,008
Total	24,095	23,937	24,148	24,268	23,594	23,356	23,659	23,197	23,064	23,406
B.C.	2.,000	20,007	2.,	2.,200	20,00	20,000	20,000	20,107	20,00	20, 100
Employed in Nursing	25,826	26,696	27,384	27,575	27,868	28,348	28,974	28.004	27,911	27,730
Employed in Nursing Employed in other than Nursing	499	462	499	92	47	20,340	20,974	28,004	78	27,730 54
, ,		_		298	136	46	64	36	176	104
Not Employed Not stated	1,588	1,479 1,276	1,492	2,781	2,953	3,741	-	834	874	611
Total	1,460 <b>29,373</b>	29,913	1,166 <b>30,541</b>	30,746	31,004	32,146	3,150 <b>32,211</b>	28,898	29,039	28,499
	29,373	29,913	30,541	30,746	31,004	32,140	32,211	20,090	29,039	26,499
Y.T. <sup>5</sup>										
Employed in Nursing				203	217	228	252	241	243	237
Employed in other than Nursing				*	*	*	5	6		
Not Employed				*	*		12	5		*
Not stated						31	5			
Total				207	222	268	274	252	251	244
N.W.T. <sup>5,6</sup>										
Employed in Nursing	487	492	513	555	559	551	476	530	490	526
Employed in other than Nursing	7	8	8	11	*	9	14	12	*	*
Not Employed	22	23	25	17	16	25	18	20	*	*
Not stated	8	7		5	*	14	18	20	40	
Total	524	530	546	588	590	599	526	582	545	544
Canada										-
Employed in Nursing	170,273	233,802	235,625	234,393	232,868 4	229,162 4	229,813	227,651	228,450	232,412
Employed in other than Nursing	5,707	6,784	10,180	8,523	6,541	6,479	6,097	5,844	5,390	4,756
Not Employed	11,838	14,253	11,211	11,668	10,766	11,208	7,966	9,767	8,816	4,480
Not stated	74,470	8,426	7,309	10,346	12,224	18,066	20,057	11,702	13,888	12,980
Total	262,288 <sup>3</sup>	263,265	264,325	264,930	262,399	264,915	263,933	254,964	256,544	254,628
									, .	ource: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. The term "not employed in nursing" comprises nurses who are employed in other occupations, nurses who have left the workforce, and nurses who are unemployed.
- 2. Inter-provincial duplicate registrations have been removed; the data refer to responses received from the registration form.
- 3. A breakdown by employment status is not available for Québec in 1991.
- 4. Québec 'Employed in Nursing' data imputed by Statistics Canada for 1995 and 1996.
- Data for the Yukon and N.W.T. are combined from 1991 through 1992.
- 6. N.W.T. data includes the Nunavut Territory.

Table 18.2 Population Per Registered Nurse Employed in Nursing by Province/Territory of Employment, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	117	115	112	110	108	106	106	102	103	100
P.E.I.	107	106	107	116	113	102	107	108	112	111
N.S.	102	101	101	101	105	107	109	110	109	108
N.B.	105	102	100	99	100	101	102	101	98	103
Que.	3	125	120	118	117	127	124	129	127	126
Ont.	130	123	127	134	139	139	145	145	148	144
Man.	110	109	109	112	111	108	108	112	112	114
Sask.	119	115	120	119	120	120	121	121	120	119
Alt.	118	124	123	124	130	135	134	133	135	136
B.C.	133	132	133	136	138	138	138	143	145	147
Y.T. <sup>1</sup>				149	145	141	127	129	127	127
N.W.T. <sup>1, 2</sup>	127	128	126	119	120	122	142	128	141	133
Canada	124	122	122	125	127	130	131	133	134	133
									So	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Data for the Yukon and N.W.T. are combined from 1991 through 1992.
- 2. N.W.T. data includes the Nunavut Territory.
- 3. Counts of registered nurses employed in nursing not available for Québec in 1991.

Table 18.3 Number of Registered Nurses Employed in Nursing<sup>1</sup>, Full-time and Part-time, by Province/Territory of Registration, Canada, 1991–2000<sup>2</sup>

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.										
Full-time	3,504	3,488	3,421	3,363	3,306	3,290	3,071	3,149	3,227	3,918
Part-time	1,448	1,576	1,724	1,815	1,897	1,971	2,139	2,180	2,037	1,476
Not stated	*							11		
Total	4,953	5,064	5,145	5,178	5,203	5,261	5,210	5,340	5,264	5,394
P.E.I.										
Full-time	580	564	568	510	506	578	570	543	539	522
Part-time	629	664	668	447	454	479	477	497	693	733
Not stated	12	16	11	205	235	283	234	237		
Total	1,221	1,244	1,247	1,162	1,195	1,340	1,281	1,277	1,232	1,255
N.S.										
Full-time	5,840	5,873	5,754	5,727	5,456	5,361	5,119	5,061	5,171	5,323
Part-time	3,179	3,255	3,375	3,430	3,407	3,377	3,468	3,464	3,444	3,376
Not stated										
Total	9,019	9,128	9,129	9,157	8,863	8,738	8,587	8,525	8,615	8,699
N.B.										
Full-time	4,431	4,544	4,528	4,463	4,317	4,193	4,034	4,031	4,165	4,049
Part-time	1,805	1,794	1,853	1,832	1,907	3,265	3,378	3,425	3,409	3,327
Not stated	900	1,011	1,140	1,315	1,321				136	
Total	7,136	7,349	7,521	7,610	7,545	7,458	7,412	7,456	7,710	7,376
Que.										
Full-time		31,572	32,441	32,679	26,024	22,485	28,986	27,322	28,115	29,895
Part-time		21,468	22,458	23,166	19,335	16,128	30,174	29,503	29,865	28,855
Not stated		4,290	4,961	5,373	16,699	18,678				
Total	60,667 <sup>3</sup>	57,330	59,860	61,218	62,058 <sup>4</sup>	57,291 <sup>4</sup>	59,160	56,825	57,980	58,750
Ont.										
Full-time	46,585	57,773	47,754	45,360	44,729	43,976	41,612	41,238	41,064	43,899
Part-time	34,327	28,316	36,589	35,941	34,681	36,222	36,455	37,587	37,133	37,780 <sup>8</sup>
Not stated										
Total	80,912	86,089	84,343	81,301	79,410	80,198	78,067	78,825	78,197	81,679
									5	Source: HPIC/CIHI

