



Pharmacists in Canada, 2009

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Canadian Institute
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Established in 1994, CIHI is an independent, not-for-profit corporation that provides essential information on Canada's health system and the health of Canadians. Funded by federal, provincial and territorial governments, we are guided by a Board of Directors made up of health leaders across the country.

Our Vision

To help improve Canada's health system and the well-being of Canadians by being a leading source of unbiased, credible and comparable information that will enable health leaders to make better-informed decisions.

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About the Canadian Institute for Health Information

The Canadian Institute for Health Information (CIHI) collects and analyzes information on health and health care in Canada and makes it publicly available. Canada's federal, provincial and territorial governments created CIHI as a not-for-profit, independent organization dedicated to forging a common approach to Canadian health information. CIHI's goal: to provide timely, accurate and comparable information. CIHI's data and reports inform health policies, support the effective delivery of health services and raise awareness among Canadians of the factors that contribute to good health.

For more information, visit our website at www.cihi.ca.

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- Manitoba Pharmaceutical Association
- National Association of Pharmacy Regulatory Authorities
- New Brunswick Pharmaceutical Society
- Newfoundland and Labrador Pharmacy Board
- Nova Scotia College of Pharmacists
- Ontario College of Pharmacists
- Ordre des pharmaciens du Québec
- Prince Edward Island Pharmacy Board
- Saskatchewan College of Pharmacists
- Yukon Government

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This report represents the work of CIHI staff within the Health Human Resources department. The core project team responsible for the development of this report includes

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Executive Summary

Highlights from *Pharmacists in Canada, 2009*

For 2009, the Pharmacist Database (PDB) excluded Quebec and Nunavut.

Supply

- There were 30,553ⁱ pharmacists in Canada in 2009.ⁱⁱ This represents an increase of 13.9% between 2006 and 2009.
- In the jurisdictions participating in the PDB, there were 23,082 registered pharmacists in 2009. This number includes data from Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, the Yukon and the Northwest Territories.
- From the participating jurisdictions, Nova Scotia and Newfoundland and Labrador had the highest supply per population, at 117 and 116 pharmacists per 100,000 population, respectively. The Northwest Territories and Ontario had the lowest supply, at 46 and 79 pharmacists per 100,000 population, respectively.

Demographics

- The majority of the pharmacist workforce was female (59.2%).ⁱⁱⁱ Gender distribution varied slightly by province. The highest percentage of female pharmacists was in Nova Scotia (69.3%), followed by New Brunswick (67.1%). The lowest percentage was in Newfoundland and Labrador (51.8%), followed by Manitoba (54.4%).
- A comparison of various health professions indicated a higher proportion of female pharmacists (59.2%) when compared with physicians (34.7%),^{iv} but a lower proportion of women in the workforce when compared with nurses (93.5%),^v occupational therapists (92.0%),^{vi} medical laboratory technologists (85.1%),^{vii} medical radiation technologists (81.7%)^{viii} and physiotherapists (78.0%).^{ix}
- The proportion of females was higher among younger pharmacists, and the proportion of males was higher among older pharmacists. Almost 70% of pharmacists older than 60 were male.
- The majority (55.7%) of pharmacists were between age 30 and 50.
- The average age of pharmacists in the participating jurisdictions was 43.6. Ontario had the oldest pharmacists, with an average age of 45.1, followed by Saskatchewan at 43.0. The youngest were in New Brunswick, with an average age of 41.6.
- Pharmacists (43.6) tended to be younger than physicians (49.8)^{iv} and nurses (44.8)^v but were older than other health professionals, such as occupational therapists (38.5)^{vi} and physiotherapists (41.6).^{ix}

i. Pharmacist Database and Health Personnel Database, Canadian Institute for Health Information.
ii. According to the National Association of Pharmacy Regulatory Authorities, the supply of registered pharmacists in Canada reached a level of 31,384 in 2009.
iii. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.
iv. Scott's Medical Database, 2008, Canadian Institute for Health Information.
v. Nursing Database, 2008, Canadian Institute for Health Information.
vi. Occupational Therapist Database, 2009, Canadian Institute for Health Information.
vii. Medical Laboratory Technologist Database, 2008, Canadian Institute for Health Information.
viii. Medical Radiation Technologist Database, 2008, Canadian Institute for Health Information.
ix. Physiotherapist Database, 2009, Canadian Institute for Health Information.

Education

- Most (94.2%) pharmacists had a baccalaureate degree as their current level of education. The remainder had a PharmD (2.3%), diploma (2.0%), master's (1.3%) or doctorate (0.2%) in pharmacy.
- Fewer than 5% (4.5%) of the pharmacists in the workforce were classified as new graduates,^x of which 68.3% were female.
- The age at which pharmacists graduated went up in the last 15 years. Among the pharmacists who graduated 15 years ago, more than two-thirds (69.8%) were younger than 25 at graduation; in recent years (0 to 4 years ago), fewer than 50% (47.8%) were younger than 25 at graduation.
- In Ontario, B.C., Alberta and Manitoba, 21.4% of pharmacists were internationally educated.
- There were more female pharmacists (61.3%) who were Canadian trained compared to those who were internationally educated (51.8%).
- Most new graduates^x (89.4%) tended to work as staff pharmacists, which was considerably higher than the rest of the pharmacist workforce (60.2%).^{xi}

Employment

- Most of the pharmacist workforce had a single employer in 2009 (80.5%), while 19.5% had two or more employers.ⁱⁱⁱ
- Almost two-thirds (63.3%) of pharmacists worked as staff pharmacists, while 30.4% worked as pharmacy owners/managers.
- The position occupied by a pharmacist varied by gender. Only 38.7% of female pharmacists (versus 61.3% of male pharmacists) were employed as pharmacy owners/managers. Conversely, 69.1% of female pharmacists worked as staff pharmacists, compared to only 30.8% of male pharmacists.
- Younger pharmacists (age 20 to 29) tended to be employed as staff pharmacists (84.1%), compared with pharmacists age 40 to 49 (56.4%).
- More than three-quarters (75.5%) of employed pharmacists worked in a community pharmacy; 18.8% worked in hospitals and other health care facilities. However, there was provincial variation to these ratios.^{xii}
- Place of work for pharmacists varied by gender. Of the pharmacists working in a community pharmacy, 54.7% were female. Of the pharmacists working in the hospital setting, 75.7% were female.

x. New graduates are pharmacists who graduated in 2008 or 2009.

xi. Findings include data from Newfoundland and Labrador, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta and B.C.

xii. For this analysis, the findings exclude Quebec, Nunavut and New Brunswick.

Geography and Mobility

- Most (87.4%) employers of pharmacists in Canada were located in urban areas, while 12.6% were located in rural and remote areas. This ratio varied by jurisdiction; populous jurisdictions like Ontario (93.3%) and B.C. (92.2%) had more pharmacists employed in urban areas. Less populous jurisdictions, such as the Northwest Territories and Newfoundland and Labrador, had only 43.8% and 61.6% of pharmacists in urban areas, respectively.

About This Report

This is the fourth edition of *Pharmacists in Canada*. It will provide the reader with the most recent statistics on the pharmacist workforce, including information on demographic, geographic, educational and employment dimensions. Analyses are supplemented with detailed information about the data collection process, pertinent limitations of the current data and an explanation of the analytical methods.

This report is intended for use by all levels of government, as well as researchers, stakeholders and advocacy groups, private and public organizations, media and pharmacists as a source of data on the pharmacist workforce in Canada. The information contained in this report is one of the key requirements for effective human resource planning in the health care sector.

In this report, CIHI presents information on the pharmacist workforce and the pharmacist profession as a distinct health provider group.

For 2009, this publication includes

- A data analysis section for 2006 to 2009 PDB information;
- A section for provincial/territorial highlights, profiles and health region analyses; and
- A comprehensive Methodological Notes section.

We hope that this report will prove to be a useful foundation for those involved in human resources planning for pharmacists throughout Canada.

Want to Know More?

Highlights and the full text of *Pharmacists in Canada, 2009* are available free of charge in English and French on the CIHI website at www.cihi.ca.

Other PDB documents that may be of interest:

- Data Dictionary
- Data Submission Specifications Manual
- Privacy Impact Assessment

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About the CIHI Pharmacist Database

In order to determine the number of health professionals required in any jurisdiction, it is necessary to understand the current supply and how that supply is changing.

Since 2006, the PDB has collected information on the supply and distribution, demographics, geography, education and employment of pharmacists in selected provinces and territories in Canada.

PDB Data Providers

The provincial regulatory authorities and territorial governments are the primary data collectors for the PDB. In 2009, all provincial regulatory authorities and territorial governments except those in Quebec and Nunavut participated in the PDB. Where possible, information on the supply and demographics of the workforce in these jurisdictions has been provided by the CIHI Health Personnel Database (HPDB).

Pharmacist Database (PDB) Data Providers

Province	Data Provider	2006	2007	2008	2009
N.L.	Newfoundland and Labrador Pharmacy Board	X	✓	✓	✓
P.E.I.	Prince Edward Island Pharmacy Board	✓	✓	✓	✓
N.S.	Nova Scotia College of Pharmacists	✓	✓	✓	✓
N.B.	New Brunswick Pharmaceutical Society	X	X	X	✓
Que.	Did not participate	X	X	X	X
Ont.	Ontario College of Pharmacists	✓	✓	✓	✓
Man.	Manitoba Pharmaceutical Association	X	X	X	✓
Sask.	Saskatchewan College of Pharmacists	✓	✓	✓	✓
Alta.	Alberta College of Pharmacists	✓	✓	✓	✓
B.C.	College of Pharmacists of British Columbia	✓	✓	✓	✓
Y.T.	Yukon Government	✓	✓	†	✓
N.W.T.	Government of the Northwest Territories	✓	✓	✓	✓
Nun.	Did not participate	X	X	X	X

Notes

† The Yukon did not participate in the Pharmacist Database for 2008 only.

x Did not participate in the Pharmacist Database.

Official registration with the provincial regulatory authorities and territorial governments requires the completion of a registration form on an annual basis, in either written or electronic format. Registration forms typically contain details with respect to personal information, education credentials and employment history. The collection of these specific pieces of information tends to be common across jurisdictions. Other information collected on the form may vary according to the bylaws and business needs of the respective provincial regulatory authorities/territorial governments.

The administrative data collected by provincial regulatory authorities/territorial governments is well suited to informing health human resource planning and management in Canada. Collecting and collating this data provide a unique opportunity to examine aggregate information about pharmacists registered in Canada, which is essential to identifying supply-based issues for future health human resources planning.

In consultation with provincial regulatory authorities/territorial governments and other stakeholders, CIHI developed a standardized set of data elements to capture supply-based information on the pharmacist workforce in Canada. These data elements cover demographic, geographic and distribution characteristics, as well as education and employment details. From this consultation, a data dictionary containing specific information on the development process, data elements and associated values, as well as definitions and rationale for collection, was created.

The *Pharmacist Database Data Dictionary* is available for download on the CIHI website at www.cihi.ca.

Under the agreement with CIHI, a portion of the administrative information collected by the provincial regulatory authorities/territorial governments is submitted to CIHI on an annual basis. CIHI and the regulatory authorities/territorial governments jointly review the new data and apply rigorous principles of data quality assurance. Once data quality assurance is complete, CIHI adds the new data to the PDB for analysis and reporting. Over time, this information will provide a historical record of changes in the supply of the pharmacist workforce on a year-to-year basis.

Note: CIHI figures on pharmacists will not be the same as figures published by provincial regulatory authorities/territorial governments for the following reasons:

- a. Collection period**—The statistics typically released by provincial regulatory authorities/territorial governments include all registrations received during the 12-month registration period. In contrast, CIHI collects data as of October 1 of the data collection year. In consultation with provincial regulatory authorities/territorial governments, this point-in-time data collection was established to ensure timely and comprehensive information in spite of the different registration periods.
- b. Reference population**—For the PDB, provincial regulatory authorities and territorial governments submit data for active registrations received during the registration year. The active total presented in this report represents the number of pharmacists deemed eligible to work by the regulatory authority in that particular jurisdiction in that year. Specifically, active registration includes those registration categories that authorize a registrant, based on the assessment and issuance by a regulatory authority or territorial government, to engage in professional practice, as defined by the relevant laws, regulations and/or policies associated with a specific jurisdiction. Information on inactive registrants is not submitted to CIHI for the PDB.

- c. **Exclusions from CIHI data**—Active registrants fall into five categories: *employed in pharmacy*, *employed in other than pharmacy seeking employment in pharmacy*, *employed in other than pharmacy and not seeking employment in pharmacy*, *unemployed and seeking employment in pharmacy* and *unemployed and not seeking employment in pharmacy*. For this publication, CIHI removes unemployed registrants falling into any of the latter four categories, as well as those pharmacists for whom information on the data element Employment Status is missing or *unknown*.
- d. **Other exclusions from CIHI data**—CIHI statistics might not include pharmacists who are on leave (for example, maternity/paternity leave) as of October 1 of the data collection year.
- e. **CIHI editing and processing**—The CIHI database is not simply an amalgamation of data from the provincial regulatory authorities/territorial governments. When data files are submitted, CIHI attempts to remove those records for pharmacists who may be registered with more than one provincial regulatory authority and/or territorial government. For example, when a pharmacist has employment in both Alberta and British Columbia, she or he is required to register with both colleges. These registrants are called secondary registrations or interprovincial duplicates. This duplicate information is removed by CIHI according to the methodology described in the Methodological Notes section of this publication in order to avoid double-counting and to more accurately reflect the primary jurisdiction of employment.
- f. **Data quality processes**—Some jurisdictions perform their data quality review at the end of their registration period. As CIHI receives the data in October for the data collection year, it is possible that some of the data quality activities of some jurisdictions are not yet completed. As a result, at the time of data submission, a jurisdiction may have records for which the information is unknown for some data elements. Although every reasonable effort is made to acquire the information at the time of data submission, the correction may not be reflected in the CIHI database.

CIHI's Definition of the Pharmacist Workforce in Canada

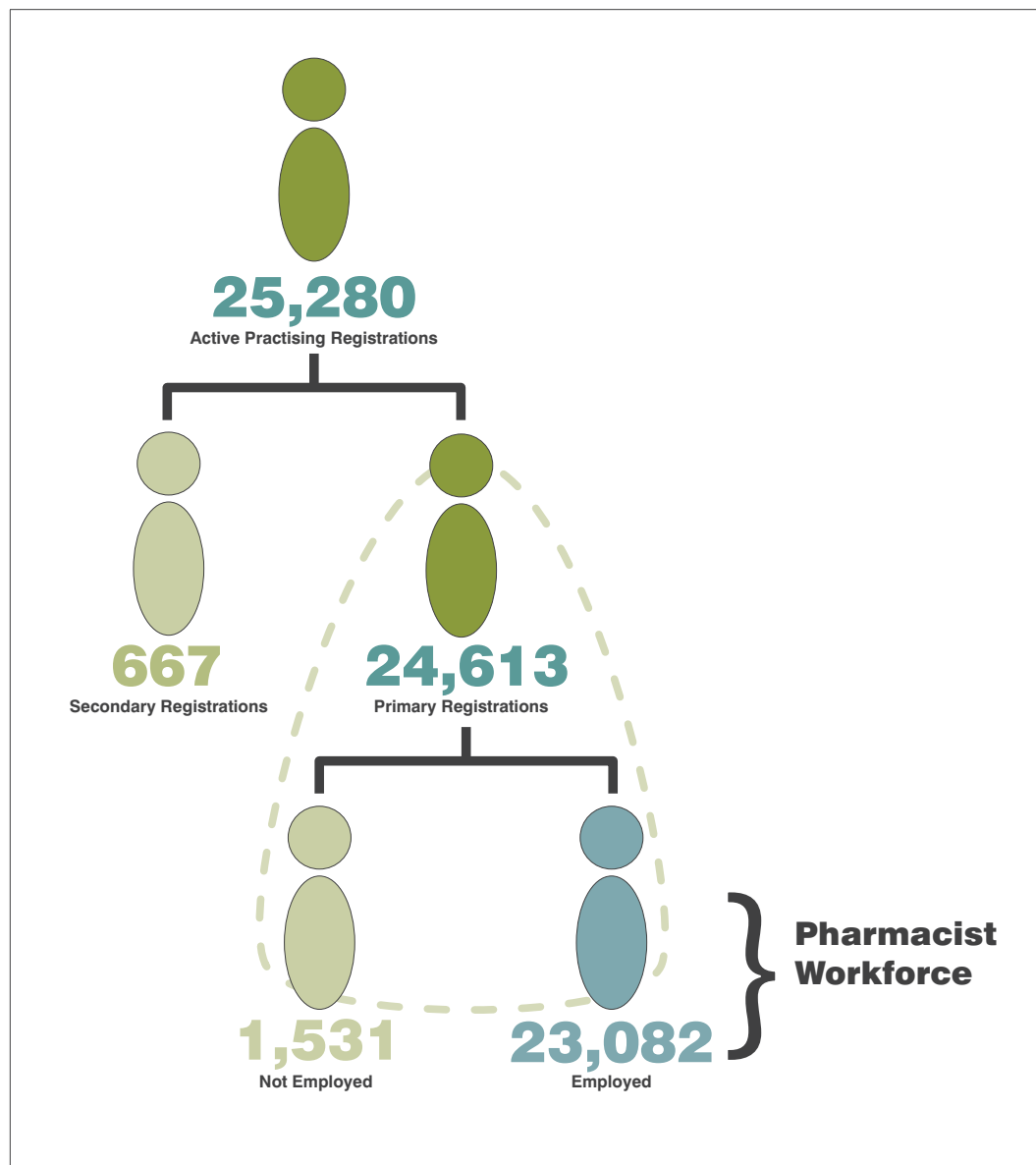
In this CIHI publication, “pharmacist workforce” is defined as the total number of pharmacists holding active registrations^{xiii} in Canada who are employed and are not considered secondary registrations^{xiv} or interprovincial duplicates. For more detailed information on the inclusion and exclusion criteria, please see the Methodological Notes.

For the 2009 pharmacist workforce information submitted by **participating** provincial regulatory authorities and territorial governments in Canada (excluding Quebec and Nunavut), 667 (2.6%) secondary registrations were removed and 1,531 (6.1%) registrations were removed because the registrants were not employed (see Figure 1).

xiii. Active registrations: Provincial regulatory authorities/territorial governments provided data to CIHI for the PDB for those pharmacists who held an active membership for 2009. This includes those specific membership categories authorizing a member as eligible to work in the particular jurisdiction in the particular year.

xiv. Secondary registrations: This group includes pharmacists who maintain provincial registration while living outside of Canada or whose Province of Residence and/or Province of Primary Employment is in a Canadian jurisdiction that is different from the Province of Registration.

Figure 1: Defining the CIHI PDB Pharmacist Workforce, 2009

**Notes**

Data from Quebec and Nunavut was not available.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

A Closer Look at the Employment Status of Registered Pharmacists

In 2009, 25,280 primary registrations were submitted by the pharmacist regulatory authorities in Canada. Almost all (93.1%, or 23,547) of the primary registrants were employed in pharmacy, 0.5% (143) were employed in other than pharmacy, 3.8% (980) were unemployed and the Employment Status was *unknown* for 2.4% (610) (see Table 1).