Table 18.3 Number of Registered Nurses Employed in Nursing<sup>1</sup>, Full-time and Part-time, by Province/Territory of Registration, Canada, 1991–2000<sup>2</sup> (cont'd)

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Man.										
Full-time	5,232	5,099	4,992	4,685	4,636	4,568	4,451	4,367	4,442	4,524
Part-time	4,058	4,186	4,189	4,211	4,346	4,526	4,711	4,754	4,960	5,527
Not stated	838	966	1,077	1,187	1,234	1,396	1,348	1,064	809	
Total	10,128	10,251	10,258	10,083	10,216	10,490	10,510	10,185	10,211	10,051
Sask.										
Full-time	4,296	3,604	4,034	2,709	3,965	4,014	3,902	3,913	4,119	4,340
Part-time	3,454	2,809	4,356	2,556	2,264	3,002	2,987	2,997	3,129	* 8
Not stated	644	2,285		3,226	2,218	1,492	1,567	1,545	1,305	*
Total	8,394	8,698	8,390	8,491	8,447	8,508	8,456	8,455	8,553	8,543
Alta.										
Full-time	11,997	15,073	14,851	14,129	11,786	11,256	11,672	12,089	12,301	12,064
Part-time	10,200	6,388	6,984	7,731	9,501	9,495	9,756	9,899	9,743	10,061
Not stated										47
Total	22,197	21,461	21,835	21,860	21,287	20,751	21,428	21,988	22,044	22,172
B.C.										
Full-time	13,762	14,907	14,856	14,582	14,265	14,172	14,339	13,494	13,284	18,703
Part-time	6,790	9,987	10,763	11,299	11,281	12,963	14,219	14,042	8,875	9,027
Not stated	5,274	1,802	1,765	1,694	2,322	1,213	416	468	5,752	
Total	25,826	26,696	27,384	27,575	27,868	28,348	28,974	28,004	27,911	27,730
Y.T. <sup>5 6</sup>										
Full-time				115	139	160	130	131	130	127
Part-time				61	78	68	122	110	113	110
Not stated				27						
Total				203	217	228	252	241	243	237
N.W.T. <sup>6 7</sup>										
Full-time	396	357	443	474	469	155	197	225	215	418
Part-time	68	79	70	81	90	53	49	54	48	108 8
Not stated	23	56				343	230	251	227	
Total	487	492	513	555	559	551	476	530	490	526
Canada										
Full-time	96,623	142,854	133,642	128,796	119,598	114,208	118,083	115,563	116,772	127,782
Part-time	65,958	80,522	93,029	92,570	89,241	91,549	107,935	108,512	103,449	104,581
Not stated	7,692	10,426	8,954	13,027	24,029	23,405	3,795	3,576	8,229	49
Total	170,273 <sup>3</sup>	233,802	235,625	234,393	232,868	229,162	229,813	227,651	228,450	232,412
									5	Source: HPIC/CIHI

- . Data not available
- \* Figures suppressed to ensure confidentiality
- Nil or zero
- 1. Nurses employed in nursing include all who are involved in direct patient care as well as in administration, teaching, and research. Those working in other than nursing are excluded. Data included in this publication will differ slightly from previous iterations due to methodological enhancements undertaken to standardize registered nursing data released, via different products, from the Registered Nurses Database at the Canadian Institute for Health Information.
- 2. Inter-provincial duplicate registrations have been removed; the data refer to responses received from the registration form.
- 3. 'Employed in Nursing' data and full-time/part-time status is not available for Québec in 1991.
- 4. Québec 'Employed in Nursing' data and full-time/part-time status imputed by Statistics Canada for 1995 and 1996.
- 5. The Yukon issued no licenses, therefore nurses working in the Yukon are registered in other jurisdictions.
- 6. Data for the Yukon and N.W.T. are combined in 1991 and 1992.
- 7. N.W.T. data includes the Nunavut Territory.
- 8. Data have been revised from earlier releases.