Table 1: Total Number of Active Registered Pharmacists by Employment Status, 2006 to 2009

Employment Status	2006		2007		2008		2009	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Employed in the Profession of Pharmacy	18,175	87.7	19,379	91.9	21,195	91.8	23,547	93.1
Employed in Other Than the Profession of Pharmacy, Seeking Employment in the Profession of Pharmacy	19	0.1	45	0.2	47	0.2	37	0.1
Employed in Other Than the Profession of Pharmacy, Not Seeking Employment in the Profession of Pharmacy	36	0.2	82	0.4	92	0.4	106	0.4
Unemployed and Seeking Employment in the Profession of Pharmacy	1,003	4.8	801	3.8	1,134	4.9	943	3.7
Unemployed and Not Seeking Employment in the Profession of Pharmacy	28	0.1	26	0.1	26	0.1	37	0.1
Unknown	1,452	7.0	743	3.5	605	2.6	610	2.4
Total Records Received	20,713	100	21,076	100	23,099	100	25,280	100

Notes

Total for 2009 includes data from Newfoundland and Labrador, P.E.I., Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, B.C., the Yukon and the Northwest Territories. Data from Quebec and Nunavut was not available.

Total for 2008 includes data from Newfoundland and Labrador, P.E.I., Nova Scotia, New Brunswick, Ontario, Saskatchewan, Alberta, B.C. and the Northwest Territories. Data from Quebec, Manitoba, the Yukon and Nunavut was not available.

Total for 2007 includes data from Newfoundland and Labrador, P.E.I., Nova Scotia, New Brunswick, Ontario, Saskatchewan, Alberta, B.C., the Yukon and the Northwest Territories. Data from Quebec, Manitoba and Nunavut was not available.

Total for 2006 includes data from P.E.I., Nova Scotia, Ontario, Saskatchewan, Alberta, B.C., the Yukon and the Northwest Territories. Data from Newfoundland and Labrador, New Brunswick, Quebec, Manitoba and Nunavut was not available.

For 2008 and 2007, data for all pharmacists submitted by the New Brunswick Pharmaceutical Society was included as *employed in the profession of pharmacy*, as Employment Status was not available.

There was an improvement in data quality in Nova Scotia, Saskatchewan, Alberta and B.C. from 2006 to 2009. In Nova Scotia, 96.7% of pharmacists reported their Employment Status in 2009, which represents an increase of 24.7% over 2006. In Saskatchewan, 95.0% of pharmacists reported their Employment Status in 2009, which represents an increase of 4.3% over 2006. In Alberta, 99.3% of pharmacists reported their Employment Status, which represents an increase of 6.1% over 2006. In B.C., 92.0% of pharmacists reported their Employment Status, which represents an increase of 11.7% over 2006.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

What Is a Pharmacist?

Pharmacists are regulated health professionals who assist their clients with medications in order to safely achieve desired health outcomes at home, in the community and in hospitals. They research and work collaboratively with other health care providers to deliver optimal health care solutions through effective use of health care products and services. By incorporating best care principles that are patient-centred, outcome-oriented and evidence-based, their professional practice emphasizes drug therapy management of diseases and symptoms and the promotion of wellness and disease prevention.

Responsibilities/Activities

Duties of a pharmacist can include the following:

- Reviewing medications and collaborating with patients/clients and other health care providers to ensure optimal therapy for each patient's/client's disease state;
- Setting therapeutic goals with patients/clients;
- Reviewing prescriptions for appropriate therapy;
- Educating patients and other health care professionals on the administration, uses and effects of medications, drug incompatibilities and contraindications;
- Advising patients/clients on selection and use of non-prescription medication;
- Leading or participating in research into the development of new drugs, improvement of patient/client outcomes or pharmaco-economic evaluation of drug therapy;
- Formulating and testing new drug products;
- Coordinating clinical investigations of new drugs;
- Controlling the quality of drug products during production;
- Developing informational materials on the uses and properties of particular drugs;
- Providing information services about drug products and pharmacotherapy; and
- Evaluating the labelling, packaging and advertising of drug products.

Pharmacists supervise and may also perform technical tasks such as compounding and/or dispensing pharmaceutical products, maintaining medication profiles of patients and registries of poisons, narcotics and controlled drugs, ensuring proper storage of vaccines, serums, biologicals and other pharmaceutical products and ordering/maintaining a stock of pharmaceutical supplies.

Practice Setting

In general, pharmacists specialize as community, institutional, government or industrial practitioners. Community pharmacists own and/or practise in community pharmacies, while institutional pharmacists practise as part of a team of health care professionals serving individual patients in hospitals, long-term care facilities and other health care institutions. Government pharmacists work in areas such as drug plan management, regulatory and professional affairs and research, while industrial pharmacists participate in the research, development, manufacturing and sales of pharmaceutical products.








Chapter 1—Supply



How Many Pharmacists Were There in Canada?

The supply of pharmacists has steadily increased since 2006, from 26,835 to 30,553, which represents an increase of 13.9%. Since 2006, participation in the PDB has increased from 8 to 11 provinces and territories.

Supply of Pharmacists, 2006 to 2009

 PDB Data
 Non-Participating
 CIHI Health
 Personnel Database
 % Fluctuation in Supply
 From 2006 to 2009



Canada	
2006	26,835
2007	28,495
2008	29,010
2009	30,553 13.9%

Notes

† Data from the CIHI Health Personnel Database (HPDB). The Quebec and Nunavut data for 2009, the Quebec, Manitoba and Nunavut data for 2006, 2007 and 2008, the Yukon data for 2008 and the Newfoundland and Labrador and New Brunswick data for 2006 was taken from the HPDB, which collects this information from the National Association of Pharmacy Regulatory Authorities and reports the number of active registered pharmacists. Therefore, the data for Quebec, Manitoba and Nunavut may include different membership categories for registrants. The HPDB data in this figure is useful for some purposes but should be used within the limitations noted in the Methodological Notes section of *Canada's Health Care Providers, 1997 to 2006, A Reference Guide*.

‡ The increase in supply may be partially attributed to an improvement in data quality in Nova Scotia, Saskatchewan, Alberta and B.C. from 2006 to 2009 and the addition of Manitoba to the PDB. In Nova Scotia, 96.7% of pharmacists reported their Employment Status in 2009, which represents an increase of 24.7% over 2006. In Saskatchewan, 95.0% of pharmacists reported their Employment Status in 2009, which represents an increase of 4.3% over 2006. In Alberta, 99.3% of pharmacists reported their Employment Status, which represents an increase of 6.1% over 2006. In B.C., 92.0% of pharmacists reported their Employment Status, which represents an increase of 11.7% over 2006.




For 2007 only, aggregate data for the New Brunswick pharmacists presented in this figure was provided by the New Brunswick Pharmaceutical Society and may include different membership categories for registrants.




For 2008 only, data for all pharmacists submitted by the New Brunswick Pharmaceutical Society and, for 2007, data for all pharmacists submitted by the Newfoundland and Labrador Pharmacy Board and the New Brunswick Pharmaceutical Society was included as *employed in the profession of pharmacy*, as Employment Status was not available. CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.




The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.





Sources

Pharmacist Database and Health Personnel Database, Canadian Institute for Health Information.

	 Newfoundland and Labrador	 Prince Edward Island	 Nova Scotia
2006	585 [†]	141	788
2007	592	155	1,002
2008	571	161	1,093
2009	591 1.0%	161 14.2%	1,098 39.3% [‡]

	 New Brunswick	 Quebec	 Ontario
2006	625 [†]	6,790 [†]	9,309
2007	668	7,057 [†]	9,779
2008	692	6,937 [†]	9,813
2009	688 10.1%	7,441 [†] 9.6%	10,423 12.0%

	 Manitoba [†]	 Saskatchewan	 Alberta
2006	1,155 [†]	1,027	3,197
2007	1,152 [†]	1,142	3,444
2008	1,205 [†]	1,138	3,566
2009	1,233 6.8%	1,189 15.8% [‡]	3,712 16.1% [‡]

	 British Columbia [†]	 Yukon	 Northwest Territories	 Nunavut
2006	3,151	29	22	16 [†]
2007	3,435	30	22	17 [†]
2008	3,753	39 [†]	20	22 [†]
2009	3,938 25.0%	29 0%	20 -9.1%	30 [†] 87.5%

Supply of Pharmacists

For the third year running, the number of pharmacists for every 100,000 Canadians increased, reaching a total of 90 pharmacists for every 100,000 Canadians in 2009. That being said, there was pronounced and consistent variation in the pharmacist-to-population ratio across the provinces and territories.

Table 2: Pharmacist Workforce by Count, Percent and per 100,000 Population by Province or Territory of Registration, 2006 to 2009

Count	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.	Total
2006	585 [†]	141	788	625 [†]	6,790 [†]	9,309	1,155 [†]	1,027	3,197	3,151	29	22	16 [†]	26,835
2007	592	155	1,002	668	7,057 [†]	9,779	1,152 [†]	1,142	3,444	3,435	30	22	17 [†]	28,495
2008	571	161	1,093	692	6,937 [†]	9,813	1,205 [†]	1,138	3,566	3,753	39 [†]	20	22 [†]	29,010
2009	591	161	1,098	688	7,441 [†]	10,423	1,233	1,189	3,712	3,938	29	20	30 [†]	30,553
Percentage Distribution														
2006	2.2	0.5	2.9	2.3	25.3	34.7	4.3	3.8	11.9	11.7	0.1	0.1	0.1	100
2007	2.1	0.5	3.5	2.3	25.9	34.3	4.2	4.0	12.1	12.1	0.1	0.1	0.1	100
2008	2.0	0.6	3.8	2.4	23.9	33.8	4.2	3.9	12.3	12.9	0.1	0.1	0.1	100
2009	1.9	0.5	3.6	2.3	24.4	34.1	4.0	3.9	12.1	12.9	0.1	0.1	0.1	100
Supply per 100,000 Population														
2006	115	102	84	84	89	73	98	104	94	73	90	51	52	82
2007	117	112	107	89	92	76	96	114	98	79	92	51	54	86
2008	112	114	116	93	89	76	100	111	99	85	117	46	70	87
2009	116	114	117	92	95	79	101	115	100	88	85	46	92	90

Notes

[†] Data from the CIHI Health Personnel Database (HPDB). Manitoba data for 2006, 2007 and 2008, Yukon data for 2008, Newfoundland and Labrador and New Brunswick data for 2006, and Quebec and Nunavut data for 2006, 2007, 2008 and 2009 was taken from the HPDB, which collects this information from the National Association of Pharmacy Regulatory Authorities and reports the number of active registered pharmacists. Therefore, the data for Quebec and Nunavut may include different membership categories for registrants. The HPDB data in this table is useful for some purposes but should be used within the limitations noted in the Methodological Notes section of *Canada's Health Care Providers, 1997 to 2006, A Reference Guide*.

For 2008, data from Manitoba, the Yukon and Nunavut was not available.

For 2007 only, aggregate data for the New Brunswick pharmacists presented in this table was provided by the New Brunswick Pharmaceutical Society and may include different membership categories for registrants.

For 2008 only, data for all pharmacists submitted by the New Brunswick Pharmaceutical Society and, for 2007, data for all pharmacists submitted by the Newfoundland and Labrador Pharmacy Board and the New Brunswick Pharmaceutical Society was included as *employed in the profession of pharmacy*, as Employment Status was not available.

There was an improvement in data quality in Nova Scotia, Saskatchewan, Alberta and B.C. from 2006 to 2009. In Nova Scotia, 96.7% of pharmacists reported their Employment Status in 2009, which represents an increase of 24.7% over 2006. In Saskatchewan, 95.0% of pharmacists reported their Employment Status in 2009, which represents an increase of 4.3% over 2006. In Alberta, 99.3% of pharmacists reported their Employment Status, which represents an increase of 6.1% over 2006. In B.C., 92.0% of pharmacists reported their Employment Status, which represents an increase of 11.7% over 2006. The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Population statistics are based on data from Statistics Canada (*Quarterly Demographic Estimates* 23, 4 [March 25, 2010], catalogue no. 91-002-X).

CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.

Sources

Pharmacist Database and Health Personnel Database, Canadian Institute for Health Information; Statistics Canada.



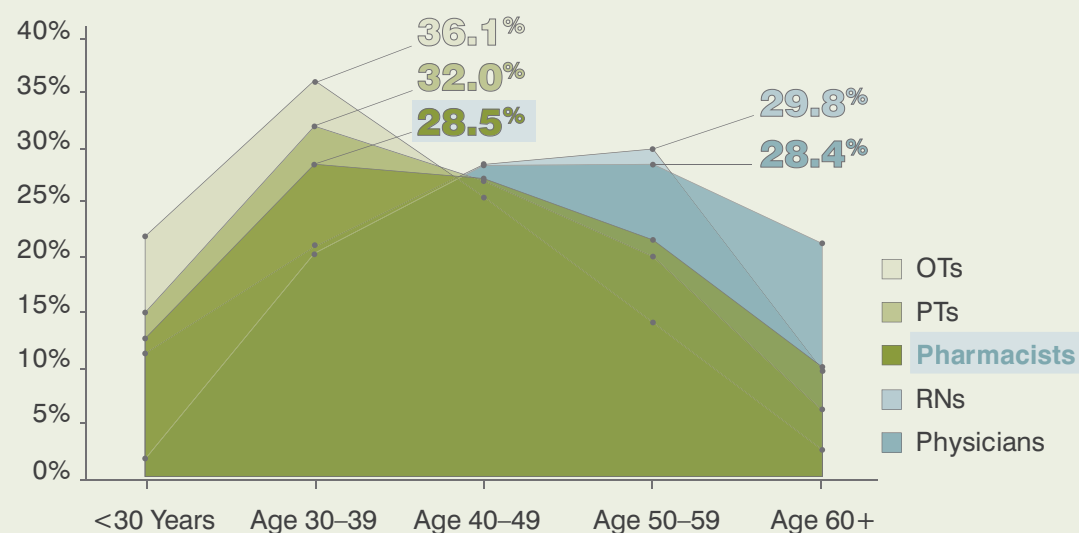
Chapter 2—Demographics



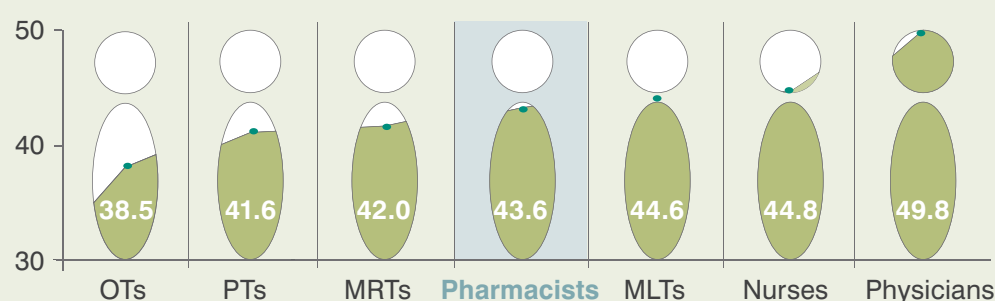
Workforce Age Gaps

Gaps appear in the age distributions of the health human resources workforce in Canada. While many in the nursing and physician workforces are in their 50s, many pharmacists, occupational therapists and physiotherapists are in their 30s. Imbalance in the age distribution of the health care providers in Canada may affect the future mix of new and experienced providers in the health workforce, as well as the net flow in or out of the workforce.

Health Professionals by Age[†]



Health Professionals by Average Age[‡]



Notes

Pharmacists

[†] Data for Quebec and Nunavut was not available. Findings from the Northwest Territories were suppressed due to small cell sizes.

[‡] Data from the Yukon was not available.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Birth: total (12, <0.1%).

For more information on the regulated nurse (2008), physician (2008), medical radiation technologist (2008), medical laboratory technologist (2008), occupational therapist (2009) and physiotherapist (2009) databases, please see their respective annual reports at www.cihi.ca.

CIHI data will differ from provincial and territorial statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Health Personnel Database, Nursing Database, Occupational Therapist Database, Physiotherapist Database, Pharmacist Database, Medical Laboratory Technologist Database, Medical Radiation Technologist Database and Scott's Medical Database, Canadian Institute for Health Information; Manitoba Health; Nova Scotia College of Physiotherapists.

Demographic Characteristics of the Pharmacist Workforce

This section highlights the gender mix and age distribution of the pharmacist workforce in Canada for 2009, which now includes Manitoba and Yukon data.

Gender

Table 3: Pharmacist Workforce by Gender and Selected Province or Territory of Registration, 2009

	Female		Male		Total
	Count	Percent	Count	Percent	
N.L.	305	51.8	284	48.2	589
P.E.I.	102	63.4	59	36.6	161
N.S.	761	69.3	337	30.7	1,098
N.B.	461	67.1	226	32.9	687
Ont.	5,984	57.4	4,439	42.6	10,423
Man.	586	54.4	491	45.6	1,077
Sask.	749	63.0	440	37.0	1,189
Alta.	2,328	62.7	1,384	37.3	3,712
B.C.	2,261	57.4	1,677	42.6	3,938
Territories	29	59.2	20	40.8	49
Total	13,566	59.2	9,357	40.8	22,923

Notes

Data for Quebec and Nunavut was not available.

Manitoba Health provided aggregate data for Age and Gender for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Gender: Newfoundland and Labrador (2, 0.3%), New Brunswick (1, 0.1%),

Manitoba (156, 12.7%), total (159, 0.7%).

CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.

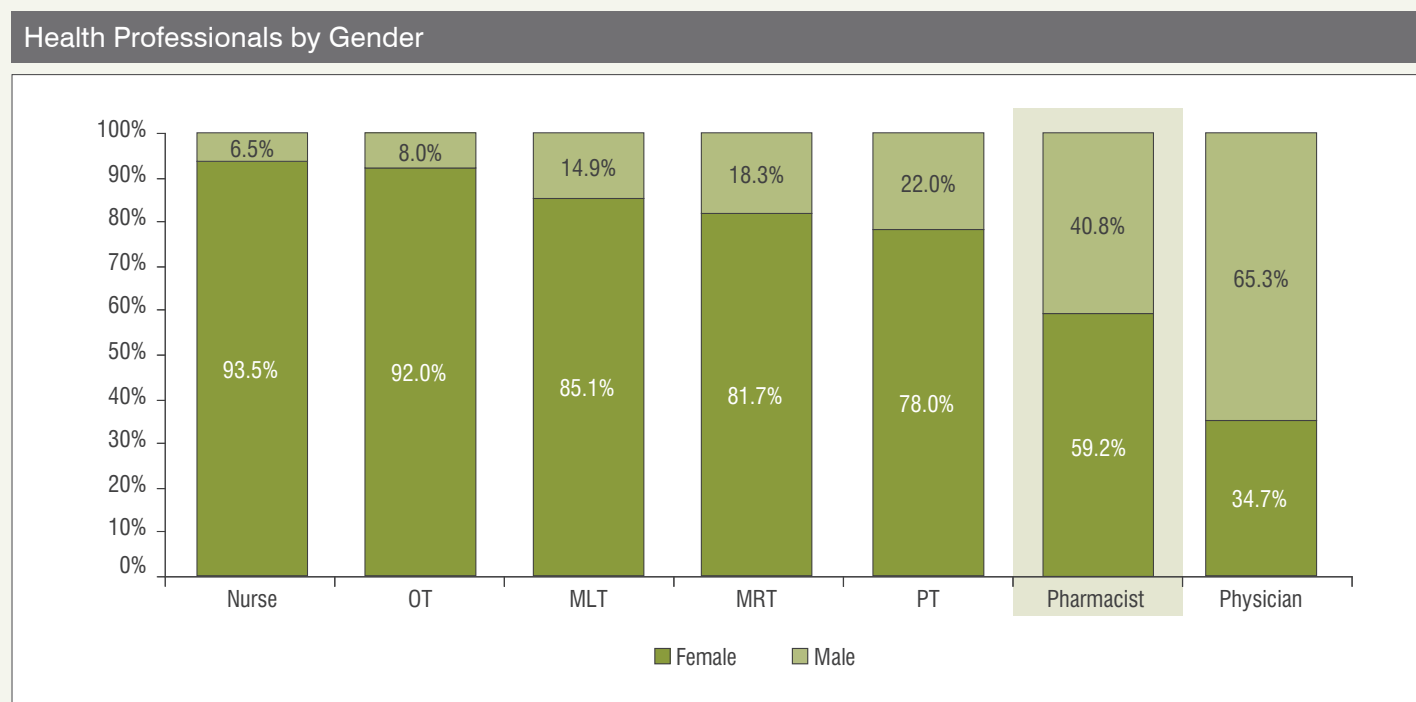
The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Cross-Profession by Gender

The gender split of the health care workforce varies greatly with the profession.