Table 18.4 Number of Nursing Graduates by Program and Province/Territory of Graduation, Canada, 1991-1999

Province/Territory	1991	1992	1993	1994	1995	1996	1997	1998	1999
Nfld.									
Diploma	242	251	262	249	169	243	159	198	_ 4
Basic Baccalaureate	25	46	44	27	31	41	45	48	40
Post-RN Baccalaureate	23	10	21	18	15	23	21	26	26
Master's/Doctorate	8	-	7	*	5	9	*	*	*
Total	298	307	334	298	220	316	229	274	69
P.E.I.									
Diploma	45	40	32	-	-	-	-	-	-
Basic Baccalaureate	-	-	-	-	-	17	26	17	75
Post-RN Baccalaureate	-	-	-	-	-	-	-	-	-
Master's/Doctorate	-	-	-	-	-	-	-	-	-
Total	45	40	32	-	-	17	26	17	75
N.S.									
Diploma	272	262	276	243	142	-	-	-	-
Basic Baccalaureate	72	58	76	81	70	91	67	82	161
Post-RN Baccalaureate	62	42	31	62	25	106	45	60	69
Master's/Doctorate	7	20	10	14	16	23	18	16	20
Total	413	382	393	400	253	220	130	158	250
N.B.									
Diploma	262	231	242	254	256	242	223	-	-
Basic Baccalaureate	91	82	93	78	84	115	88	87	169
Post-RN Baccalaureate	40	33	56	25	24	23	52	55	49
Master's/Doctorate	-	-	-	-	-	-	-	*	*
Total	393	346	391	357	364	380	363	144	221
Qué.									
Diploma	1,747	1,640	1,720	1,548	1,523	1,747	1,718	1,476	671
Basic Baccalaureate	201	248	198	199	206	255	241	249	241
Post-RN Baccalaureate	294	265	313	295	336	401	397	363	298
Master's/Doctorate	62	47	53	57	73	62	35	25	59
Total	2,304	2,200	2,284	2,099	2,138	2,465	2,391	2,113	1,269
Ont.									
Diploma	2,237	2,411	2,333	2,182	2,195	1,882	1,608	1,598	724
Basic Baccalaureate	468	564	551	552	579	610	675	505	525
Post-RN Baccalaureate	276	300	319	321	354	382	433	400	448
Master's/Doctorate	38	44	44	36	34	51	62	82	74
Total	3,019	3,319	3,247	3,091	3,162	2,925	2,778	2,585	1,771
								Sourc	e: HPIC/CIHI

Table 18.4 Number of Nursing Graduates by Program and Province/Territory of Graduation, Canada, 1991-1999 (cont'd)

Province/Territory	1991	1992	1993	1994	1995	1996	1997	1998	1999
Man.									
Diploma	473	449	421	359	270	121	78	7	-
Basic Baccalaureate	60	69	67	74	82	99	111	101	119
Post-RN Baccalaureate	63	72	63	63	97	56	66	58	59
Master's/Doctorate	13	13	17	7	10	22	15	13	19
Total	609	603	568	503	459	298	270	179	197
Sask.									
Diploma	303	304	292	261	198	89	67	50	14
Basic Baccalaureate	61	67	68	59	59	75	63	55	133
Post-RN Baccalaureate	32	36	29	38	38	25	30	37	44
Master's/Doctorate	5	5	*	6	*	*	5	*	5
Total	401	412	392	364	299	192	165	146	196
Alta.									
Diploma	800	743	541	383	413	177	40	70	71
Basic Baccalaureate	119	149	160	160	287	370	580	385	447
Post-RN Baccalaureate	223	193	209	169	223	218	192	131	101
Master's/Doctorate	30	48	48	55	49	47	54	32	40
Total	1,172	1,133	958	767	972	812	866	618	659
B.C.	,	,							
Diploma	551	730	588	585	530	465	356	187	114
Basic Baccalaureate	65	62	89	93	109	145	279	385	266
Post-RN Baccalaureate	188	256	251	255	188	198	255	263	252
Master's/Doctorate	26	26	23	23	38	40	21	44	48
Total	830	1,074	951	956	865	848	911	879	680
Y.T. <sup>1</sup>									
Diploma									
Basic Baccalaureate									
Post-RN Baccalaureate									
Master's/Doctorate									
Total	n/a	n/a							
N.W.T./Nun.									
Diploma									
Basic Baccalaureate									
Post-RN Baccalaureate									
Master's/Doctorate									
Total									
Canada									
Diploma <sup>2</sup>	6,932	7,061	6,707	6,064	5,696	4,966	4,249	3,586	1,594
Basic Baccalaureate <sup>3</sup>	1,162	1,345	1,346	1,323	1,507	1,818	2,175	1,914	2,176
Post-RN Baccalaureate <sup>4</sup>	1,201	1,207	1,292	1,246	1,300	1,432	1,491	1,393	1,346
Master's/Doctorate	189	203	205	202	229	257	214	220	271
Total	9,484	9,816	9,550	8,835	8,732	8,473	8,129	7,113	5,387
								Source	e: HPIC/CIHI

- .. Data not available
- \* Figure suppressed to ensure confidentiality
- Nil or zero

2000 data not available at time of publication

- 1. Yukon does not have a school of nursing
- 2. 1991: 4 Diploma schools not reporting
  - 1992: 7 Diploma schools not reporting
  - 1993: unknown number of Diploma schools not reporting
  - 1994: 10 Diploma schools not reporting
  - 1995: unknown number of Diploma schools not reporting
  - 1996: 4 Diploma schools not reporting
  - 1997: 15 Diploma schools not reporting
  - 1998: 4 Diploma schools not reporting
  - 1999: 15 Diploma schools not reporting
- 3. 1991: 1 campus not reporting
  - 1992: 2 campuses not reporting
  - 1996: 3 campuses not reporting
  - 1997: 2 campuses not reporting
  - 1998: 2 campuses not reporting
  - 1999: 3 campuses not reporting
- 4. Nursing program no longer offered.

### **Sources**

- Figure 31 Calculated from data in Table 18.1.
- Figure 32 Calculated from data in Table 18.2.
- Table 18.1 Canadian Institute for Health Information.
- Table 18.2 Data calculated based on Table 18.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 18.3 Canadian Institute for Health Information.
- Table 18.4 Canadian Nurses Association.

# **Registered Psychiatric Nurses**

# **Description**

Registered Psychiatric Nurses provide mental health services to individuals whose primary care needs relate to mental and developmental health. Registered Psychiatric Nurses duties include planning, implementing and evaluating therapies and programs on the basis of psychiatric nursing assessments. Psychiatric nurses work in government agencies, health care facilities, correctional institutions, group homes, social services agencies, educational institutions, community services, child and family services, agencies for persons with developmental handicaps, regional health services, crisis services, and community mental health services.

# **Analysis**

Registered Psychiatric Nurses are regulated as a distinct profession in only four provinces in Canada: British Columbia, Alberta, Saskatchewan, and Manitoba. As shown in Table 19.1, the number of registered psychiatric nurses have decreased 7.0% from 5,826 in 1991 to 5,416 in 2000.

The population per registered psychiatric nurse is illustrated in Table 19.2.

Table 19.1 Number of Active Registered Psychiatric Nurses<sup>1</sup>, by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.										
P.E.I.										
N.S.										
N.B.										
Que.										
Ont.										
Man.	1,173	1,192	1,176	1,149	1,133	1,102	1,077	1,055	1,034	1,028
Sask.	1,121	1,166	1,142	1,172	1,182	1,155	1,137	1,112	1,089	1,051
Alta.	1,309	1,319	1,303	1,275	1,230	1,177	1,158	1,155	1,148	1,136
B.C.	2,223	2,280	2,282	2,257	2,316	2,212	2,210	2,200	2,179	2,201
Y.T.										
N.W.T.										
Canada	5,826	5,957	5,903	5,853	5,861	5,646	5,582	5,522	5,450	5,416
									So	urce: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Registered Psychiatric Nurses are regulated as a distinct profession in only four provinces in Canada: British Columbia, Alberta, Saskatchewan, and Manitoba.

Table 19.2. Population per Registered Psychiatric Nurse<sup>1</sup> by Province/Territory of Residence, Canada, 1991–2000<sup>2</sup>

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.										
P.E.I.										
N.S.										
N.B.										
Que.										
Ont.										
Man.	947	935	952	980	998	1,030	1,055	1,080	1,107	1,118
Sask.	893	861	882	863	860	884	900	923	941	971
Alta.	1,996	2,012	2,063	2,134	2,243	2,384	2,475	2,539	2,590	2,661
B.C.	1,540	1,546	1,590	1,656	1,656	1,774	1,803	1,823	1,858	1,853
Y.T.										
N.W.T.										
Canada	1,399	1,393	1,430	1,469	1,491	1,574	1,614	1,650	1,687	1,712
									Sou	rce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Canadian population is based on the sum of the populations of each of the contributing provinces.
- 2. Registered Psychiatric Nurses are regulated as a distinct profession in only four provinces in Canada: British Columbia, Alberta, Saskatchewan, and Manitoba.

# **Sources**

Table 19.1 Data provided by provincial regulatory authorities (Registered Psychiatric Nurses Association of Alberta, College of Psychiatric Nurses of British Columbia, Registered Psychiatric Nurses Association of Manitoba, Registered Psychiatric Nurses Association of Saskatchewan).

Table 19.2 Data calculated based on Table 19.1 and population estimates from Statistics Canada shown in Appendix A.

# **Respiratory Therapists**

# **Description**

Respiratory therapists (RTs) assist in the diagnosis, treatment and care of patients with respiratory and cardiopulmonary disorders. Duties of respiratory therapists include: operating equipment which temporarily replaces a patient's lungs; performing diagnostic tests, such as arterial blood gas analysis and cardiopulmonary functions tests; performing artificial respiration and external cardiac massage; maintaining and testing diagnostic and therapeutic equipment; supervising and training student respiratory therapists; and participating in research related to cardiac and pulmonary disorders. Respiratory therapists are usually employed in hospitals, medical clinics, and respiratory home care companies.

### **Analysis**

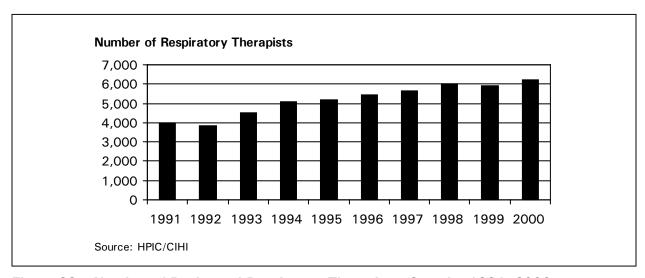


Figure 33. Number of Registered Respiratory Therapists, Canada, 1991–2000

The number of registered respiratory therapists (RTs) in Canada from 1991 to 2000 is illustrated in Figure 33. Over this ten-year period, the number of RTs increased 54.7%, from 4,010 in 1991 to 6,204 in 2000. Some of this increase may be the result of regulatory changes between 1991 and 2000. By the year 2000, four provinces (Quebec, Ontario, Manitoba, and Alberta) require RTs to be registered in order to practise. As such, caution must be exercised in interpreting inter-temporal changes, as counts provided by associations with voluntary membership may undercount the number of respiratory therapists.

The number of RTs in each province increased significantly between 1991 and 2000. As shown in Table 20.1, of all the provinces, Alberta experienced the greatest increase (180.1%) between 1991 and 2000, while the four Atlantic provinces, combined, experienced a 69.1% increase. Ontario's count increased by 58.1%, British Columbia's by 47.8%, Quebec's by 36.5%, and Manitoba's by 14.2% (again, the demonstrated increases may be, in part, the result of the implementation of mandatory registration as a condition of employment).