Notes

Pharmacists

Data from Quebec and Nunavut was not available.

The results do not include data for which responses were *unknown*.

Count and percentage *unknown* for Gender: total (159, 0.7%).

Manitoba Health provided aggregate totals for Gender for registrants in Manitoba.

For more information on the regulated nurse (2008), physician (2008), medical radiation technologist (2008), medical laboratory technologist (2008), occupational therapist (2009) and physiotherapist databases (2009), please see their respective annual reports at www.cihi.ca.

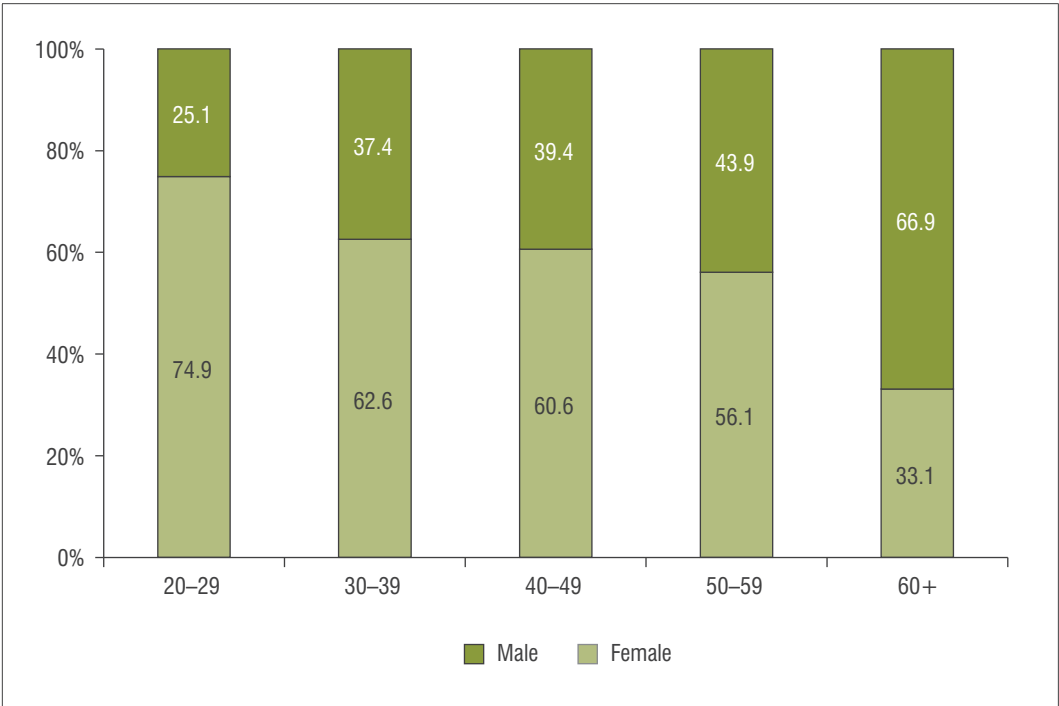
CIHI data will differ from provincial and territorial statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Nursing Database, Occupational Therapist Database, Physiotherapist Database, Pharmacist Database, Medical Laboratory Technologist Database, Medical Radiation Technologist Database, Scott's Medical Database and Health Personnel Database, Canadian Institute for Health Information; Manitoba Health; Nova Scotia College of Physiotherapists.

Figure 2: Pharmacist Workforce by Gender by 10-Year Age Groups, 2009



Notes

Data for Quebec and Nunavut was not available.
Manitoba Health provided aggregate data for Gender and Age for registrants in Manitoba.
The results do not include data for which responses were *unknown*.
Percentage *unknown* for Gender: total (159, 0.7%).
Percentage *unknown* for Year of Birth: total (12, <0.1%).
CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.
The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Table 4: Pharmacist Workforce by Gender and 10-Year Age Groups, Selected Province or Territory of Registration, 2009

	N.L.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total
Count of Pharmacists										
Female										
20–29 Years	77	16	112	75	690	87	156	462	434	2,109
30–39 Years	82	41	244	161	1,754	207	232	707	654	4,082
40–49 Years	102	29	225	132	1,806	144	167	577	608	3,790
50–59 Years	43	16	161	86	1,298	113	157	466	452	2,792
60+ Years	0	0	19	6	436	34	37	116	113	761
Total	304	102	761	460	5,984	585	749	2,328	2,261	13,534
Male										
20–29 Years	26	*	22	**	253	30	44	142	176	707
30–39 Years	66	13	104	77	1,084	128	95	440	433	2,188
40–49 Years	73	20	88	61	1,148	130	111	381	450	2,462
50–59 Years	74	**	74	**	1,080	120	95	270	413	2,188
60+ Years	45	14	49	24	874	82	95	151	205	1,539
Total	284	59	337	226	4,439	490	440	1,384	1,677	9,336
Percentage of Pharmacists										
Female										
20–29 years	25.3	15.7	14.7	16.3	11.5	14.9	20.8	19.8	19.2	15.6
30–39 years	27.0	40.2	32.1	35.0	29.3	35.4	31.0	30.4	28.9	30.2
40–49 years	33.6	28.4	29.6	28.7	30.2	24.6	22.3	24.8	26.9	28.0
50–59 years	14.1	15.7	21.2	18.7	21.7	19.3	21.0	20.0	20.0	20.6
≥60 years	0.0	0.0	2.5	1.3	7.3	5.8	4.9	5.0	5.0	5.6
Male										
20–29 years	9.2	*	6.5	**	5.7	6.1	10.0	10.3	10.5	7.6
30–39 years	23.2	22.0	30.9	34.1	24.4	26.1	21.6	31.8	25.8	26.1
40–49 years	25.7	33.9	26.1	27.0	25.9	26.5	25.2	27.5	26.8	26.4
50–59 years	26.1	**	22.0	**	24.3	24.5	21.6	19.5	24.6	23.4
≥60 years	15.8	23.7	14.5	10.6	19.7	16.7	21.6	10.9	12.2	16.5

Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

Data for Quebec, the Yukon and Nunavut was not available.

Findings from the Northwest Territories were suppressed due to small cell sizes.

Manitoba Health provided aggregate totals for Age and Gender for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Gender: Newfoundland and Labrador (2, 0.3%), New Brunswick (1, 0.1%), Manitoba (156, 12.7%), total (159, 0.7%).

Percentage *unknown* for Year of Birth: Newfoundland and Labrador (3, 0.5%), New Brunswick (2, 0.3%), Manitoba (7, 0.6%), total (12, <0.1%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Age Distribution

The age distribution of pharmacists is slightly skewed towards younger age groups, with an average age of 43.6.

Table 5: Pharmacist Workforce by 10-Year Age Groups and Average Age, Selected Province of Registration, 2009

	20–29 Years		30–39 Years		40–49 Years		50–59 Years		60+ Years		Total	Average Age
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
N.L.	103	17.5	148	25.2	175	29.8	117	19.9	45	7.7	588	42.3
P.E.I.	19	11.8	54	33.5	49	30.4	25	15.5	14	8.7	161	42.6
N.S.	134	12.2	348	31.7	313	28.5	235	21.4	68	6.2	1,098	42.4
N.B.	86	12.5	238	34.7	193	28.1	139	20.3	30	4.4	686	41.6
Ont.	943	9.0	2,838	27.2	2,954	28.3	2,378	22.8	1,310	12.6	10,423	45.1
Man.	208	17.0	380	31.0	287	23.4	235	19.2	116	9.5	1,226	42.2
Sask.	200	16.8	327	27.5	278	23.4	252	21.2	132	11.1	1,189	43.0
Alta.	604	16.3	1,147	30.9	958	25.8	736	19.8	267	7.2	3,712	41.7
B.C.	610	15.5	1,087	27.6	1,058	26.9	865	22.0	318	8.1	3,938	42.6
Total	2,907	12.6	6,567	28.5	6,265	27.2	4,982	21.6	2,300	10.0	23,021	43.6

Notes

Data for Quebec and Nunavut was not available.

Findings from the Northwest Territories were suppressed due to small cell sizes.

Manitoba Health provided aggregate totals for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Birth: Newfoundland and Labrador (3, 0.5%), New Brunswick (2, 0.3%), Manitoba (7, 0.6%), total (12, <0.1%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.



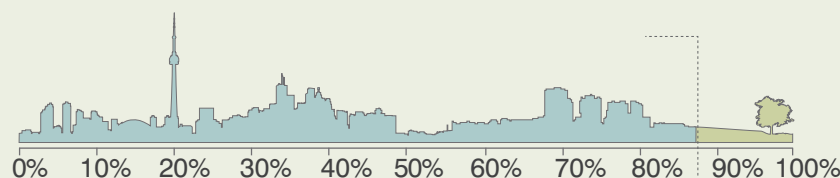
Chapter 3—Geography



Putting Pharmacists on the Map

In 2009, many pharmacists continued to work in urban areas; 52.5% of pharmacists were employed in areas with at least half a million people, where 46.4% of the Canadian population resides. Conversely, only 12.6% of pharmacists were employed in rural and remote areas of Canada, where 27% of the population resides.¹

Urban, Rural and Remote Distribution, 2009



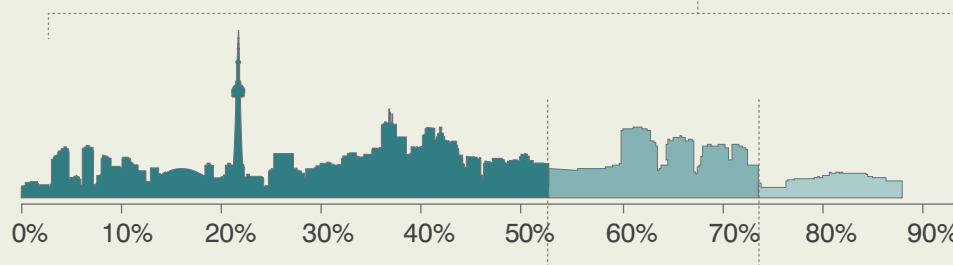
Urban

87.4% Pharmacists

73.0% CANADIAN POPULATION

Rural and Remote

12.6% Pharmacists

27.0% CANADIAN POPULATION


Urban 500,000+

52.5% Pharmacists

46.4% CANADIAN POPULATION

Urban 499,999–100,000

21.2% Pharmacists

12.6% CANADIAN POPULATION

Urban 99,999–10,000

13.7% Pharmacists

14.0% CANADIAN POPULATION

Notes

Data for Quebec and Nunavut was not available.

Not stated and *unknown* responses were removed from the above analysis.

Unknown indicates that the Postal Code of Primary Employment was provided but did not match the Postal Code Conversion File (PCCF) from Statistics Canada.

Not stated indicates that the postal code of primary employment was not provided.

Percentage *unknown* for Postal Code of Primary Employment: total (995, 4.3%).

Postal Code of Primary Employment data was assigned to urban, rural and remote categories using the March 2009 release of Statistics Canada's PCCF.

The urban, rural and remote categories are based on a classification scheme developed by Statistics Canada.

CMA/CA: census metropolitan area/census agglomeration.

MIZ: metropolitan influenced zone.

Urban/rural population statistics are based on 2006 census data from Statistics Canada (catalogue no. 97-550-XWE2006002, released July 12, 2007).¹

CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada.

Geography

Based on the Postal Code of Employment, it is possible to determine where in Canada pharmacists are employed and may provide pharmacy services.

Table 6: Count, Percentage and per 10,000 Population of Pharmacists in Urban and Rural/Remote Regions, by Province or Territory of Registration, 2009

	Urban			Rural and Remote Areas		
	Count	Percent	Per 10,000 Population	Count	Percent	Per 10,000 Population
N.L.	349	61.6	18.0	218	38.4	7.0
P.E.I.	121	76.1	22.7	38	23.9	4.6
N.S.	745	71.4	18.3	298	28.6	5.9
N.B.	442	70.8	14.8	182	29.2	4.2
Ont.	9,227	93.3	9.5	663	6.7	2.7
Man.	897	77.6	12.5	259	22.4	6.0
Sask.	839	74.1	16.3	294	25.9	6.5
Alta.	3,158	86.0	13.2	513	14.0	5.7
B.C.	3,502	92.2	10.7	297	7.8	3.5
Y.T.	24	82.8	13.2	5	17.2	4.1
N.W.T.	7	43.8	3.9	9	56.3	3.8
Total	19,311	87.4	11.0	2,776	12.6	4.3

Notes

Data for Quebec and Nunavut was not available.

For the Northwest Territories, the *rural and remote* classification also includes the *territories* classification.

Not stated and *unknown* responses were removed from the above analysis.

Unknown indicates that the Postal Code of Primary Employment was provided but did not match the Postal Code Conversion File (PCCF) from Statistics Canada.

Not stated indicates that the postal code of primary employment was not provided.

Percentage *unknown* for Postal Code of Primary Employment: total (995, 4.3%).

Postal Code of Primary Employment data was assigned to urban, rural and remote categories using the March 2009 release of Statistics Canada's PCCF.

The urban, rural and remote categories are based on a classification scheme developed by Statistics Canada.

Urban/rural population statistics are based on 2006 census data from Statistics Canada

(catalogue no. 97-550-XWE2006002, released July 12, 2007).

CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

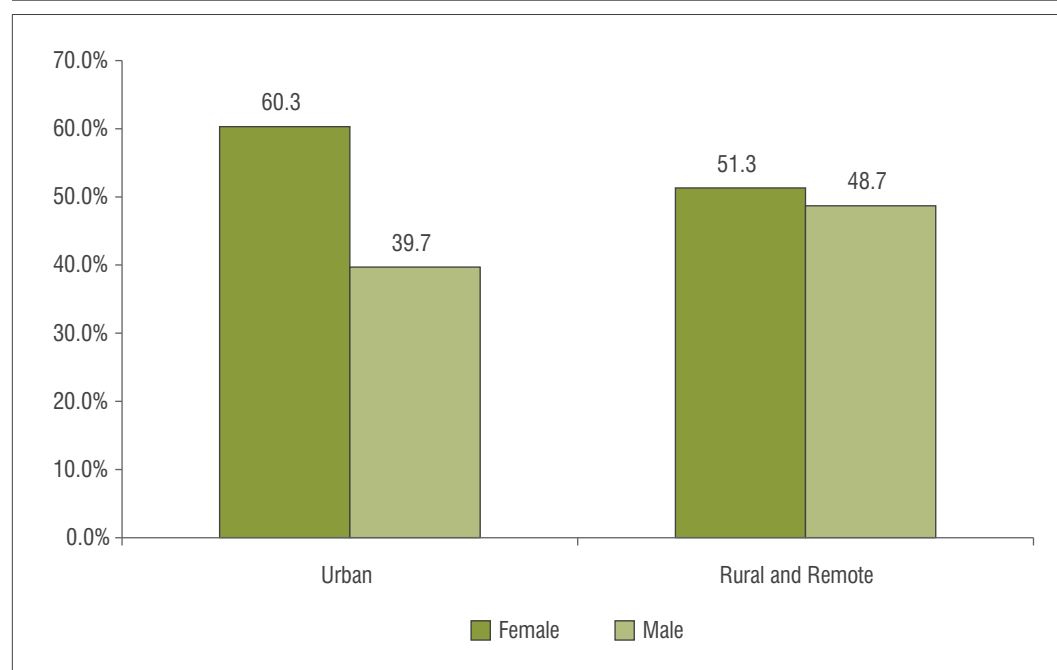
Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada.

Demographic Characteristics of the Pharmacist Workforce Employed in Urban Versus Rural/Remote Areas

Pharmacists in urban areas were more likely to be female.

Figure 3: Pharmacist Workforce by Urban and Rural/Remote Distribution by Gender, 2009



Notes

Data for Quebec and Nunavut was not available.

For the Northwest Territories, the *rural and remote* classification also includes the *territories* classification.

Not stated and *unknown* responses were removed from the above analysis.

Unknown indicates that the Postal Code of Primary Employment was provided but did not match the Postal Code Conversion File (PCCF) from Statistics Canada.

Not stated indicates that the postal code of primary employment was not provided.

Percentage *unknown* for Postal Code of Primary Employment: total (995, 4.3%).

Postal Code of Primary Employment data was assigned to urban, rural and remote categories using the March 2009 release of Statistics Canada's PCCF. The urban, rural and remote categories are based on a classification scheme developed by Statistics Canada.

CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada.

Table 7: Pharmacist Workforce by Urban and Rural/Remote Distribution by 10-Year Age Groups, 2009

Age Group	Urban (%)	Rural and Remote (%)
20–29 Years	12.7	11.5
30–39 Years	29.2	25.4
40–49 Years	27.4	26.9
50–59 Years	21.4	23.3
60+ Years	9.3	12.8

Notes

Data for Quebec and Nunavut was not available.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The urban, rural and remote categories are based on a classification scheme developed by Statistics Canada.

Not stated and *unknown* responses were removed from the above analysis.

Unknown indicates that the Postal Code of Primary Employment was provided but did not match the Postal Code Conversion File (PCCF) from Statistics Canada.

Not stated indicates that the postal code of primary employment was not provided.

Percentage *unknown* for Postal Code of Primary Employment: total (995, 4.3%).

Postal Code of Primary Employment data was assigned to urban, rural and remote categories using the March 2009 release of Statistics Canada's PCCF.

CIHI data will differ from provincial regulatory authority and territorial government statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health; Statistics Canada.