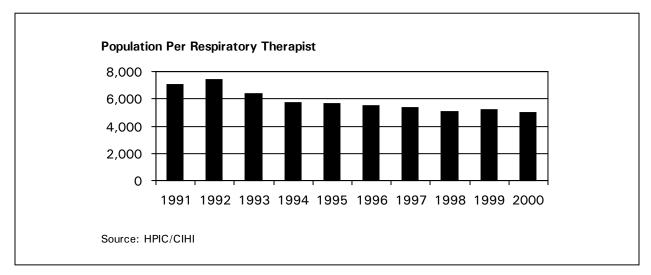


Figure 34. Population Per Registered Respiratory Therapist, Canada, 1991–2000

The population per registered respiratory therapist is illustrated in Figure 34 and in Table 20.2. The rate of increase of respiratory therapists has been greater than the population growth rate, resulting in lower population per respiratory therapist figures across the country between 1991 and 2000.

The number of graduates from respiratory therapy programs is shown in Table 20.3, with not all schools represented. However, for the schools reporting, there has been a 7.2% decrease in the number of graduates between 1991 and 2000.

Table 20.1 Number of Registered Respiratory Therapists by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	285 <sup>1</sup>	266 <sup>1</sup>	50	48	63	71	65	78	50	60
P.E.I.			*	*	*	*	*	*	*	*
N.S.			149	161	166	172	186	223	176	179
N.B.			117	146	159	169	170	193	177	192
Que. 2,3	1,768	1,800	1,800	1,900	2,000	2,100	2,200	2,159	2,297	2,413
Ont.4	1,166	1,082	1,252	1,572	1,628	1,658	1,727	1,687	1,705	1,843
Man. <sup>5</sup>	176	178	178	182	183	186	195	189	200	201
Sask.	*	66	79	93	92	94	94	116	95	93
Alta. <sup>6</sup>	297	234	600	600	620	681	680	812	812	832
B.C.	253	218	288	371	271	303	304	540	384	374
Y.T. & N.W.T.	*		*	*	*	*	*	*	*	*
Canada	4,010	3,844	4,521	5,080	5,189	5,446	5,636	6,018	5,914	6,204
									S	ource: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Combined total for the four Atlantic provinces (Newfoundland, P.E.I., Nova Scotia, and New Brunswick).
- 2. Non-practicing respiratory therapists are not included in the figures for Québec.
- 3. Quebec data for the years 1998 to 2000 is provided by L'Ordre professionel des inhalotherapeutes du Québec.
- 4. Ontario became regulated in 1994; Ontario data for the years 1994 to 2000 is provided by the College of Respiratory Therapists of Ontario.
- 5. Manitoba figures for the years 1991 to 1997 have been changed from previous figures provided in the "Health Personnel in Canada, 1988 to 1997" publication. All of Manitoba's figures reported in this publication is provided by the Manitoba Association of Registered Respiratory Therapists and only include active registered respiratory therapists.
- 6. Alberta data for the years 1998 to 2000 is provided by the College and Association of Respiratory Therapists of Alberta.

Table 20.2 Population Per Registered Respiratory Therapist, by Province/Territory of Residence, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	8,330 <sup>1</sup>	8,362 <sup>1</sup>	11,548	11,896	8,957	7,851	8,463	6,963	10,822	8,963
P.E.I.			*	*	*	*	*	*	*	*
N.S.			6,212	5,758	5,600	5,426	5,031	4,203	5,347	5,264
N.B.			6,412	5,148	4,732	4,459	4,437	3,904	4,270	3,944
Que.	4,006	3,969	3,995	3,803	3,630	3,471	3,324	3,398	3,205	3,060
Ont.	8,993	9,825	8,587	6,927	6,775	6,733	6,550	6,778	6,790	6,371
Man.	6,308	6,263	6,293	6,186	6,179	6,103	5,826	6,028	5,723	5,718
Sask.	*	15,205	12,756	10,881	11,047	10,857	10,887	8,847	10,788	10,975
Alta.	8,798	11,341	4,479	4,535	4,451	4,120	4,215	3,612	3,662	3,633
B.C.	13,534	16,172	12,600	10,074	14,150	12,949	13,110	7,429	10,543	10,902
Y.T. & N.W.T.	*		*	*	*	*	*	*	*	*
Canada	7,028	7,403	6,385	5,746	5,687	5,475	5,343	5,043	5,175	4,976
									Soi	rce: HPIC/CIHI

## Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Based on the combined total for the four Atlantic provinces (Newfoundland, P.E.I., Nova Scotia, and New Brunswick).

Table 20.3 Number of Graduates of Accredited Schools of Respiratory Therapy<sup>1</sup>, by Year and School of Graduation, Canada, 1991–2000

School	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.										
College of the North Atlantic			10	9	8	12	8	11		12
NB										
New Brunswick Community College								10	11	12
Que.										
Collè gede Chi co uti mi	20	21 <sup>2</sup>	15	17	25	21	22	26	21	22
Collè gede Rosemont	35	43	33	41	45	45	47	28	28	29
Collè geVani e r	11 2	17	15 <sup>3</sup>	16	15	14				
Ont.										
Canadore College				11	16	13	14	10	10	12
Fanshawe College	30	36	46	45	45	42	52	31	34	
La Cite collegiale,										
College d'arts appliques et de technologie	15	11	6	6	8	8	*	9	9	7
The Michener Institute			28	51	- 4	51	39	35	34	33
Man.										
Health Sciences Centre	14	13	20	9	15	12	*	13	8	- 5
Alta.										
Northern Alberta Institute of Technology	40	38 <sup>2</sup>		28	35	22	19	17	18	17
Southern Alberta Institute of Technology	20	26	25	26	17	17	16	23	22	18
B.C.										
University College of the Cariboo	37	32	40	32	34	46	32	34	25	30
Canada	222	237	238	290	263	304	274	373	235	206
									Source	ce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. Not all schools are represented.
- 2. Estimate.
- 3. Figures represent an annual average.
- 4. No graduating class due to a change in program length.
- No graduating class is the result of no student intake in 1997 as the program was to be transferred to the University of Manitoba.