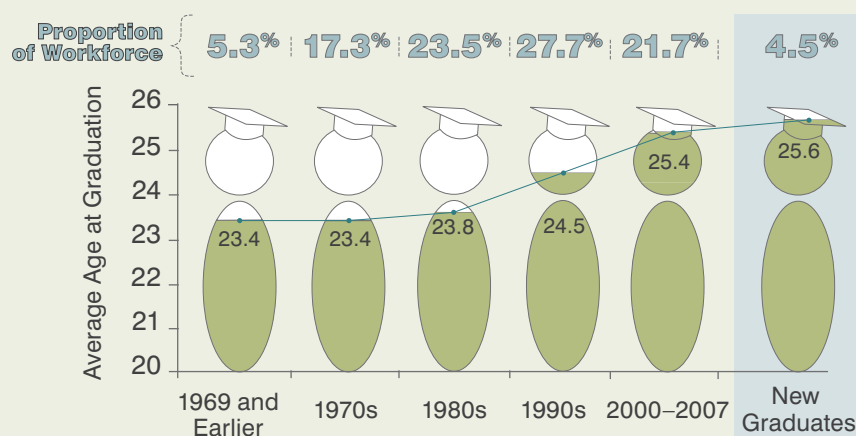
Chapter 4—Education



New Pharmacists in the Workforce

Recent graduates made up 4.5% of the workforce in 2009. On average, they graduated in their late 20s (while pharmacists who graduated 30 years ago were in their early 20s). A total of 68.3% of recent graduates were female, which was higher than in the overall pharmacist workforce (59.2% female). The vast majority of new graduates (89.4%) entered the workforce as staff pharmacists.

Age at Graduation*



Notes

New graduates: graduates have a Year of Graduation for Basic Education of 2008 or 2009.

Primary Employment: the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Pharmacy owner/manager: pharmacy owner with a major role in the day-to-day operation of a pharmacy, although may include some direct client service provision.

Pharmacy manager: major role is in the day-to-day operation of a pharmacy combined with significant direct client service provision.

Staff pharmacist: major role is the direct delivery of pharmacist services to clients.

Other: includes director of pharmacy, institutional leader/coordinator, pharmacist consultant, educator, researcher, industrial pharmacist and other positions not otherwise specified.

Data for Quebec and Nunavut was not available.

* Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Birth: total (12, <0.1%).

Percentage *unknown* for Year of Graduation for Basic Education: total (45, 0.2%).

Percentage *unknown* for Position of Primary Employment for new graduates: total (19, 2.0%).

Percentage *unknown* for Position of Primary Employment for entire workforce: total (290, 1.3%).

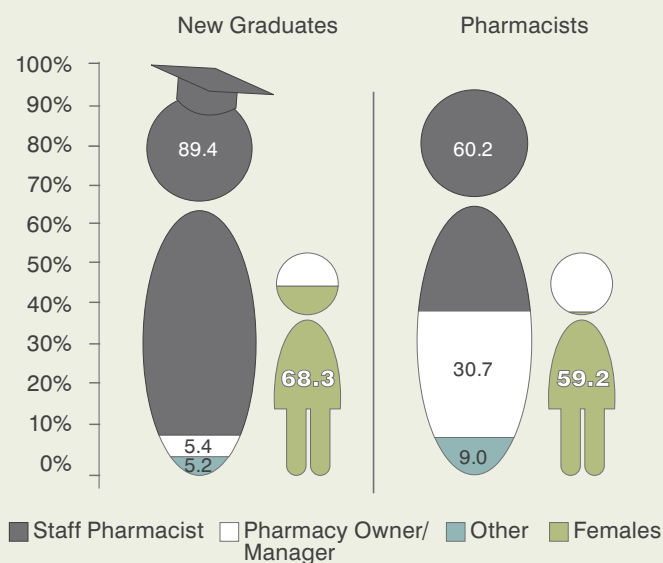
CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Female New Graduates and Primary Employment Position



Education

The current minimum educational standard for pharmacy practice in Canada is a professional baccalaureate degree (bachelor of science) in pharmacy (BScPharm). The professional program comprises four years of undergraduate pharmacy education, plus a minimum prerequisite of one additional year of undergraduate pre-pharmacy education.

Table 8: Pharmacist Workforce Current Level of Education, 2006 to 2009

Current Education	2006		2007		2008		2009	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Diploma	107	0.7	166	0.9	384	1.9	449	2.0
Baccalaureate	16,043	97.5	18,223	96.3	18,991	94.6	21,687	94.2
Master's	107	0.7	189	1.0	244	1.2	305	1.3
PharmD	194	1.2	327	1.7	424	2.1	528	2.3
Doctorate	6	0.0	23	0.1	37	0.2	43	0.2
Total	16,463[†]	100	18,928[‡]	100	20,080[§]	100	23,012	100

Notes

† 2006 includes data from P.E.I., Ontario, Saskatchewan, Alberta, B.C. and the Northwest Territories.

Data for Newfoundland and Labrador, New Brunswick, Quebec, Manitoba and Nunavut was not available.

‡ 2007 includes data from P.E.I., Nova Scotia, Ontario, Saskatchewan, Alberta, B.C. and the Northwest Territories. Data from Quebec, Manitoba and Nunavut was not available. Findings do not include Newfoundland and Labrador, New Brunswick and the Yukon, as the Level of Education was not collected/submitted.

§ 2008 includes data from Newfoundland and Labrador, P.E.I., Nova Scotia, Ontario, Saskatchewan, Alberta, B.C. and the Northwest Territories. Data for Quebec, Manitoba, the Yukon and Nunavut was not available.

2009 includes data from Newfoundland and Labrador, Prince Edward Island, New Brunswick, Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, B.C., the Yukon and the Northwest Territories. Data for Quebec and Nunavut was not available.

Level of Current Education in Pharmacy represents the highest and the most recently acquired level of education in pharmacy reported by the registrant.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Level of Current Education in Pharmacy, 2009: total (70, 0.3%).

Percentage *unknown* for Level of Current Education in Pharmacy, 2008: total (35, 0.2%).

Percentage *unknown* for Level of Current Education in Pharmacy, 2007: total (51, 0.3%).

Percentage *unknown* for Level of Current Education in Pharmacy, 2006: total (384, 2.3%).

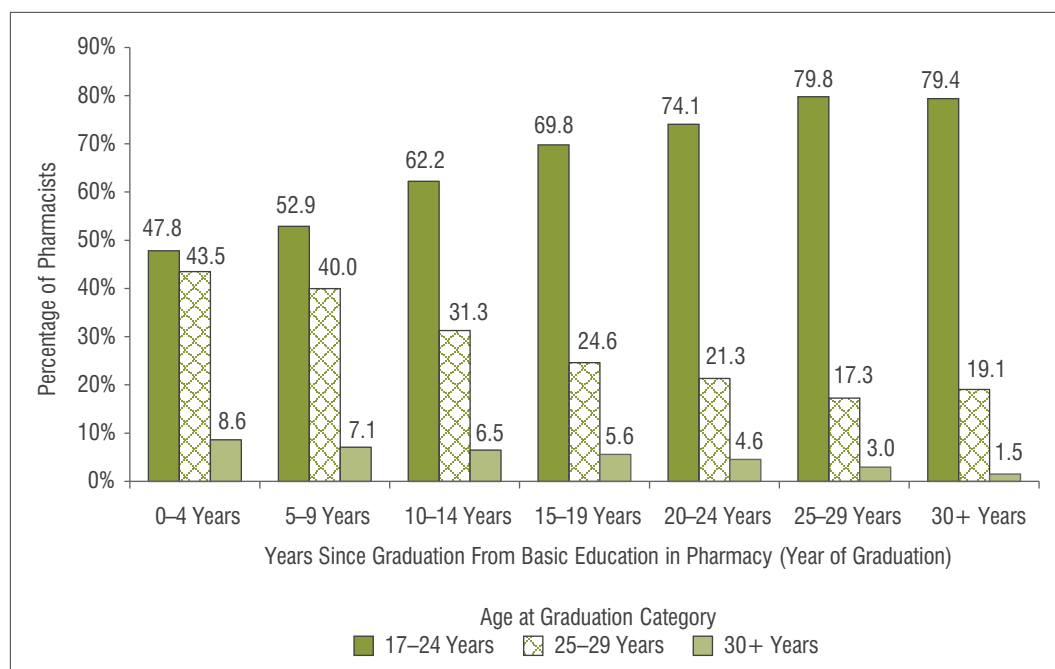
CIHI data will differ from provincial regulatory authority or territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

Figure 4: Age at Graduation From Basic Education in Pharmacy

**Notes**

Data for Quebec and Nunavut was not available.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Graduation for Basic Education in Pharmacy: total (45, 0.2%).

CIHI data will differ from provincial and territorial data due to the CIHI collection, processing and reporting methodology.

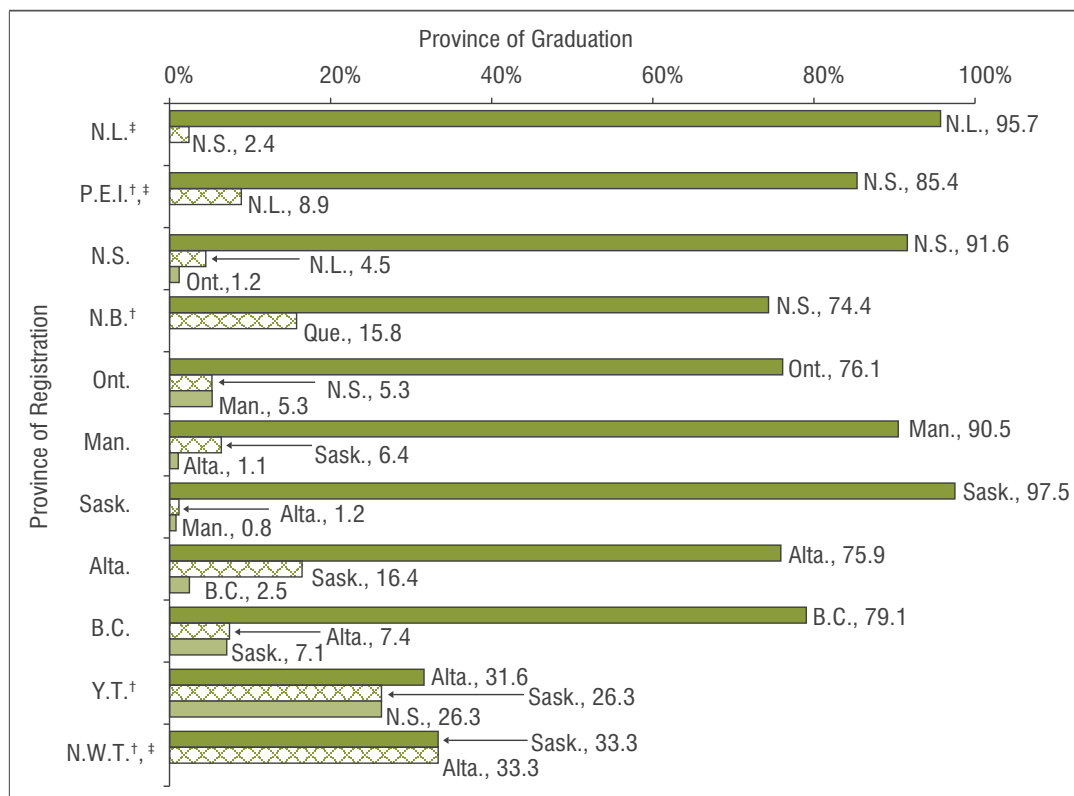
The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Top Three Provinces of Graduation by Province of Registration

Figure 5: Pharmacist Workforce by Province or Territory of Registration and Top Three Provinces of Graduation, 2009



Notes

† P.E.I., New Brunswick, the Yukon, the Northwest Territories and Nunavut do not have a graduate program in pharmacy.

‡ Only the top two provinces of graduation were used for P.E.I., Newfoundland and Labrador and the Northwest Territories due to small cell sizes.

Data for Quebec and Nunavut was not available.

Percentage *unknown* for University of Graduation for Current Education in Pharmacy: Newfoundland and Labrador (34, 5.8%), Nova Scotia (3, 0.3%), Ontario (1,214, 11.6%), Saskatchewan (26, 2.2%), B.C. (556, 14.1%), Yukon (6, 20.7%), total (1,839, 8.0%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.



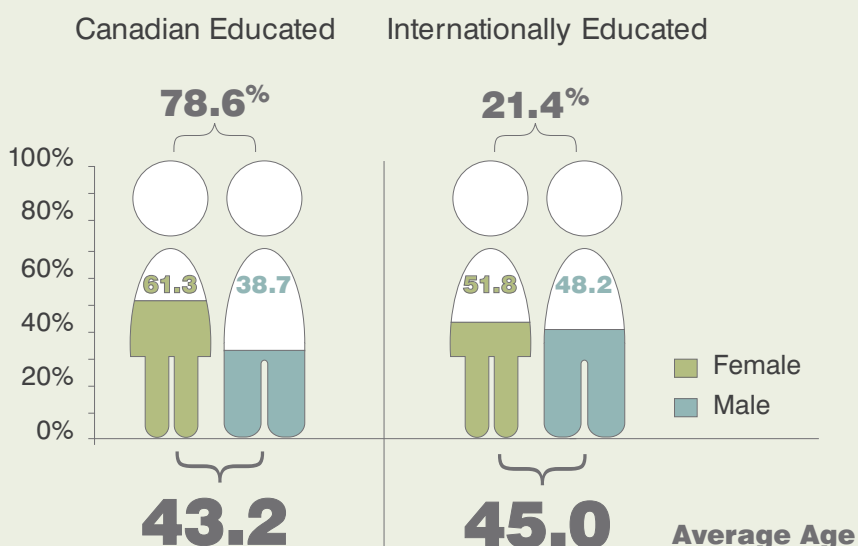
Chapter 5—Employment



A Portrait of the Internationally Educated Pharmacist

Information on internationally educated pharmacists was available for the Ontario, Manitoba, Alberta and B.C. workforces only. In comparison to their Canadian-educated counterparts, internationally educated pharmacists comprised more men and had a slightly older workforce. They also were more likely to be pharmacy owners/managers and work in a private/business setting.

Canadian and Internationally Educated

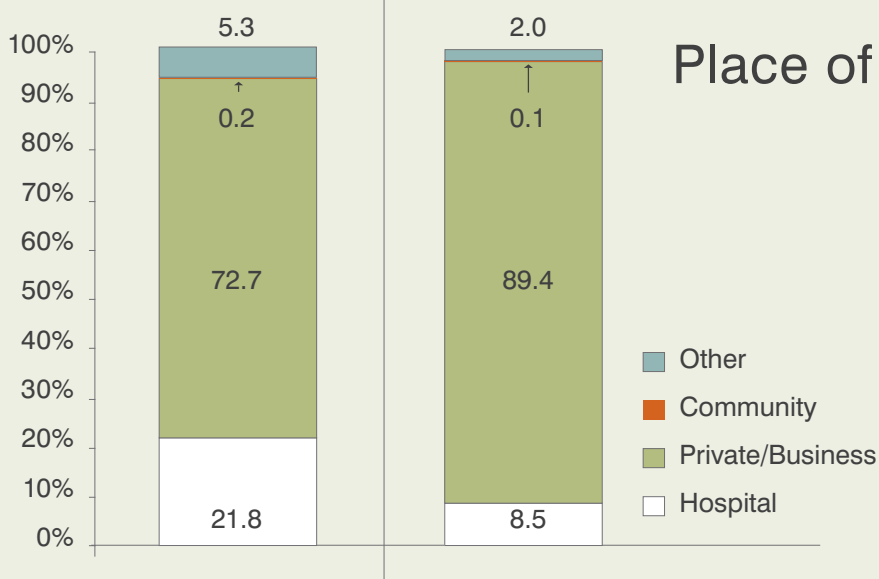


Notes

Data for Quebec and Nunavut was not available.
 Manitoba Health provided aggregate data for Gender for registrants in Manitoba. The results do not include data for which responses were *unknown*.
 Percentage *unknown* for Country of Graduation for Basic Education: total (173, 0.7%).
 Percentage *unknown* for Gender: total (159, 0.7%).
 CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology. The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.



Notes

Data for Quebec and Nunavut was not available.
 Manitoba Health provided aggregate data for Age for registrants in Manitoba. Findings from New Brunswick were not included, due to a high proportion of *unknowns* for Place of Employment for 2009. The results do not include data for which responses were *unknown*.
 Percentage *unknown* for Year of Birth: total (12, <0.1%).
 Percentage *unknown* for Country of Graduation for Basic Education: total (173, 0.7%).
 Percentage *unknown* for Place of Employment for Primary Employment: total (313, 1.4%).
 Primary Employment: the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.
 Hospital and other health care facilities: this category also includes rehabilitation facilities, mental health facilities and residential care facilities.
 Community pharmacy: retail setting where drugs and related products are distributed primarily through direct contact with clients. CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology. The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

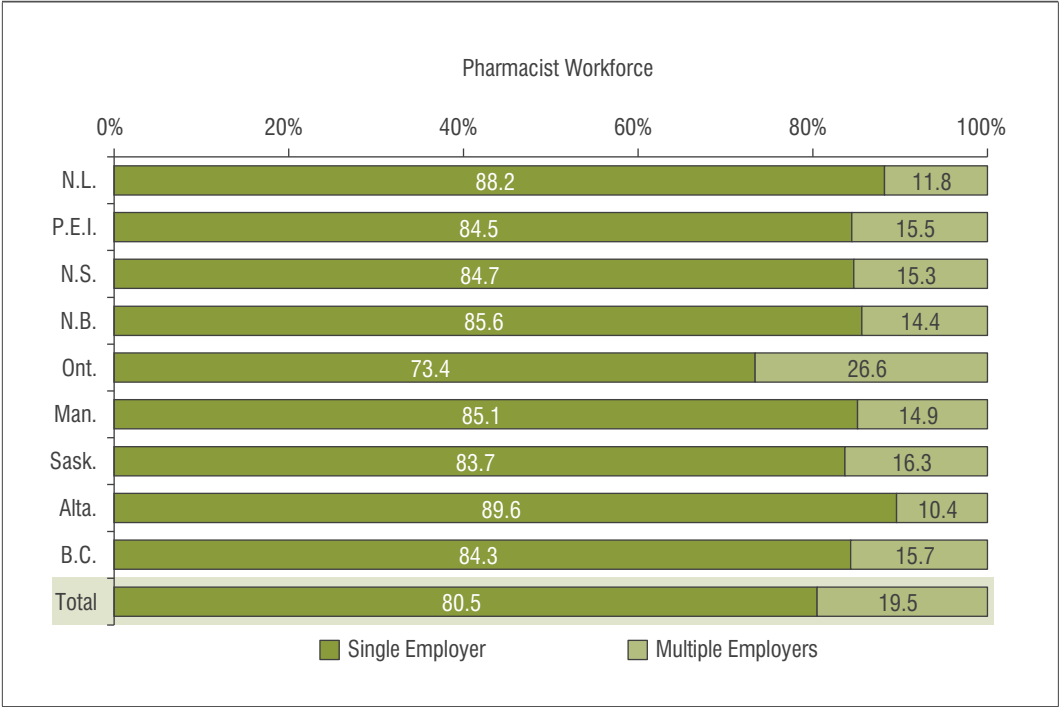
Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Employment

The PDB collects information on the employment characteristics of pharmacists, including where they work, what they do and estimates of their workload activities, among other factors.

Single Versus Multiple Employers

Figure 6: Pharmacist Workforce by Number of Employers, Selected Province of Registration, 2009



Notes

Data for Quebec and Nunavut was not available.
The results do not include data for which responses were *unknown*.
Percentage *unknown* for Number of Employers: Newfoundland and Labrador (6, 1.0%), Ontario (283, 2.7%), Manitoba (4, 0.3%), B.C. (28, 0.7%), total (321, 1.4%).
CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.
The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

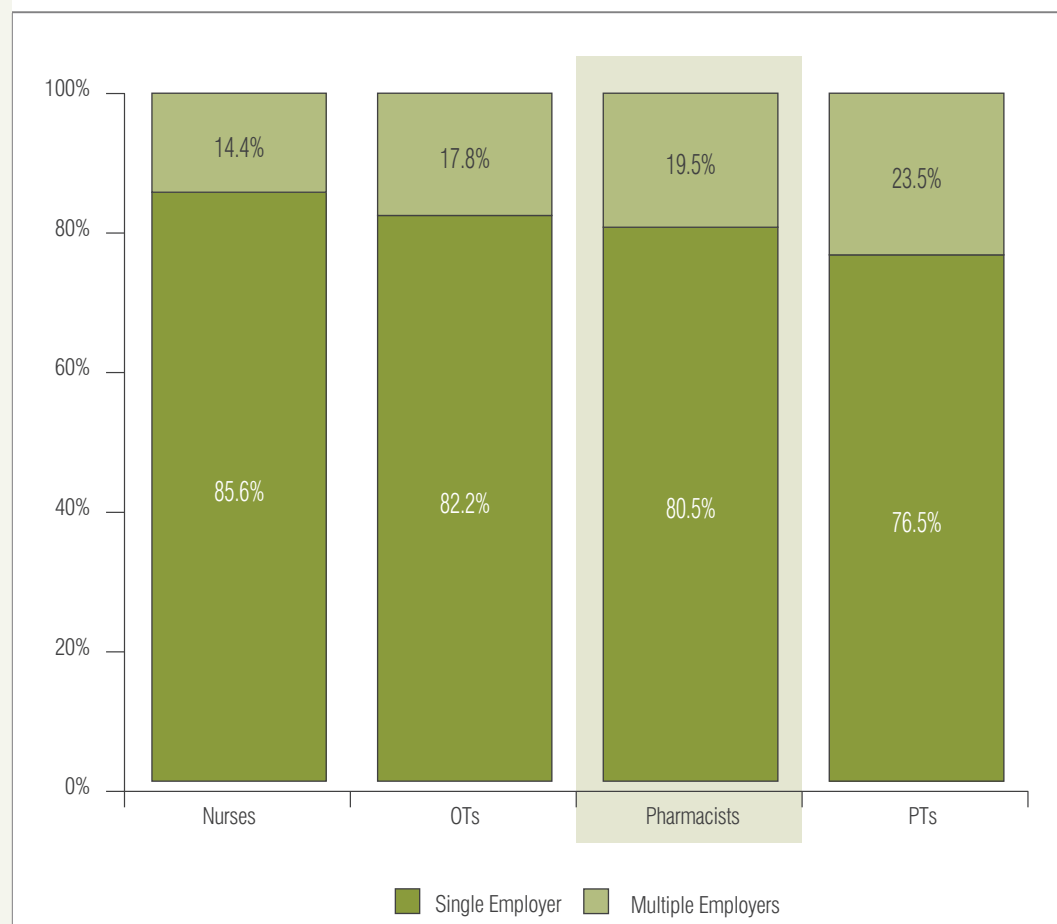
Source

Pharmacist Database, Canadian Institute for Health Information.

Cross-Profession by Multiple Employers

Health care providers are similar in their likelihood of holding more than one job.

Health Professionals by Multiple Employers



Notes

Pharmacists

Data for Quebec and Nunavut was not available.

Findings do not include the Yukon and the Northwest Territories, as primary and/or secondary and third employment information was not collected/submitted.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for multiple employment status: total (321, 1.4%).

For more information on the regulated nurse, occupational therapist and physiotherapist databases, please see their respective annual reports at www.cihi.ca.

CIHI data will differ from provincial and territorial statistics due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Nursing Database (2008), Occupational Therapist Database (2009), Physiotherapist Database (2009) and Pharmacist Database (2009), Canadian Institute for Health Information.

Table 9: Pharmacist Workforce by Number of Employers and Gender, 2009

	Single		Multiple		Total
	Count	Percent	Count	Percent	
Female	10,461	60.5	2,335	54.9	12,796
Male	6,818	39.5	1,916	45.1	8,734
Total	17,279	100	4,335	100	21,530

Notes

Data for Quebec and Nunavut was not available.

Findings do not include the Yukon and the Northwest Territories, as primary and/or secondary and third employment information was not collected/submitted.

Manitoba Health provided aggregate data for Gender for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Gender: total (159, 0.7%).

Percentage *unknown* for Number of Employers: total (321, 1.4%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Table 10: Pharmacist Workforce by Number of Employers and 10-Year Age Groups, 2009

	Single		Multiple		Total
	Count	Percent	Count	Percent	
20–29 Years	2,351	13.3	452	10.4	2,803
30–39 Years	5,035	28.4	1,247	28.8	6,282
40–49 Years	4,778	27.0	1,212	28.0	5,990
50–59 Years	3,785	21.4	972	22.4	4,757
60+ Years	1,733	9.8	450	10.4	2,183
Total	17,718	100	4,335	100	22,053

Notes

Data for Quebec and Nunavut was not available.

Findings do not include the Yukon and the Northwest Territories, as primary and/or secondary and third employment information was not collected/submitted.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Number of Employers: total (321, 1.4%).

Percentage *unknown* for Year of Birth: total (12, <0.1%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Employment Category

Employment Category captures the Employment Status of the pharmacists with their employers. As shown, the majority of pharmacists (85.5%) work as permanent employees for their primary employers.

Table 11: Pharmacist Workforce by Employment Category for Primary Employment, Selected Province of Registration, 2009

	Permanent Employee		Temporary/Casual Employee		Self-Employed		Total
	Count	Percent	Count	Percent	Count	Percent	
N.L.	482	82.5	49	8.4	53	9.1	584
P.E.I.	148	91.9	8	5.0	5	3.1	161
N.S.	946	86.5	57	5.2	91	8.3	1,094
N.B.	571	83.6	30	4.4	82	12.0	683
Man.	1,113	90.6	45	3.7	71	5.8	1,229
Sask.	881	79.2	84	7.6	147	13.2	1,112
Alta.	3,075	82.8	230	6.2	407	11.0	3,712
B.C.	3,370	88.5	264	6.9	176	4.6	3,810
Total	10,586	85.5	767	6.2	1,032	8.3	12,385

Notes

Data for Quebec and Nunavut was not available.

Data from the Northwest Territories was suppressed due to small cell sizes.

Findings do not include Ontario, as the Ontario College of Pharmacists was unable to identify the Employment Category and indicated that 100% of active registrants were *permanent employees* in its data submission to CIHI.

Findings do not include the Yukon, as the Yukon Government does not collect Employment Category.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Employment Category for Primary Employment: Newfoundland and Labrador (7, 1.2%), New Brunswick (5, 0.7%), Nova Scotia (4, 0.4%), Manitoba (4, 0.3%), Saskatchewan (75, 6.3%), B.C. (128, 3.3%), total (223, 1.0%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Permanent employee—status with employer is permanent with an indeterminate duration (no specified end date) of employment and guaranteed or fixed hours of work per week.

Self-employed—a person engaged independently in the profession, operating his or her own economic enterprise. The individual may be the working owner of an incorporated or unincorporated business or professional practice, or an individual in a business relationship characterized by a verbal or written agreement(s) in which the self-employed individual agrees to perform specific work for a payer in return for payment.

Temporary employee—status with employer is temporary with fixed duration of employment, based on a defined start and end date and guaranteed or fixed hours of work per week.

Casual employee—status with employer is on an as-needed basis, with employment that is not characterized by a guaranteed or fixed number of hours per week.

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

Place of Employment

Three-quarters of the pharmacist workforce was employed in a community pharmacy setting.

Table 12: Pharmacist Workforce by Place of Employment for Primary Employment, Selected Province of Registration, 2009

	Hospital and Other Health Care Facilities		Community Pharmacy		Health-Related Industry/Manufacturing/Commercial		Other		Total
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
N.L.	98	16.8	449	76.8	*	*	**	**	585
P.E.I.	24	14.9	127	78.9	0	0.0	10	6.2	161
N.S.	180	16.4	834	76.0	18	1.6	66	6.0	1,098
Ont.	1,758	17.7	7,601	76.5	220	2.2	363	3.7	9,942
Man.	279	22.8	865	70.7	0	0.0	80	6.5	1,224
Sask.	190	17.4	849	77.7	*	*	**	**	1,092
Alta.	776	20.9	2,702	72.8	24	0.6	210	5.7	3,712
B.C.	778	20.1	2,955	76.2	7	0.2	138	3.6	3,878
Total	4,083	18.8	16,382	75.5	274	1.3	953	2.5	21,692

Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

Data for Quebec and Nunavut was not available.

Findings from New Brunswick were not included, as a high proportion of *unknowns* were submitted to CIHI for Place of Employment for 2009.

Findings from the Yukon and the Northwest Territories were suppressed due to small cell sizes.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Place of Employment for Primary Employment: Newfoundland and Labrador (6, 1.0%), Ontario (151, 1.4%), Saskatchewan (96, 8.1%), B.C. (60, 1.5%), total (313, 1.4%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Hospital and other health care facilities—this category also includes rehabilitation facilities, mental health facilities and residential care facilities.

Community pharmacy—retail setting where drugs and related products are distributed primarily through direct contact with clients.

Health-related industry/manufacturing/commercial—a health-related industry whose focus of activities is not the direct delivery of health care services but rather health-related products, services and/or sales (medical device companies, pharmaceutical companies, insurers, etc.).

Other—includes other pharmacy, group professional practice/clinic, community health centre, other community-based pharmacist practice, post-secondary educational institution, association/government/para-governmental, community pharmacy corporate office and other place of employment not otherwise specified.

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

Table 13: Pharmacist Workforce Employed in Hospitals Versus Community Pharmacies for Primary Employment by Gender, Selected Province of Registration, 2009

	Community Pharmacy					Hospital				
	Female		Male		Total	Female		Male		Total
	Count	Percent	Count	Percent		Count	Percent	Count	Percent	
N.L.	225	50.2	223	49.8	448	52	53.1	46	46.9	98
P.E.I.	77	60.6	50	39.4	127	**	**	**	**	24
N.S.	559	67.0	275	33.0	834	137	76.1	43	23.9	180
Ont.	3,961	52.1	3,640	47.9	7,601	1,400	79.6	358	20.4	1,758
Man.	374	50.7	364	49.3	738	174	68.0	82	32.0	256
Sask.	519	61.1	330	38.9	849	143	75.3	47	24.7	190
Alta.	1,584	58.6	1,118	41.4	2,702	593	76.4	183	23.6	776
B.C.	1,582	53.5	1,373	46.5	2,955	557	71.6	221	28.4	778
Territories	24	63.2	14	36.8	38	*	*	*	*	**
Total	8,905	54.7	7,387	45.3	16,292	3,077	75.7	988	24.3	4,065

Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

Data for Quebec and Nunavut was not available.

Findings from New Brunswick were not included, due to a high proportion of *unknowns* for Place of Employment for 2009.

Manitoba Health provided aggregate data for Gender for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Gender: Newfoundland and Labrador (2, 0.3%), Manitoba (156, 12.7%), total (159, 0.7%).

Percentage *unknown* for Place of Employment for Primary Employment: Newfoundland and Labrador (6, 1.0%), Ontario (151, 1.4%), Saskatchewan (96, 8.1%), B.C. (60, 1.5%), total (313, 1.4%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Hospital and other health care facilities—this category also includes rehabilitation facilities, mental health facilities and residential care facilities.

Community pharmacy—retail setting where drugs and related products are distributed primarily through direct contact with clients.

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Table 14: Pharmacist Workforce Employed in Hospitals Versus Community Pharmacies for Primary Employment by 10-Year Age Groups, Selected Province of Registration, 2009

	N.L.	P.E.I.	N.S.	Ont.	Man.	Sask.	Alta.	B.C.	Total
Count of Pharmacists									
Hospital									
20–29 Years	20	*	**	201	46	35	141	118	579
30–39 Years	27	10	57	590	102	53	213	195	1,247
40–49 Years	29	5	51	484	64	42	224	234	1,133
50–59 Years	22	6	51	363	53	47	167	193	902
60+ Years	0	*	**	120	14	13	31	38	222
Total	98	24	180	1,758	279	190	776	778	4,083
Community Pharmacy									
20–29 Years	78	17	116	693	158	155	450	463	2,130
30–39 Years	106	42	271	1,957	262	225	853	842	4,558
40–49 Years	133	39	226	2,150	199	194	661	764	4,366
50–59 Years	88	16	160	1,766	162	172	524	624	3,512
60+ Years	42	13	61	1,035	82	103	214	262	1,812
Total	447	127	834	7,601	863	849	2,702	2,955	16,378
Percentage of Pharmacists									
Hospital									
20–29 Years	20.4	*	**	11.4	16.5	18.4	18.2	15.2	14.2
30–39 Years	27.6	41.7	31.7	33.6	36.6	27.9	27.4	25.1	30.5
40–49 Years	29.6	20.8	28.3	27.5	22.9	22.1	28.9	30.1	27.7
50–59 Years	22.4	25.0	28.3	20.6	19.0	24.7	21.5	24.8	22.1
60+ Years	0.0	*	**	6.8	5.0	6.8	4.0	4.9	5.4
Total	100	100	100	100	100	100	100	100	100
Community Pharmacy									
20–29 Years	17.4	13.4	13.9	9.1	18.3	18.3	16.7	15.7	13.0
30–39 Years	23.7	33.1	32.5	25.7	30.4	26.5	31.6	28.5	27.8
40–49 Years	29.8	30.7	27.1	28.3	23.1	22.9	24.5	25.9	26.7
50–59 Years	19.7	12.6	19.2	23.2	18.8	20.3	19.4	21.1	21.4
60+ Years	9.4	10.2	7.3	13.6	9.5	12.1	7.9	8.9	11.1
Total	100	100	100	100	100	100	100	100	100

Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

Data for Quebec and Nunavut was not available.

Findings from New Brunswick were not included, due to a high proportion of *unknowns* for Place of Employment for 2009.

Findings from the Yukon and the Northwest Territories were suppressed due to small cell sizes.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Birth: Newfoundland and Labrador (3, 0.5%), Manitoba (7, 0.6%), total (12, <0.1%).

Percentage *unknown* for Place of Employment for Primary Employment: Newfoundland and Labrador (6, 1.0%), Ontario (151, 1.4%), Saskatchewan (96, 8.1%), B.C. (60, 1.5%), total (313, 1.4%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Hospital and other health care facilities—this category also includes rehabilitation facilities, mental health facilities and residential care facilities.

Community pharmacy—retail setting where drugs and related products are distributed primarily through direct contact with clients.

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

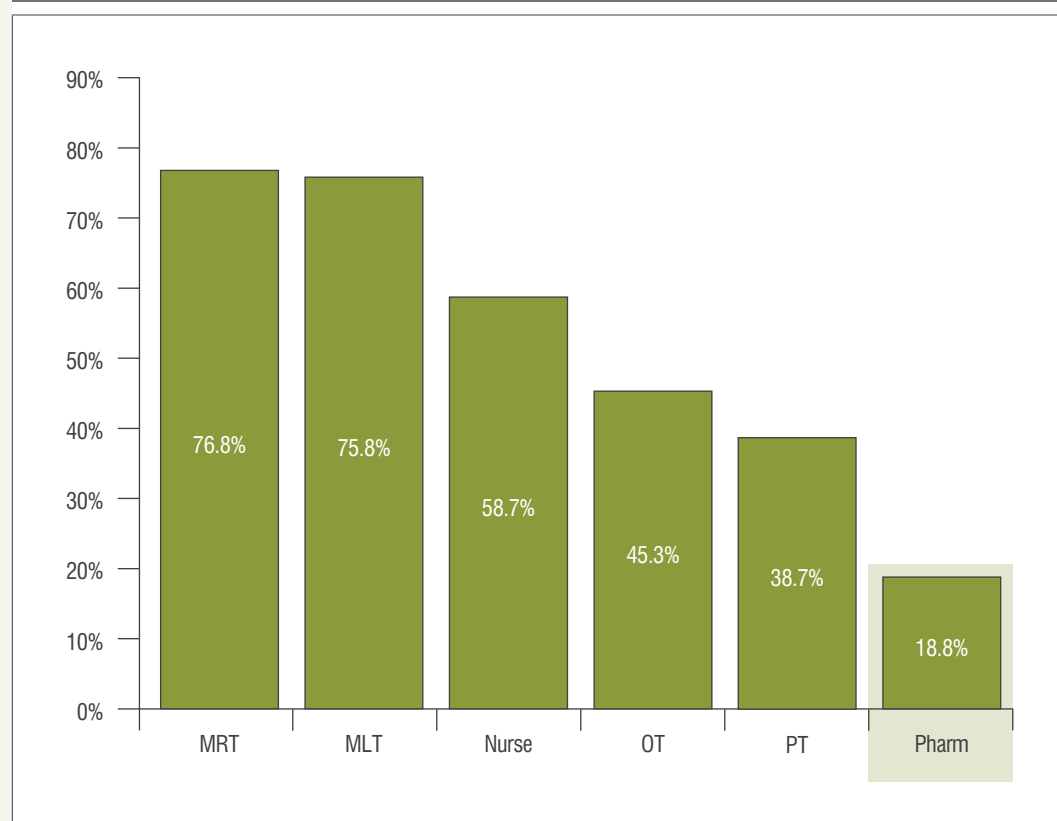
Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Cross-Profession by Hospital Place of Work

The proportion of the workforce employed by hospitals varies by occupation, depending on the level of involvement in community settings.

Health Professionals by Place of Work—Hospital



Notes

Pharmacists

Data from Quebec and Nunavut was not available.

Findings from New Brunswick were not included, due to a high proportion of *unknowns* for Place of Employment for 2009.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Place of Employment: total (313, 1.4%).

Hospital includes *rehabilitation facility*, *mental health facility* and *residential care facility*.

For more information on the regulated nurse (2008), medical radiation technologist (2008), medical laboratory technologist (2008), occupational therapist (2009) and physiotherapist (2009) databases, please see their respective annual reports at www.cihi.ca.

CIHI data will differ from provincial and territorial data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of the PDB data.