### Sources

- Figure 33 Calculated from data in Table 20.1.
- Figure 34 Calculated from data in Table 20.2.
- Table 20.1 1991–1992: Canadian Society of Respiratory Therapists, la Corporation des inhalothérapeutes du Québec, Manitoba Association of Registered Respiratory Therapists Inc.
  - 1993–1997: Canadian Society of Respiratory Therapists, Manitoba Association of Registered Respiratory Therapists Inc.
  - 1998 2000: Canadian Society of Respiratory Therapists, Ordre professionel des inhalothérapeutes du Québec, Manitoba Association of Registered Respiratory Therapists Inc.
- Table 20.2 Data calculated based on Table 20.1 and population estimates from Statistics Canada shown in Appendix A.
- Table 20.3 Individual universities, colleges, and institutes.

# **Social Workers**

# **Description**

Social Workers treat social functioning difficulties, provide counselling, therapy and referral to other supportive social services. Some social workers evaluate child development and the adequacy of childcare. The duties of social workers include: interviewing clients individually, in families, or in groups, to assess their situation and problems and determine the types of services required; providing counsel and therapy to assist clients in developing skills to deal with and resolve their social and personal problems; planning programs of assistance for clients including referral to agencies that provide financial assistance, legal aid, housing, medical treatment and other services; investigating cases of child abuse or neglect and taking authorized protective action when necessary; serving as members on interdisciplinary teams of professionals working with specific client groups; acting as advocates for client groups in the community; lobbying for solutions to problems directly affecting client groups; developing or advising on social policy, conduct social research; and assisting in community development. Social workers are usually employed in hospitals, school boards, social service agencies, welfare organizations or correctional facilities.

# **Analysis**

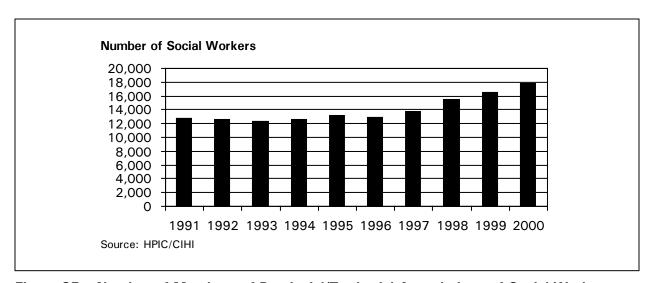


Figure 35. Number of Members of Provincial/Territorial Associations of Social Work, Canada, 1991–2000

Figure 35 illustrates the number of members of provincial/territorial social work associations or regulatory bodies in Canada for the years 1991 to 2000. By the end of the year 2000, in the ten provinces, the term "social worker" could only be used by those who had met the criteria and registered with the provincial regulatory body. Hence, individuals wishing to practice as 'social workers' must be licensed with provincial regulatory bodies.

As shown in Table 21.1, although Ontario and British Columbia both show decreases of 25.7% and 1.7% respectively between 1991 and 2000, most other provinces experienced significant increases during that same period, including Newfoundland (307.8%), Nova

Scotia (173.4%), Saskatchewan (165.7%), and Alberta (150.6%). In part, the increases can be attributed to legislative changes that required social workers to be registered in those provinces.

The population per social worker is shown in Table 21.2. Due to the large increases in the number of members of provincial social work associations, the population per social worker has decreased in all provinces/territories except Ontario and British Columbia.

Table 21.1 Number of Members of Provincial/Territorial Associations of Social Workers by Province/Territory of Registration, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	232	232	244 <sup>1</sup>	251 <sup>1</sup>	252 <sup>1</sup>	254 <sup>1</sup>	255 <sup>1</sup>	838	865	946
P.E.I. <sup>2</sup>	155 <sup>3</sup>	160 <sup>3</sup>	165 <sup>3</sup>	170 <sup>3</sup>	175 <sup>3</sup>	180 <sup>3</sup>	185 <sup>3</sup>	190 <sup>3</sup>	195	198
N.S.	488	562	596	650	943	1,117	1,169	1,131	1,261	1,334
N.B.	983	1,087	1,125 <sup>3</sup>	1,146	1,168	1,082	1,208	1,205	1,238	1,243
Que.	3,200	3,215	3,344	3,686	3,889	4,053	4,273	4,323	4,564	4,721
Ont.	3,997	3,677	3,107	2,977	3,048	2,977	3,042	3,038	3,250	2,970 <sup>3</sup>
Man.	406	408	388	409	412	398	504	524	487	487
Sask.4	350	413	435 <sup>1</sup>	446 <sup>1</sup>	449 <sup>1</sup>	452 <sup>1</sup>	453 <sup>1</sup>	856	923	930
Alta.	1,443	1,469	1,548 <sup>1</sup>	1,587 <sup>1</sup>	1,598 <sup>1</sup>	1,609 <sup>1</sup>	1,612 <sup>1</sup>	2,043	2,309	3,616 <sup>5</sup>
B.C.	1,327	1,336	1,242	1,238	1,202	689	926	1,270	1,277	1,304
Y.T.	50	50 <sup>3</sup>	<i>53</i> <sup>1</sup>	<i>54</i> <sup>1</sup>	<i>54</i> <sup>1</sup>	<i>55</i> <sup>1</sup>	<i>55</i> <sup>1</sup>	54	<i>54</i> <sup>1</sup>	<i>54</i> <sup>1</sup>
N.W.T.	61 <sup>3</sup>	60 <sup>3</sup>	<i>63</i> <sup>1</sup>	65 <sup>1</sup>	65 <sup>1</sup>	66 <sup>1</sup>	66 <sup>1</sup>	85	69 <sup>1</sup>	70 <sup>1</sup>
Canada	12,692	12,669	12,311	12,679	13,256	12,932	13,747	15,557	16,493	17,874
									Sc	ource: HPIC/CIHI