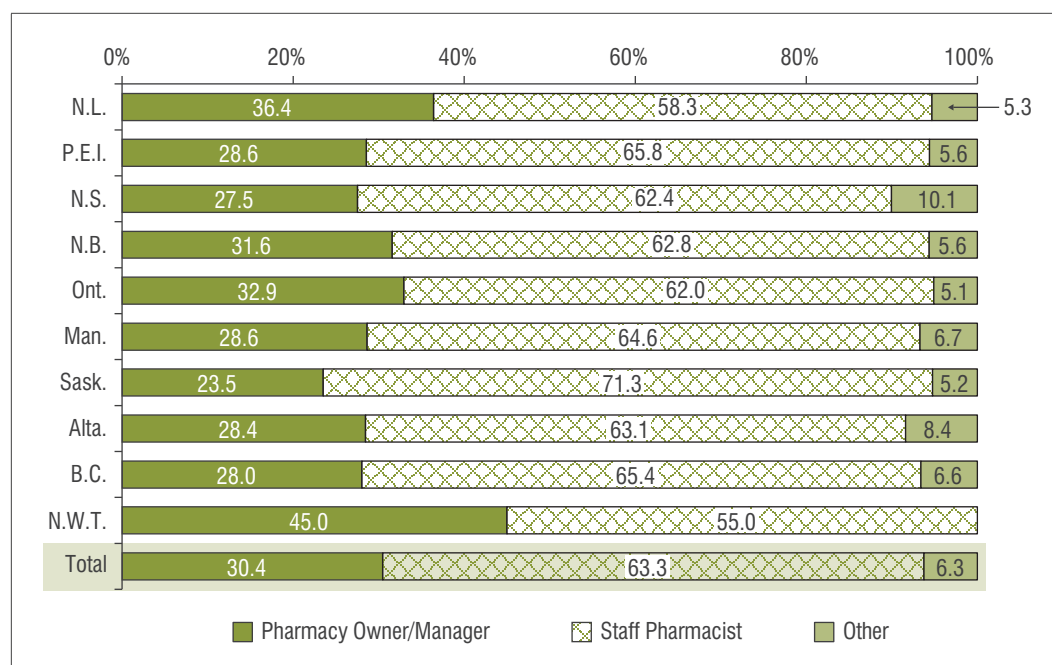
Sources

Nursing Database, Occupational Therapist Database, Physiotherapist Database, Pharmacist Database, Medical Laboratory Technologist Database and Medical Radiation Technologist Database, Canadian Institute for Health Information.

Employment Position

In 2009, the vast majority of pharmacists were employed as staff pharmacists or pharmacy owners/managers.

Figure 7: Pharmacist Workforce by Employment Position for Primary Employment, Selected Province of Registration, 2009



Notes

Data for Quebec and Nunavut was not available.

Findings do not include the Yukon, as Position for Primary Employment was not collected/submitted to CIHI for 2009.

Results do not include data for which responses were *unknown*.

Percentage *unknown* for Position for Primary Employment: Newfoundland and Labrador (6, 1.0%), Nova Scotia (4, 0.4%), New Brunswick (13, 1.9%), Ontario (11, 0.1%), Manitoba (6, 0.5%), Saskatchewan (121, 10.2%), B.C. (129, 3.3%),

total (290, 1.3%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Pharmacy owner/manager—pharmacy owner with a major role in the day-to-day operation of a pharmacy, although may include some direct client service provision.

Pharmacy manager—major role is in the day-to-day operation of a pharmacy combined with significant direct client service provision.

Staff pharmacist—major role is the direct delivery of pharmacist services to clients.

Other—includes director of pharmacy, institutional leader/coordinator, pharmacist consultant, educator, researcher, industrial pharmacist and other positions not otherwise specified.

The CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

Demographic Characteristics of the Pharmacist Workforce Employed as Staff Pharmacist Versus Pharmacy Owner/Manager

Table 15: Pharmacist Workforce by Gender and Selected Employment Positions for Primary Employment, Selected Province of Registration, 2009

	Staff Pharmacist					Pharmacy Owner/Manager				
	Female		Male		Total	Female		Male		Total
	Count	Percent	Count	Percent		Count	Percent	Count	Percent	
N.L.	201	58.9	139	40.8	340	85	39.9	128	60.1	213
P.E.I.	77	72.6	29	27.4	106	21	45.7	25	54.3	46
N.S.	508	74.4	175	25.6	683	170	56.5	131	43.5	301
N.B.	329	77.6	94	22.2	423	98	46.0	115	54.0	213
Ont.	4,197	67.2	2,050	32.8	6,247	1,236	37.2	2,086	62.8	3,322
Man.	437	66.9	216	33.1	653	40	24.1	126	75.9	166
Sask.	578	76.0	183	24.0	761	97	38.6	154	61.4	251
Alta.	1,699	72.5	645	27.5	2,344	460	43.6	596	56.4	1,056
B.C.	1,690	69.3	801	30.7	2,491	359	39.1	708	60.9	1,067
Total	9,716	69.1	4,332	30.8	14,048	2,566	38.7	4,069	61.3	6,635

Notes

Data for Quebec and Nunavut was not available.

Data from the Yukon and the Northwest Territories is not included due to small cell sizes.

Manitoba Health provided aggregate data for Gender for registrants in Manitoba.

Results do not include data for which responses were *unknown*.

Percentage *unknown* for Gender: Newfoundland and Labrador (2, 0.3%), New Brunswick (1, 0.1%), Manitoba (156, 12.7%), total (159, 0.7%).

Percentage *unknown* for Position for Primary Employment: Newfoundland and Labrador (6, 1.0%), Nova Scotia (4, 0.4%), New Brunswick (13, 1.9%), Ontario (11, 0.1%), Manitoba (6, 0.5%), Saskatchewan (121, 10.2%), B.C. (129, 3.3%), total (290, 1.3%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Pharmacy owner/manager—pharmacy owner with a major role in the day-to-day operation of a pharmacy, although may include some direct client service provision.

Pharmacy manager—major role is in the day-to-day operation of a pharmacy combined with significant direct client service provision.

Staff pharmacist—major role is the direct delivery of pharmacist services to clients.

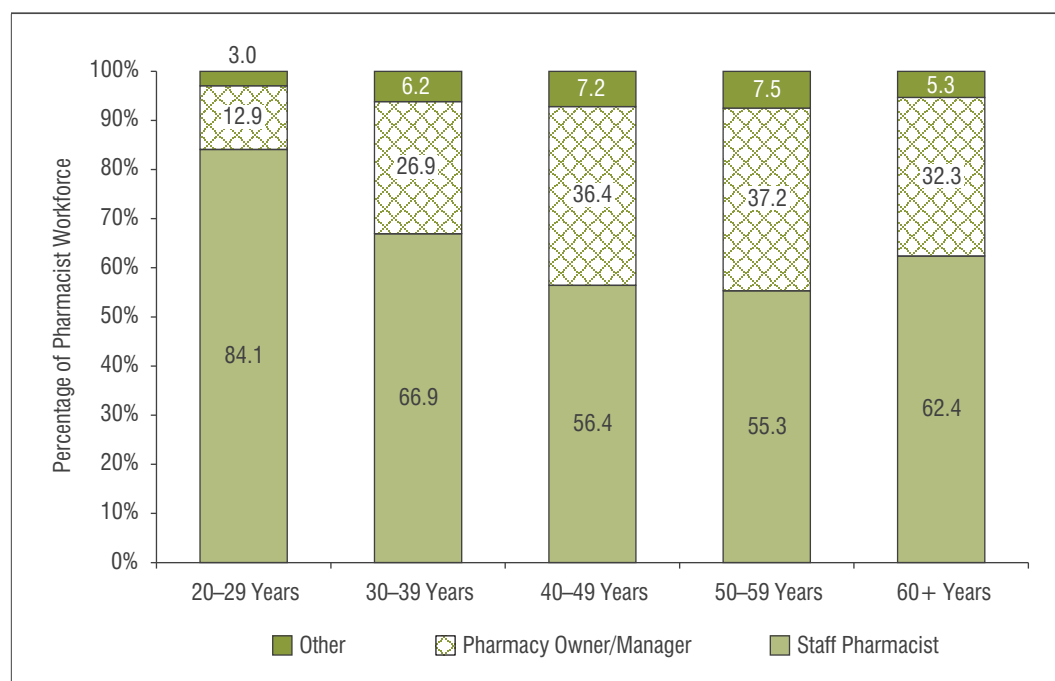
The CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Figure 8: Pharmacist Workforce by 10-Year Age Groups and Employment Position for Primary Employment, 2009



Notes

Data for Quebec and Nunavut was not available.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Birth: total (12, <0.1%).

Percentage *unknown* for Position for Primary Employment: total (290, 1.3%).

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Pharmacy owner/manager—pharmacy owner with a major role in the day-to-day operation of a pharmacy, although may include some direct client service provision.

Pharmacy manager—major role is in the day-to-day operation of a pharmacy combined with significant direct client service provision.

Staff pharmacist—major role is the direct delivery of pharmacist services to clients.

Other—includes director of pharmacy, institutional leader/coordinator, pharmacist consultant, educator, researcher, industrial pharmacist and other positions not otherwise specified.

The CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

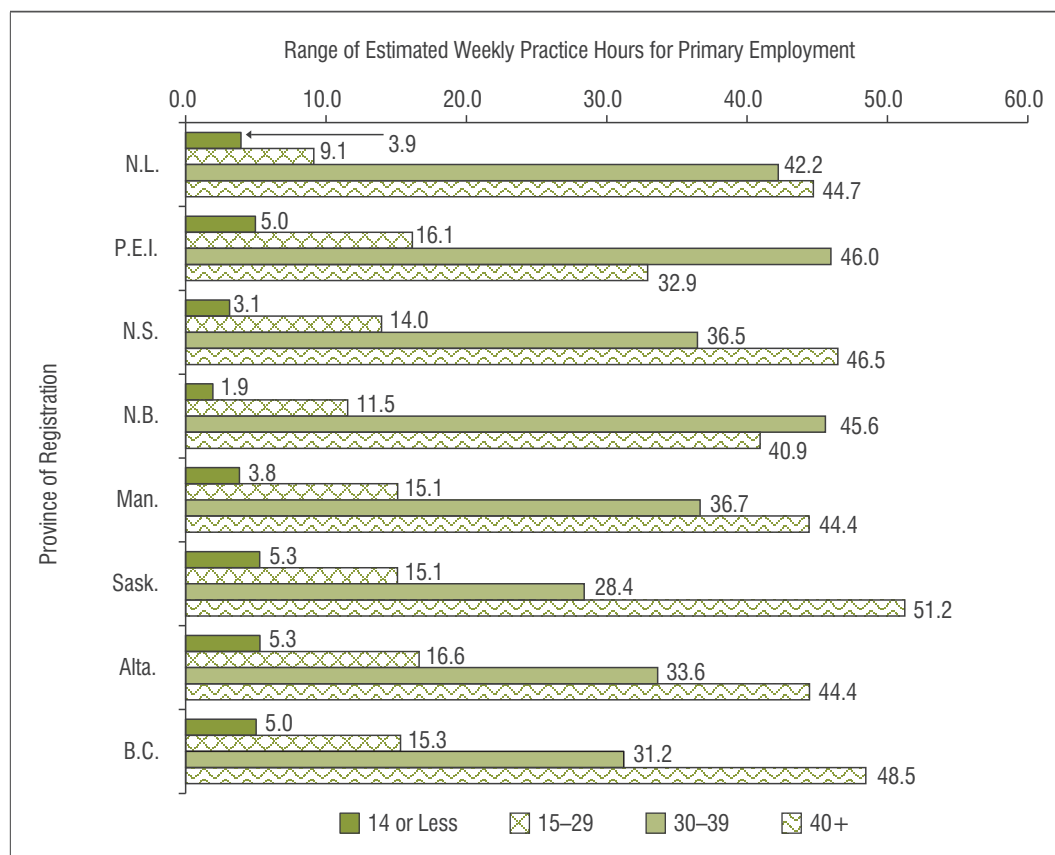
The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Range of Estimated Weekly Practice Hours

Figure 9: Pharmacist Workforce by Range of Estimated Weekly Practice Hours for Primary Employment, Selected Province of Registration, 2009



Notes

Data for Quebec and Nunavut was not available.

Findings from Ontario and the Yukon were not included, as Range of Estimated Weekly Hours of Work was not collected/submitted to CIHI for 2009.

Findings from the Northwest Territories were suppressed due to small cell sizes.

The results do not include data for which responses were *unknown*.

Primary Employment—the employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Percentage *unknown* for Range of Estimated Weekly Hours of Work: Newfoundland and Labrador (32, 5.4%), Nova Scotia (9, 0.8%), New Brunswick (21, 3.1%), Manitoba (6, 0.5%), Saskatchewan (129, 10.8%), B.C. (141, 3.6%), total (338, 1.5%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.





Chapter 6—In Focus

New Graduates

Table 16: Number of Graduates of Accredited Programs in Pharmacy by School of Graduation, Canada, 1999 to 2009

School	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
N.L.											
Memorial University	36	38	40	35	32	37	35	36	20	18	38
N.S.											
Dalhousie University	62	66	64	62	50	59	88	83	87	87	91
Que.											
Université Laval	120	103	99	97	112	135	138	188	179	184	93
Université de Montréal	123	149	107	94	120	129	185	153	176
Ont.											
University of Toronto	109	122	111	117	119	132	165	170	183	237	270
University of Waterloo†	–	–	–	–	–	–	–	–	–	–	–
Man.											
University of Manitoba	46	42	47	48	47	43	45	49	43	51	50
Sask.											
University of Saskatchewan	71	74	75	65	..	72	80	73	85	112	102
Alta.											
University of Alberta	99	104	104	95	98	93	97	102	115	135	135
B.C.											
University of British Columbia ‡	130	135	123	129	127	121	145	132	125	149	161
Canada	796	833	770	742	705	821	978	833	837	1,126	1,116

Notes

† New school opened in January 2008.

‡ University of British Columbia 2001–2002 data came from the College of Pharmacists of British Columbia. In 2005, there was an increase in graduates due to an increase in enrolment numbers; this includes graduates from the master's degree program.

.. Information not available.

– Data not applicable or does not exist.

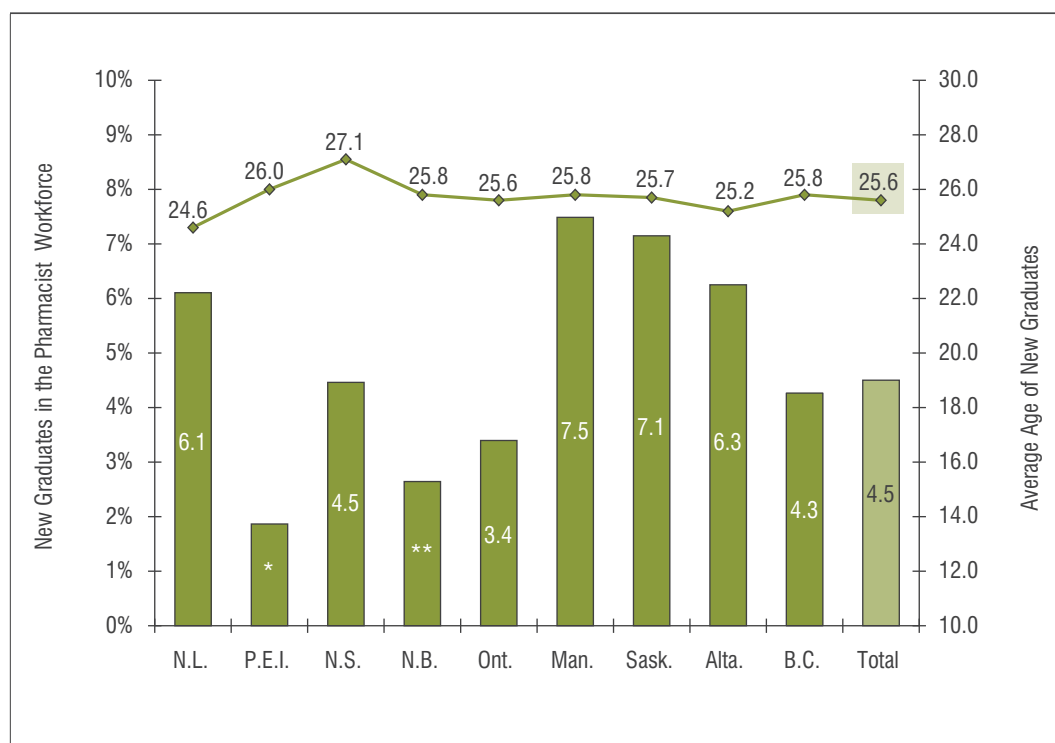
1999 to 2005 data provided by the Health Personnel Database, which reports the graduates from accredited pharmacy programs in Canada.

Data in this table should be used within the limitations noted in the Methodological Notes section of *Canada's Health Care Providers, 1997 to 2006, A Reference Guide*.

Sources

1999 to 2005: Health Personnel Database, Canadian Institute for Health Information; 2006 to 2008: Pharmacy Examining Board of Canada; 2009: individual schools' and universities' registrar's offices or administrations.

Figure 10: New Graduates in the Pharmacist Workforce, Selected Province of Registration, 2009



Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

New graduates: graduates have a Year of Graduation for Basic Education of 2008 or 2009.

Data for Quebec and Nunavut was not available.

Yukon and Northwest Territories data was suppressed due to small cell sizes.

Manitoba Health provided aggregate data for Age for registrants in Manitoba.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Birth: Newfoundland and Labrador (3, 0.5%), New Brunswick (2, 0.3%), Manitoba (7, 0.6%), total (12, <0.1%).

Percentage *unknown* for Year of Graduation for Basic Education: Newfoundland and Labrador (34, 5.8%), New Brunswick (7, 1.0%), Manitoba (4, 0.3%), Yukon (5, 17.3%), total (50, 0.2%).

CIHI data will differ from provincial regulatory authority or territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Sources

Pharmacist Database, Canadian Institute for Health Information; Manitoba Health.

Demographic Characteristics of New Graduates

More than two-thirds (68.3%) of new graduates were female. This was higher than the entire workforce, where only 59.2% were female.

Table 17: New Graduates by Gender, Selected Province of Registration, 2009

	N.L.	N.S.	N.B.	Ont.	Sask.	Alta.	B.C.	Total
Count of New Graduates								
Female	**	34	**	244	63	157	106	642
Male	**	15	*	110	22	75	62	298
Total	34	49	18	354	85	232	168	940
Percentage of New Graduates								
Female	**	69.4	**	68.9	74.1	67.7	63.1	68.3
Male	**	30.6	*	31.1	25.9	32.3	36.9	31.7
Total	100	100	100	100	100	100	100	100

Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

New graduates: graduates have a Year of Graduation for Basic Education of 2008 or 2009.

Data for Quebec and Nunavut was not available.

Manitoba data for new graduates was not available and is not included in this analysis.

P.E.I., Yukon and Northwest Territories data was suppressed due to small cell sizes.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Gender: Newfoundland and Labrador (2, 0.3%), New Brunswick (1, 0.1%), Manitoba (156, 12.7%), total (159, 0.7%).