### Notes

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. CIHI estimate.
- 2. Not all social workers in Prince Edward Island are members of the Association, as membership is voluntary.
- 3. Estimate.
- 4. Data include full-time, part-time, not-employed, and retired members.
- 5. In 2000, membership with the provincial association became mandatory in order to practice.

Table 21.2 Population Per Social Worker<sup>1</sup> by Province/Territory of Registration, Canada, 1991–2000

Provinces	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nfld.	2,497	2,504	2,362	2,278	2,236	2,193	2,161	648	626	568
P.E.I.	843	823	806	791	774	759	740	723	710	702
N.S.	1,880	1,641	1,553	1,426	986	836	800	829	746	706
N.B.	760	689	667	656	644	696	624	625	610	609
Que.	2,214	2,222	2,150	1,960	1,867	1,799	1,711	1,697	1,613	1,564
Ont.	2,624	2,891	3,460	3,658	3,618	3,750	3,718	3,764	3,562	3,953
Man.	2,735	2,733	2,887	2,753	2,745	2,852	2,254	2,174	2,350	2,360
Sask.	2,860	2,430	2,315	2,268	2,262	2,256	2,258	1,199	1,110	1,097
Alta.	1,811	1,807	1,736	1,714	1,727	1,743	1,778	1,436	1,288	836
B.C.	2,580	2,639	2,922	3,019	3,190	5,695	4,304	3,159	3,170	3,127
Y.T.	587	604	569	561	579	586	582	576	565	554
N.W.T.	1,010	1,048	1,019	1,018	1,026	1,026	1,026	797	994	998
Canada	2,221	2,253	2,345	2,302	2,226	2,306	2,190	1,951	1,856	1,727
									Sou	urce: HPIC/CIHI

- .. Information not available
- \* Amount suppressed to protect confidentiality
- Nil or zero
- 1. "Social worker" is considered to be those members of provincial/territorial social work associations.

### **Sources**

- Figure 35 Calculated from data in Table 21.1.
- Table 21.1 1991–1992: provincial/territorial organizations.

1993–1997: Canadian Association of Social Workers from provincial organizations.

1998–2000: Newfoundland & Labrador Association of Social Workers, Nova Scotia Association of Social Workers, New Brunswick Association of Social Workers, Prince Edward Island Association of Social Workers/ Prince Edward Island Social Work Registration Board, Ontario College of Social Workers and Social Service, Ordre professionnel des travailleurs sociaux du Québec, Manitoba Institute of Registered Social Workers, Saskatchewan Association of Social Workers, Alberta College of Social Workers, Board of Registration for Social Workers of British Columbia, Government of Yukon, Northwest Territories Association of Social Workers, and the Canadian Association of Social Workers (CASW).

Table 21.2 Data calculated based on Table 21.1 and population estimates from Statistics Canada shown in Appendix A.

# Appendix A

Statistics Canada Population Estimates for Canada, the Provinces and Territories, 1991 to 2000 ('000s)

# Statistics Canada Population Estimates for Canada, the Provinces and Territories, 1991 to 2000 ('000s)

Province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Fiovince	(ID)	(ID)	(ID)	(ID)	(ID)	(PD)	(PR)	(PR)	(PR)	(PP)
Nfld.	579.41	580.97	577.41	571.02	564.31	557.44	550.12	543.12	541.09	537.80
P.E.I.	130.60	131.68	132.97	134.39	135.53	136.53	136.86	137.30	138.43	139.08
N.S.	917.34	922.02	925.52	927.06	929.65	933.32	935.76	937.25	941.01	942.32
N.B.	746.77	748.48	750.26	751.63	752.33	753.52	754.28	753.56	755.70	757.27
Que.	7,083.27	7,143.75	7,190.32	7,224.94	7,259.02	7,289.63	7,313.02	7,336.28	7,361.14	7,383.30
Ont.	10,486.19	10,630.59	10,750.79	10,889.51	11,028.96	11,163.80	11,311.14	11,434.74	11,577.18	11,741.79
Man.	1,110.28	1,114.87	1,120.10	1,125.81	1,130.79	1,135.17	1,136.14	1,139.25	1,144.68	1,149.22
Sask.	1,001.16	1,003.52	1,007.69	1,011.91	1,016.29	1,020.60	1,023.35	1,026.26	1,024.85	1,020.66
Alta.	2,613.13	2,653.87	2,687.45	2,720.98	2,759.46	2,805.42	2,866.52	2,933.12	2,973.56	3,022.86
B.C.	3,424.11	3,525.53	3,628.87	3,737.57	3,834.66	3,923.56	3,985.34	4,011.56	4,048.45	4,077.39
Yukon	29.34	30.19	30.00	30.29	31.49	32.12	31.93	31.10	30.75	30.19
N.W.T. <sup>1</sup>	61.64	62.85	64.44	65.99	66.96	67.45	67.56	67.73	68.91	70.09
Canada	28,183.25	28,548.31	28,865.78	29,191.10	29,509.45	29,818.57	30,112.02	30,351.27	30,605.74	30,871.97
									Source: Sta	tistics Canada

#### Notes

All population figures are as of December 31 of the given year. In Statistics Canada publications it would equate to the figure for January 1 of the next year.