Percentage *unknown* for Year of Graduation for Basic Education: Newfoundland and Labrador (34, 5.8%), New Brunswick (7, 1.0%), Yukon (5, 17.3%), total (46, 0.2%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

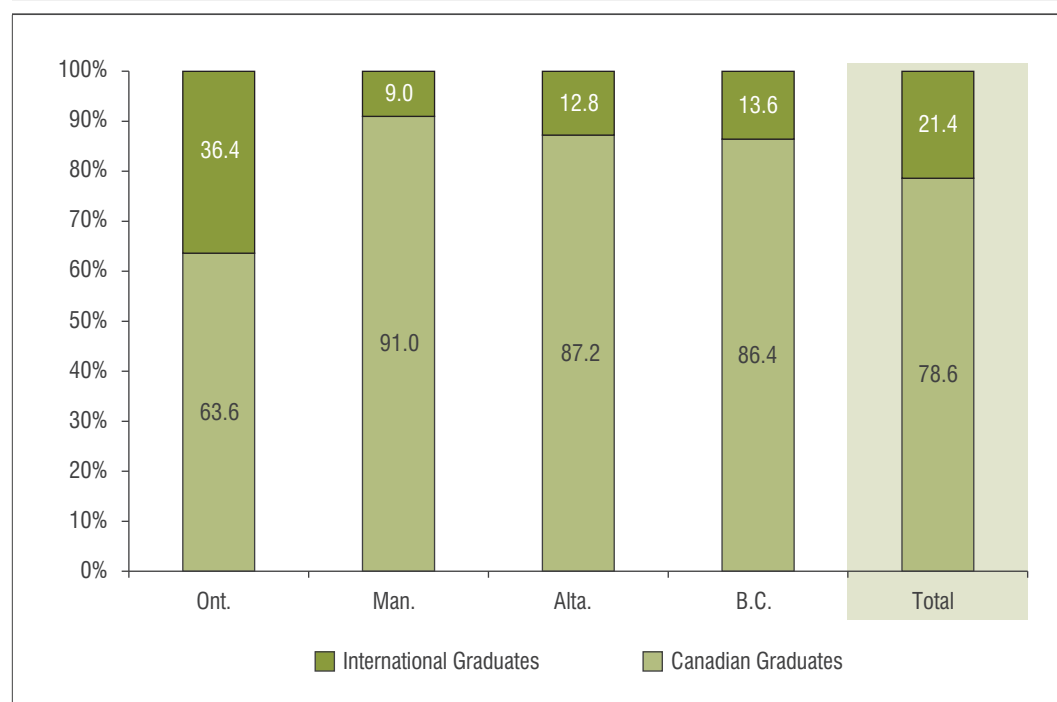
Source

Pharmacist Database, Canadian Institute for Health Information.

Internationally Educated Pharmacists

To monitor the Canadian-educated/internationally educated composition of the pharmacist workforce, the Pharmacist Database captures the Canadian university name or country of graduation. For 2009, B.C., Alberta, Manitoba and Ontario provided information regarding country of graduation to CIHI. The section below reports on internationally educated pharmacists registered in these jurisdictions only.

Figure 11: Internationally Educated Pharmacists, Selected Province of Registration, 2009



Notes

A pharmacist with a Country of Graduation for Basic Education in Pharmacy other than Canada is denoted as an internationally educated pharmacist. Therefore, the total number could also include Canadian citizens who studied abroad.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Country of Graduation for Basic Education in Pharmacy: Ontario (43, 0.4%), B.C. (23, 0.6%), total (66, 0.7%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

Top Five Countries of Graduation

Most internationally educated pharmacists in Alberta, Manitoba and Ontario graduated from Egypt, whereas the majority in B.C. graduated from the Philippines or the U.K.

Table 18: Top Five Countries of Graduation for Internationally Educated Pharmacists, Selected Province of Registration, 2009

	Ontario	Alberta	Manitoba	British Columbia
Top Five Countries	Egypt: 22.3% U.S.: 19.2% U.K.: 10.9% India: 9.8% Philippines: 4.9%	Egypt: 17.5% U.K.: 11.0% Pakistan: 9.7% Philippines: 9.3% U.S.: 7.4% India: 7.4%	Egypt: 26.1% Pakistan: 14.4% India: 11.7% U.S.: 8.1% Philippines: 6.3%	Philippines: 14.7% U.K.: 13.7% U.S.: 9.6% Korea: 8.6% India: 7.5%

Notes

A pharmacist with a Country of Graduation for Basic Education in Pharmacy other than Canada is denoted as an internationally educated pharmacist. Therefore, the total number could also include Canadian citizens who studied abroad.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Country of Graduation for Basic Education in Pharmacy: Ontario (43, 0.4%), B.C. (23, 0.6%), total (66, 0.7%).

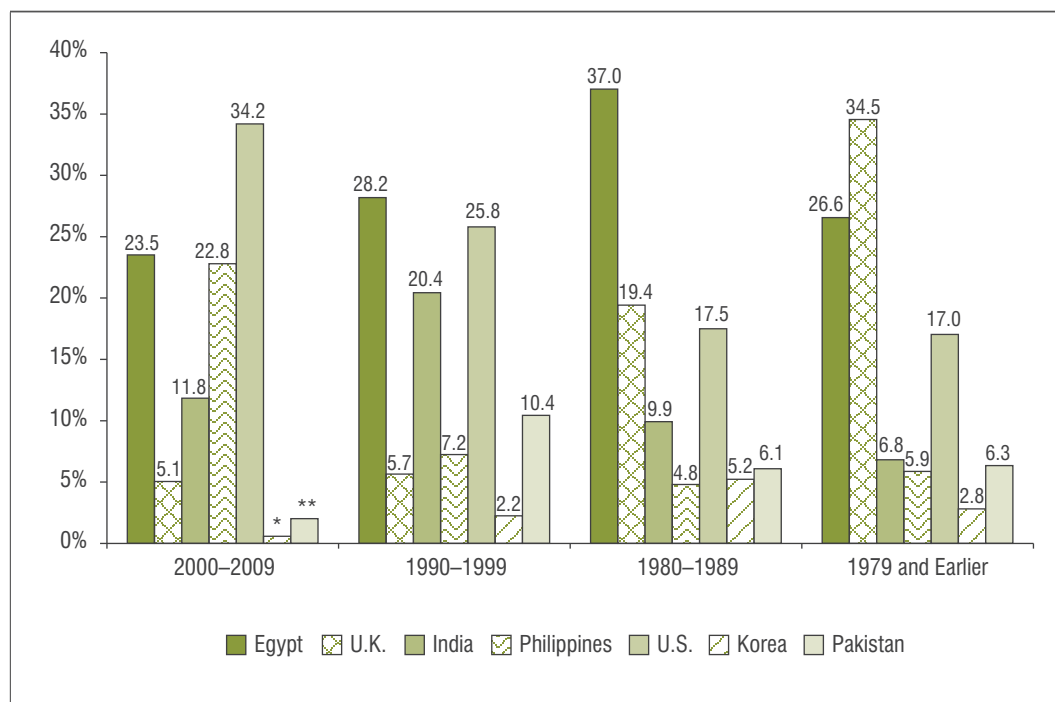
CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.

Figure 12: Top Seven Countries of Graduation for Internationally Educated Pharmacists in Selected Provinces by Year of Graduation for Basic Education, 2009



Notes

* Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.

** Value suppressed to ensure confidentiality; cell value is 5 or greater.

The results do not include data for which responses were *unknown*.

Percentage *unknown* for Year of Graduation for Basic Education: total (42, 0.2%).

Percentage *unknown* for Country of Graduation for Basic Education in Pharmacy: total (66, 0.7%).

CIHI data will differ from provincial regulatory authority and territorial government data due to the CIHI collection, processing and reporting methodology.

The Methodological Notes provide more comprehensive information regarding the collection and comparability of PDB data.

Source

Pharmacist Database, Canadian Institute for Health Information.





Provincial/Territorial Highlights and Analyses

2009 Highlights for Pharmacists in Newfoundland and Labrador

Supply

- There were 591 pharmacists employed in the profession in Newfoundland and Labrador in 2009.
- Similar to other Atlantic provinces (P.E.I. and Nova Scotia), Newfoundland and Labrador had a higher supply of pharmacists per population, at 116 pharmacists per 100,000 population.

Demographics

- The percentage of female pharmacists in Newfoundland and Labrador was the lowest, at 51.8%, of all the participating provinces (59.2%).ⁱ
- Pharmacists in Newfoundland and Labrador had an average age of 42.3; the pharmacist workforce average age was 43.6.ⁱ
- Newfoundland and Labrador had the highest percentage of pharmacists age 20 to 29 (17.5%).

Education

- Newfoundland and Labrador had one university program in pharmacy (Memorial University).
- Newfoundland and Labrador had the lowest proportion (58.2%) of pharmacists with their current level of education as baccalaureate, compared to other provinces.
- Just more than 6% (6.1%) of the Newfoundland and Labrador pharmacist workforce were classified as new graduates.ⁱⁱ
- Like most other provinces, Newfoundland and Labrador had a higher percentage of new pharmacist graduates who were female (64.7%).

Employment

- Newfoundland and Labrador had the second-lowest percentage of pharmacists with multiple employment (11.8%), compared to other provinces.
- Newfoundland and Labrador had the highest percentage of pharmacists with temporary/casual employment (8.4%), compared to other provinces.
- Newfoundland and Labrador had a higher percentage of its pharmacist workforce working as a pharmacy owner/manager (36.4%) compared to the pharmacist workforce (30.4%).ⁱⁱⁱ
- Newfoundland and Labrador had the lowest percentage of pharmacists working fewer than 30 hours a week (13.0%), compared to the other provinces in the report.

Geography and Mobility

- Among the provinces, Newfoundland and Labrador had the lowest percentage (61.6%) of pharmacist employers located in urban areas.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

ii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

iii. For this analysis, the pharmacist workforce excludes Quebec, Nunavut and the Yukon.

2009 Newfoundland and Labrador Pharmacist Workforce Provincial Profile

		Newfoundland and Labrador			
		2008		2009	
Pharmacists Employed in Pharmacy		571		591	
Gender	Male	278	48.7%	284	48.1%
	Female	293	51.3%	305	51.6%
	Missing Values	0	0.0%	2	0.3%
Average Age	Years	42.0	42.0	42.3	42.3
10-Year Age Group	20–29	90	15.8%	103	17.4%
	30–39	160	28.0%	148	25.0%
	40–49	180	31.5%	175	29.6%
	50–59	98	17.2%	117	19.8%
	60–69	**	**	**	**
	70–79	*	*	**	**
	80+	*	*	*	*
	Missing Values	0	0.0%	3	0.5%
Urban Versus Rural	Urban	313	54.8%	349	59.1%
	Rural	65	11.4%	71	12.0%
	Remote Territories	139	24.3%	147	24.9%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	54	9.5%	24	4.1%
Current Level of Education in Pharmacy	Diploma	221	38.7%	223	37.7%
	Baccalaureate	308	53.9%	324	54.8%
	Master's	*	*	*	*
	PharmD	**	**	**	**
	Doctorate	0	0.0%	*	*
	Missing Values	30	5.3%	34	5.8%
New Graduates	No	512	89.7%	523	88.5%
	Yes	29	5.1%	34	5.8%
	Missing Values	30	5.3%	34	5.8%
Multiple Employment Status	Single Employer	477	83.5%	516	87.3%
	Multiple Employers	53	9.3%	69	11.7%
	Missing Values	41	7.2%	6	1.0%
Employment Category	Permanent	441	77.2%	482	81.6%
	Temporary	5	0.9%	*	*
	Casual	30	5.3%	46	7.8%
	Self-Employed	53	9.3%	53	9.0%
	Missing Values	42	7.4%	**	**
	Missing Values	42	7.4%	**	**
Place of Employment	Hospital and Other Health Care Facility	93	16.3%	98	16.6%
	Community Pharmacy	405	70.9%	449	76.0%
	Other Pharmacy	0	0.0%	0	0.0%
	Group Professional Practice/Clinic	*	*	*	*
	Community Health Centre	0	0.0%	*	*
	Other Community-Based Pharmacist Practice	0	0.0%	0	0.0%
	Postsecondary Educational Institution	11	1.9%	14	2.4%
	Association/Government/Para-Governmental	12	2.1%	12	2.0%
	Health-Related Industry/Manufacturing/Commercial	*	*	*	*
	Community Pharmacy Corporate Office	*	*	*	*
	Other	*	*	*	*
	Missing Values	41	7.2%	6	1.0%
	Missing Values	41	7.2%	6	1.0%
Position	Director of Pharmacy	8	1.4%	6	1.0%
	Pharmacy Owner/Manager	196	34.3%	213	36.0%
	Pharmacy Manager	0	0.0%	0	0.0%
	Institutional Leader/Coordinator	*	*	*	*
	Staff Pharmacist	302	52.9%	341	57.7%
	Pharmacist Consultant	*	*	*	*
	Educator	8	1.4%	12	2.0%
	Researcher	0	0.0%	*	*
	Industrial Pharmacist	0	0.0%	0	0.0%
	Other	10	1.8%	6	1.0%
	Missing Values	42	7.4%	6	1.0%
	Missing Values	42	7.4%	6	1.0%

(cont'd on next page)

2009 Newfoundland and Labrador Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
1011	Eastern Regional Integrated Health Authority	300,920	377	125
1012	Central Regional Integrated Health Authority	93,538	83	89
1013	Western Regional Integrated Health Authority	77,630	85	109
1014	Labrador-Grenfell Regional Integrated Health Authority	36,837	22	60
	Missing Values	—	24	—

Notes

- * Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.
- ** Value suppressed to ensure confidentiality; cell value is 5 or greater.
- Data not applicable or does not exist.

Missing Values

Missing values are values attributed in instances where a data provider is unable to provide information for a registrant for a specific data element. There are three situations that correspond to the following CIHI missing values: *not collected* means that the information is not collected by the data provider on the registration form or that a data provider cannot submit the information; *unknown* indicates that the information was not provided by the registrant; and *not applicable* states that the data element is not relevant to the situation of the registrant. For example, if a pharmacist resides in the U.S., Province of Residence is *not applicable*.

Postal Code of Primary Employment data was assigned to urban/rural/remote categories using the March 2009 release of Statistics Canada's Postal Code Conversion File.

Employment Category, Place of Employment and Position refer to Primary Employment.

Totals may not sum to 100% due to rounding.

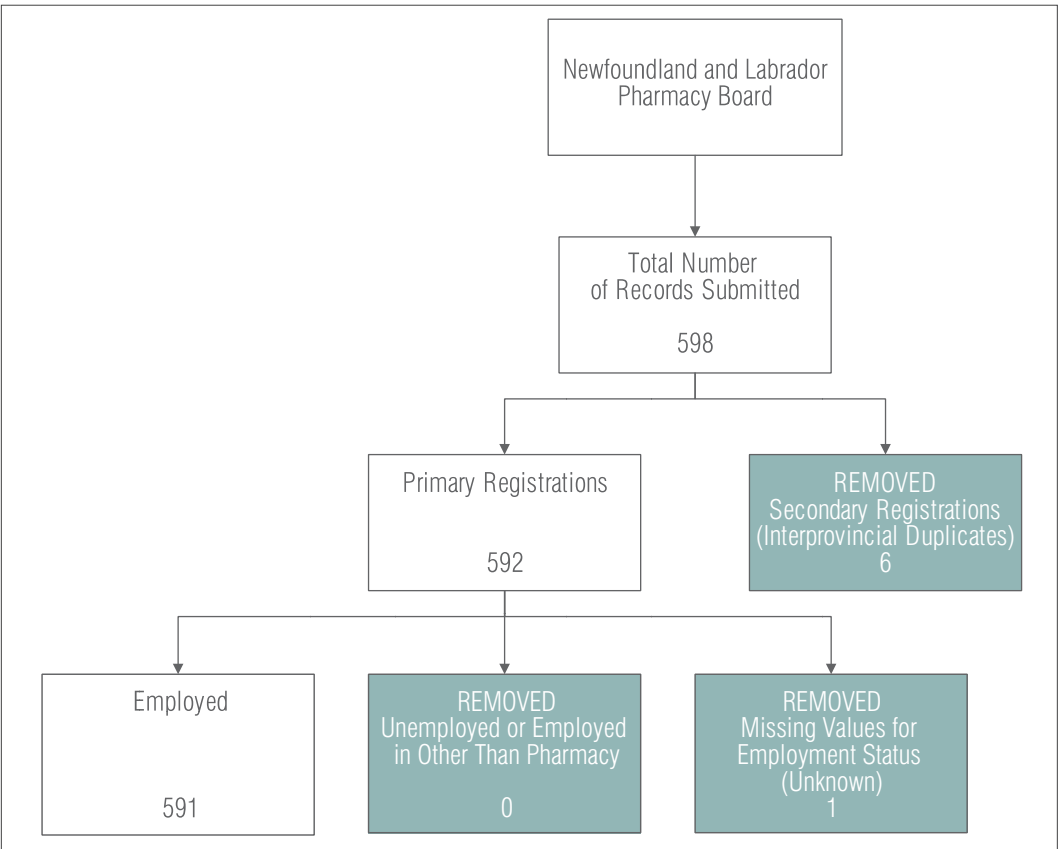
Statistics released by CIHI will differ from statistics released by provincial regulatory authorities and territorial governments due to CIHI's collection, processing and reporting methodologies.

Additional methodological information is available upon request by sending an email to pdb@cihi.ca.

Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada, Table 109-5325—Estimates of Population (2006 Census and Administrative Data), by Age Group and Sex, Canada, Provinces, Territories, Health Regions (2007 Boundaries) and Peer Groups, Annual (Number) (CANSIM database), accessed July 27, 2010, from <http://cansim2.statcan.gc.ca/cgi-win/cnsmcgi.exe?Lang=E&CNSM-Fi=CII/CII_1-eng.htm>.

2009 Data Flow From the Newfoundland and Labrador Pharmacy Board to CIHI



2009 Highlights for Pharmacists in Prince Edward Island

Supply

- From 2006 to 2009, the pharmacist workforce in P.E.I. grew by 14.2%, reaching a total of 161 pharmacists registered and employed in the province. However, the pharmacist workforce in P.E.I. did not see any growth from 2008 to 2009, remaining steady at 161 pharmacists.

Demographics

- Most (63.3%) of the P.E.I. pharmacist workforce were female, higher than the pharmacist workforce (59.2%).ⁱ
- Pharmacists in P.E.I. had an average age of 42.6; the pharmacist workforce average age was 43.6.ⁱ
- P.E.I. had a higher proportion (45.3%) of younger pharmacists (younger than 40).

Education

- P.E.I. did not offer any university programs in pharmacy.
- The majority (92.5%) of pharmacists in P.E.I. had a baccalaureate as their current level of education in pharmacy.
- Most (85.4%) pharmacists in P.E.I. graduated from Dalhousie University.
- P.E.I. had the lowest proportion (1.9%) of new graduatesⁱⁱ of all the jurisdictions in the report.

Employment

- P.E.I. had a high percentage of pharmacists with multiple employers (15.5%), compared to other provinces.
- The majority (91.9%) of pharmacists in P.E.I. had permanent employment.
- P.E.I. had a higher proportion (65.8%) of pharmacists working in the position of staff pharmacist compared to the pharmacist workforce (63.3%).ⁱⁱⁱ
- Compared to other jurisdictions, P.E.I. had the highest proportion (78.9%) of pharmacists working in a community pharmacy setting and the lowest proportion (14.9%) working in a hospital setting.
- P.E.I. had the highest proportion (46.0%) of pharmacists working between 30 and 39 hours a week and the lowest proportion (32.9%) of pharmacists working more than 40 hours, compared to the other provinces.

Geography and Mobility

- P.E.I. had 23.9% of pharmacists working in rural areas of the provinces/territories in the report.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

ii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

iii. For this analysis, the pharmacist workforce excludes Quebec, Nunavut and the Yukon.