<sup>1</sup>For the years 1999 and 2000, the population of the Nunavut Territory (27,310 in 1999 and 27,978 in 2000) has been included in totals for the Northwest Territories.

### **Sources**

1991 to 2000: Quarterly Demographic Statistics, Statistics Canada, Catalogue no. 91-002-XIB, Volume 14, no.4, May, 2001.

- (IR) Final Intercensal Estimates
- (PR) Updated Postcensal Estimates
- (PP) Preliminary Postcensal Estimates
- (PD) Final Post Censal Estimates
- (ID) Final Post Censal Estimates adjusted for net undercoverage.

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# Appendix B

1991 Standard Occupational Classification (SOC)
Codes Included in Labour Force Survey Data

# 1991 Standard Occupational Classification (SOC) Codes Included in Labour Force Survey Data

Variable: 'LFS-selected health occupations'

GROUP	1991 SOC Code(s)
Chiropractors	D022
Dental Hygienists	D222
Dentists	D013
Dietitians	D032
Health Record Administrators/Technicians	A114 + B513
Health Service Executives	1
Licensed Practical Nurses	D233
Medical Laboratory Technologists	D211
Medical Radiation Technologists	D215
Occupational Therapists	D043
Optometrists	D021
Pharmacists	D031
Physicians	D011 + D012
Physiotherapists	D042
Psychologists	E021
Registered Nurses	D111 + D112
Respiratory Therapists	D214
Social Workers	E022

### Notes

 Health Service Executives are included in SOC code A014—Senior Managers - Health, Education, Social and Community Services and Membership Organizations. Including this code would over-represent the number of Health Service Executives included in this publication.

Variable: 'LFS-all health occupations'

GROUP	1991 SOC Code
Health Occupations	D (all) <sup>1</sup>
Health Record Administrators	A114
Health Record Technicians	B513
Psychologists	E021
Social Workers	E022

### Notes

 Category D of the 1991 Standard Occupational Classification codes is comprised of: (D0) Professional Occupations in Health; (D1) Nurse Supervisors and Registered Nurses; (D2) Technical and Related Occupations in Health; and (D3) Assisting Occupations in Support of Health Services. For further description, please see the Statistics Canada website at http://www.statcan.ca/english/Subjects/Standard/soc/categoryd.htm.

# Appendix C

1991 Standard Occupational Classification Codes— Category 'D'

# 1991 Standard Occupational Classification Codes—Category 'D'

# DO-PROFESSIONAL OCCUPATIONS IN HEALTH

### D01-PHYSICIANS, DENTISTS AND VETERINARIANS

- D011-Specialist Physicians
- D012—General Practitioners and Family Physicians
- D013 Dentists
- D014-Veterinarians

# D02—OPTOMETRISTS, CHIROPRACTORS AND OTHER HEALTH DIAGNOSINGAND TREATING PROFESSIONALS

- D021 Optometrists
- D022—Chiropractors
- D023-Other Professional Occupations in Health Diagnosing and Treating

# D03-PHARMACISTS, DIETITIANS AND NUTRITIONISTS

- D031-Pharmacists
- D032—Dietitians and Nutritionists

## D04-THERAPY AND ASSESSMENT PROFESSIONALS

- D041 Audiologists and Speech-Language Pathologists
- D042-Physiotherapists
- D043—Occupational Therapists
- D044—Other Professional Occupations in Therapy and Assessment

# D1-NURSE SUPERVISORS AND REGISTERED NURSES

# D11-NURSE SUPERVISORS AND REGISTERED NURSES

- D111—Head Nurses and Supervisors
- D112—Registered Nurses

# D2-TECHNICAL AND RELATED OCCUPATIONS IN HEALTH

# D21-MEDICAL TECHNOLOGISTS AND TECHNICIANS (EXCEPT DENTAL HEALTH)

- D211 Medical Laboratory Technologists and Pathologists' Assistants
- D212—Medical Laboratory Technicians
- D213—Animal Health Technologists
- D214—Respiratory Therapists and Clinical Perfusionists
- D215 Medical Radiation Technologists
- D216—Medical Sonographers
- D217—Cardiology Technologists
- D218—Electroencephalographic and Other Diagnostic Technologists, n.e.c.
- D219—Other Medical Technologists and Technicians (except Dental Health)

# D22-TECHNICAL OCCUPATIONS IN DENTAL HEALTH CARE

- D221 Denturists
- D222—Dental Hygienists and Dental Therapists
- D223—Dental Technicians and Laboratory Bench Workers

# D23-OTHER TECHNICAL OCCUPATIONS IN HEALTH CARE (EXCEPT DENTAL)

- D231 Opticians
- D232-Midwives and Practitioners of Natural Healing
- D233—Registered Nursing Assistants
- D234—Ambulance Attendants and Other Paramedical Occupations
- D235—Other Technical Occupations in Therapy and Assessment

# D3-ASSISTING OCCUPATIONS IN SUPPORT OF HEALTH SERVICES

### D31 – ASSISTING OCCUPATIONS IN SUPPORT OF HEALTH SERVICES

- D311—Dental Assistants
- D312—Nurse Aides and Orderlies
- D313—Other Aides and Assistants in Support of Health Services