2009 Prince Edward Island Pharmacist Workforce Provincial Profile

		Prince Edward Island			
		2008		2009	
Pharmacists Employed in Pharmacy		161		161	
Gender	Male	58	36.0%	59	36.6%
	Female	103	64.0%	102	63.4%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	41.9	41.9	42.6	42.6
10-Year Age Group	20–29	22	13.7%	19	11.8%
	30–39	56	34.8%	54	33.5%
	40–49	45	28.0%	49	30.4%
	50–59	26	16.1%	25	15.5%
	60–69	**	**	**	**
	70–79	*	*	*	*
	80+	*	*	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	115	71.4%	121	75.2%
	Rural	**	**	**	**
	Remote Territories	*	*	*	*
	Missing Values	0	0.0%	0	0.0%
	Missing Values	5	3.1%	2	1.2%
Current Level of Education in Pharmacy	Diploma	**	**	**	**
	Baccalaureate	147	91.3%	149	92.5%
	Master's	*	*	*	*
	PharmD	*	*	*	*
	Doctorate	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
New Graduates	No	155	96.3%	**	**
	Yes	6	3.7%	*	*
	Missing Values	0	0.0%	0	0.0%
Multiple Employment Status	Single Employer	131	81.4%	136	84.5%
	Multiple Employers	29	18.0%	25	15.5%
	Missing Values	1	0.6%	0	0.0%
Employment Category	Permanent	146	90.7%	148	91.9%
	Temporary	*	*	**	**
	Casual	**	**	*	*
	Self-Employed	6	3.7%	5	3.1%
	Missing Values	1	0.6%	0	0.0%
Place of Employment	Hospital and Other Health Care Facility	27	16.8%	24	14.9%
	Community Pharmacy	124	77.0%	127	78.9%
	Other Pharmacy	*	*	*	*
	Group Professional Practice/Clinic	0	0.0%	0	0.0%
	Community Health Centre	0	0.0%	0	0.0%
	Other Community-Based Pharmacist Practice	*	*	*	*
	Postsecondary Educational Institution	0	0.0%	0	0.0%
	Association/Government/Para-Governmental	**	**	**	**
	Health-Related Industry/Manufacturing/Commercial	0	0.0%	0	0.0%
	Community Pharmacy Corporate Office	*	*	*	*
	Other	0	0.0%	0	0.0%
	Missing Values	1	0.6%	0	0.0%
Position	Director of Pharmacy	0	0.0%	*	*
	Pharmacy Owner/Manager	20	12.4%	19	11.8%
	Pharmacy Manager	27	16.8%	27	16.8%
	Institutional Leader/Coordinator	*	*	*	*
	Staff Pharmacist	105	65.2%	106	65.8%
	Pharmacist Consultant	**	**	*	*
	Educator	0	0.0%	0	0.0%
	Researcher	0	0.0%	0	0.0%
	Industrial Pharmacist	0	0.0%	0	0.0%
	Other	*	*	*	*
	Missing Values	1	0.6%	0	0.0%

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2009 Prince Edward Island Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
1101	Kings County	18,225	9	49
1102	Queens County	77,999	103	132
1103	Prince County	44,761	47	105
	Missing Values	–	2	–

Notes

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Postal Code of Primary Employment data was assigned to urban/rural/remote categories using the March 2009 release of Statistics Canada's Postal Code Conversion File.

Employment Category, Place of Employment and Position refer to Primary Employment.

Totals may not sum to 100% due to rounding.

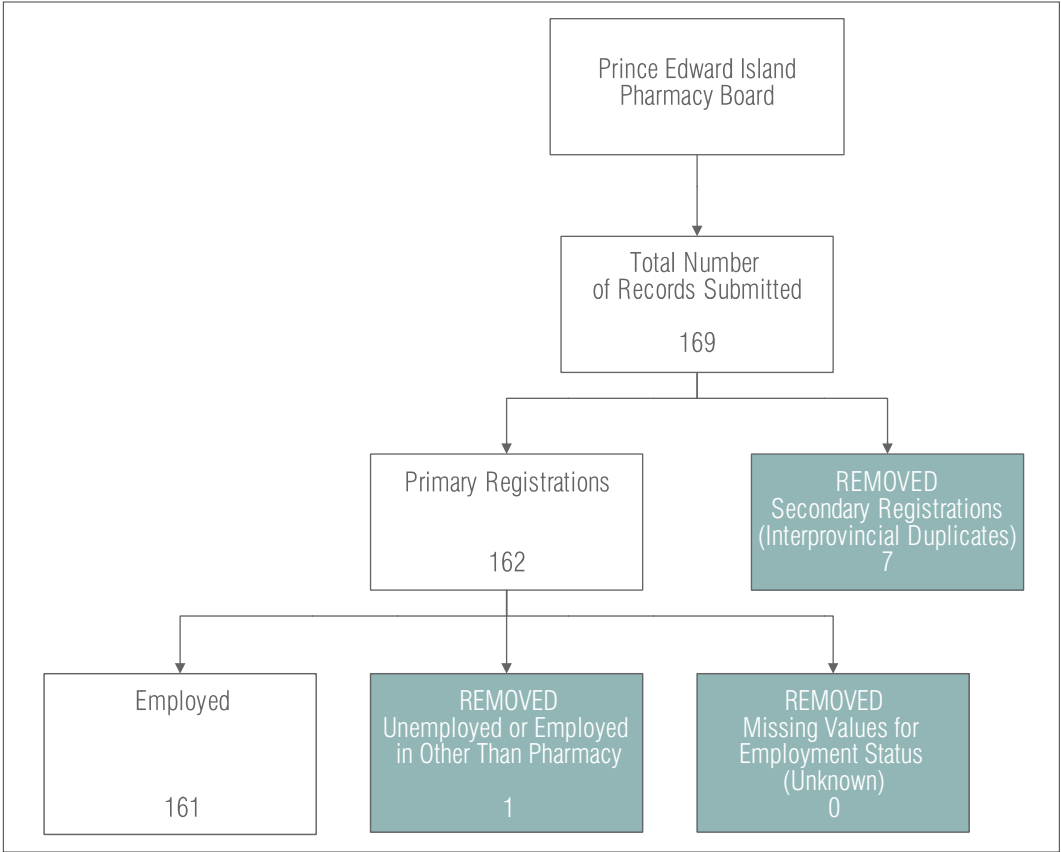
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Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada, Table 109-5325—Estimates of Population (2006 Census and Administrative Data), by Age Group and Sex, Canada, Provinces, Territories, Health Regions (2007 Boundaries) and Peer Groups, Annual (Number) (CANSIM database), accessed July 27, 2010, from <http://cansim2.statcan.gc.ca/cgi-win/cnsmcgi.exe?Lang=E&CNSM-Fi=CII/CII_1-eng.htm>.

2009 Data Flow From the Prince Edward Island Pharmacy Board to CIHI



2009 Highlights for Pharmacists in Nova Scotia

Supply

- From 2006 to 2009, the pharmacist workforce in Nova Scotia grew by 39.3%, reaching a total of 1,098 pharmacists registered and employed in the province.ⁱ

Demographics

- Nova Scotia had the highest proportion of female pharmacists (69.3%) across jurisdictions in the report.
- The average age of pharmacists in Nova Scotia was 42.4; the pharmacist workforce average age was 43.6.ⁱⁱ
- Nova Scotia had a relatively younger workforce, with almost half (43.9%) of its workforce younger than age 40.

Education

- Nova Scotia had one university program in pharmacy (Dalhousie University).
- The majority (94.4%) of pharmacists in Nova Scotia had a baccalaureate as their current level of academic credential in pharmacy.
- Nova Scotia had the oldest (age 27.1) new graduates,ⁱⁱⁱ compared to other jurisdictions in the report.
- Similar to the gender distribution of the Nova Scotia pharmacist workforce (69.3%), the majority of new graduates in Nova Scotia were female (69.4%).

Employment

- Nova Scotia had a slightly higher proportion of pharmacists working as permanent employees (86.5%) than other jurisdictions in the report.
- Three-quarters (76.0%) of pharmacists working in Nova Scotia were working in a community pharmacy setting.
- Most (84.7%) pharmacists in Nova Scotia had single employment, higher than the pharmacist workforce (80.5%).ⁱⁱ

Geography and Mobility

- Nova Scotia had the second-highest proportion of pharmacists working in rural and remote areas (28.6%) of the participating provinces.

i. The increase in supply in Nova Scotia may be partially attributed to an improvement in data quality. In 2009, 96.7% of pharmacists reported their Employment Status, which represents an increase of 24.7% over 2006.

ii. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

iii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

2009 Nova Scotia Pharmacist Workforce Provincial Profile

		Nova Scotia			
		2008		2009	
Pharmacists Employed in Pharmacy		1,093		1,098	
Gender	Male	338	30.9%	337	30.7%
	Female	755	69.1%	761	69.3%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	41.8	41.8	42.4	42.4
10-Year Age Group	20–29	158	14.5%	134	12.2%
	30–39	345	31.6%	348	31.7%
	40–49	306	28.0%	313	28.5%
	50–59	220	20.1%	235	21.4%
	60–69	56	5.1%	59	5.4%
	70–79	**	**	**	**
	80+	*	*	*	*
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	675	61.8%	745	67.9%
	Rural	91	8.3%	103	9.4%
	Remote Territories	188	17.2%	195	17.8%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	139	12.7%	55	5.0%
Current Level of Education in Pharmacy	Diploma	32	2.9%	30	2.7%
	Baccalaureate	1,027	94.0%	1,037	94.4%
	Master's	**	**	**	**
	PharmD	19	1.7%	18	1.6%
	Doctorate	*	*	*	*
	Missing Values	1	0.1%	0	0.0%
New Graduates	No	1,019	93.2%	1,049	95.5%
	Yes	71	6.5%	49	4.5%
	Missing Values	3	0.3%	0	0.0%
Multiple Employment Status	Single Employer	901	82.4%	930	84.7%
	Multiple Employers	136	12.4%	168	15.3%
	Missing Values	56	5.1%	0	0.0%
Employment Category	Permanent	896	82.0%	946	86.2%
	Temporary	18	1.6%	22	2.0%
	Casual	31	2.8%	35	3.2%
	Self-Employed	88	8.1%	91	8.3%
	Missing Values	60	5.5%	4	0.4%
Place of Employment	Hospital and Other Health Care Facility	171	15.6%	180	16.4%
	Community Pharmacy	795	72.7%	834	76.0%
	Other Pharmacy	*	*	*	*
	Group Professional Practice/Clinic	*	*	*	*
	Community Health Centre	*	*	*	*
	Other Community-Based Pharmacist Practice	*	*	5	0.5%
	Postsecondary Educational Institution	23	2.1%	24	2.2%
	Association/Government/Para-Governmental	12	1.1%	15	1.4%
	Health-Related Industry/Manufacturing/Commercial	14	1.3%	18	1.6%
	Community Pharmacy Corporate Office	12	1.1%	14	1.3%
	Other	*	*	*	*
	Missing Values	56	5.1%	0	0.0%
Position	Director of Pharmacy	19	1.7%	22	2.0%
	Pharmacy Owner/Manager	290	26.5%	301	27.4%
	Pharmacy Manager	0	0.0%	0	0.0%
	Institutional Leader/Coordinator	**	**	**	**
	Staff Pharmacist	643	58.8%	683	62.2%
	Pharmacist Consultant	19	1.7%	21	1.9%
	Educator	20	1.8%	23	2.1%
	Researcher	*	*	*	*
	Industrial Pharmacist	0	0.0%	0	0.0%
	Other	30	2.7%	33	3.0%
	Missing Values	60	5.5%	4	0.4%

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2009 Nova Scotia Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
1201	Zone 1	117,819	119	101
1202	Zone 2	82,263	71	86
1203	Zone 3	106,511	106	100
1204	Zone 4	90,711	94	104
1205	Zone 5	123,873	123	99
1206	Zone 6	417,006	528	127
	Missing Values	—	55	—

Notes

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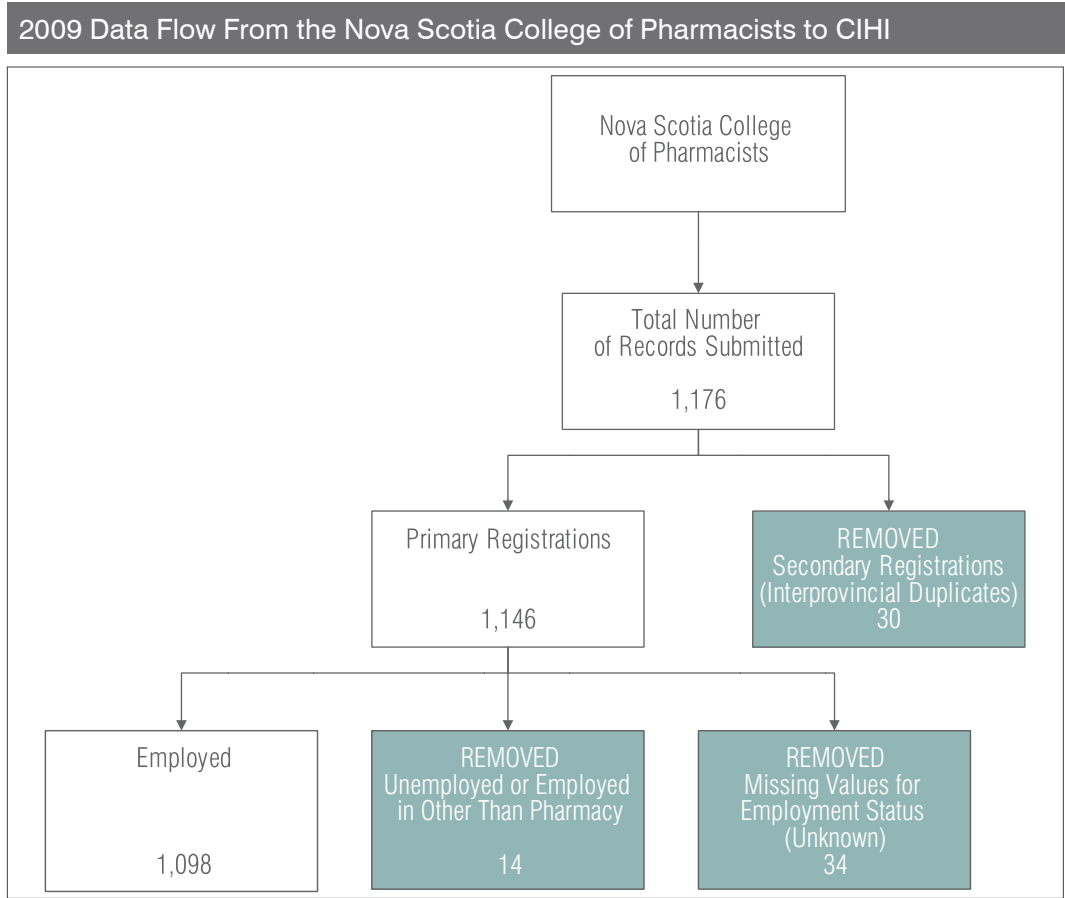
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Sources

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2009 Highlights for Pharmacists in New Brunswick

Supply

- In 2009, the pharmacist workforce in New Brunswick totalled 688 pharmacists registered and employed in the province.

Demographics

- Two-thirds (67.1%) of the pharmacist workforce in New Brunswick were female, higher than the pharmacist workforce (59.2%).ⁱ
- The average age of pharmacists in New Brunswick was 41.6, the lowest of all the participating jurisdictions.
- Compared to other jurisdictions, New Brunswick had the lowest proportion (4.4%) of pharmacists older than age 60.

Education

- New Brunswick did not offer a pharmacy program.
- Almost three-quarters (74.4%) of pharmacists in New Brunswick graduated from Dalhousie University.
- New Brunswick had the second-lowest proportion (90.7%) of pharmacists with their current level of education as baccalaureate, compared to other provinces.
- New Brunswick had the second-lowest proportion (2.6%) of the pharmacist workforce who were classified as new graduates.ⁱⁱ
- New Brunswick had the highest percentage of new pharmacist graduates who were female (88.9%).

Employment

- New Brunswick had the second-highest percentage of pharmacists who were self-employed (12.0%), compared to other provinces.
- Most (85.6%) pharmacists in New Brunswick had single employment, higher than the pharmacist workforce (80.5%).ⁱ

Geography and Mobility

- New Brunswick had the second-lowest proportion (70.8%) of pharmacists working in urban areas of the provinces in the report.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

ii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

2009 New Brunswick Pharmacist Workforce Provincial Profile

		New Brunswick			
		2008		2009	
Pharmacists Employed in Pharmacy		692		688	
Gender	Male	232	33.5%	226	32.8%
	Female	459	66.3%	461	67.0%
	Missing Values	1	0.1%	1	0.1%
Average Age	Years	41.2	41.2	41.6	41.6
10-Year Age Group	20–29	93	13.4%	86	12.5%
	30–39	239	34.5%	238	34.6%
	40–49	196	28.3%	193	28.1%
	50–59	128	18.5%	139	20.2%
	60–69	27	3.9%	**	**
	70–79	7	1.0%	*	*
	80+	0	0.0%	0	0.0%
Missing Values		2	0.3%	2	0.3%
Urban Versus Rural	Urban	–	–	442	64.2%
	Rural	–	–	106	15.4%
	Remote Territories	–	–	76	11.0%
	Missing Values	–	–	0	0.0%
Current Level of Education in Pharmacy	Diploma	–	–	64	9.3%
	Baccalaureate	–	–	57	8.3%
	Master's	–	–	623	90.6%
	PharmD	–	–	*	*
	Doctorate	–	–	*	*
Missing Values		–	–	0	0.0%
New Graduates	No	–	–	1	0.1%
	Yes	–	–	663	96.4%
	Missing Values	–	–	18	2.6%
Multiple Employment Status	Single Employer	–	–	7	1.0%
	Multiple Employers	–	–	589	85.6%
	Missing Values	–	–	99	14.4%
Employment Category	Permanent	–	–	0	0.0%
	Temporary	–	–	571	83.0%
	Casual	–	–	10	1.5%
	Self-Employed	–	–	20	2.9%
	Missing Values	–	–	82	11.9%
Place of Employment	Hospital and Other Health Care Facility	–	–	5	0.7%
	Community Pharmacy	–	–	11	1.6%
	Other Pharmacy	–	–	61	8.9%
	Group Professional Practice/Clinic	–	–	*	*
	Community Health Centre	–	–	*	*
	Other Community-Based Pharmacist Practice	–	–	0	0.0%
	Postsecondary Educational Institution	–	–	0	0.0%
	Association/Government/Para-Governmental	–	–	0	0.0%
	Health-Related Industry/Manufacturing/Commercial	–	–	*	*
	Community Pharmacy Corporate Office	–	–	*	*
	Other	–	–	*	*
	Missing Values	–	–	*	*
Position	Director of Pharmacy	–	–	609	88.5%
	Pharmacy Owner/Manager	–	–	7	1.0%
	Pharmacy Manager	–	–	209	30.4%
	Institutional Leader/Coordinator	–	–	*	*
	Staff Pharmacist	–	–	7	1.0%
	Pharmacist Consultant	–	–	424	61.6%
	Educator	–	–	11	1.6%
	Researcher	–	–	*	*
	Industrial Pharmacist	–	–	0	0.0%
	Other	–	–	0	0.0%
	Missing Values	–	–	12	1.7%
		–	–	13	1.9%

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2009 New Brunswick Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
1301	Region 1	201,771	193	96
1302	Region 2	174,853	147	84
1303	Region 3	173,062	132	76
1304	Region 4	49,425	37	75
1305	Region 5	26,929	27	100
1306	Region 6	78,205	47	60
1307	Region 7	45,223	40	88
	Missing Values	—	64	—

Notes

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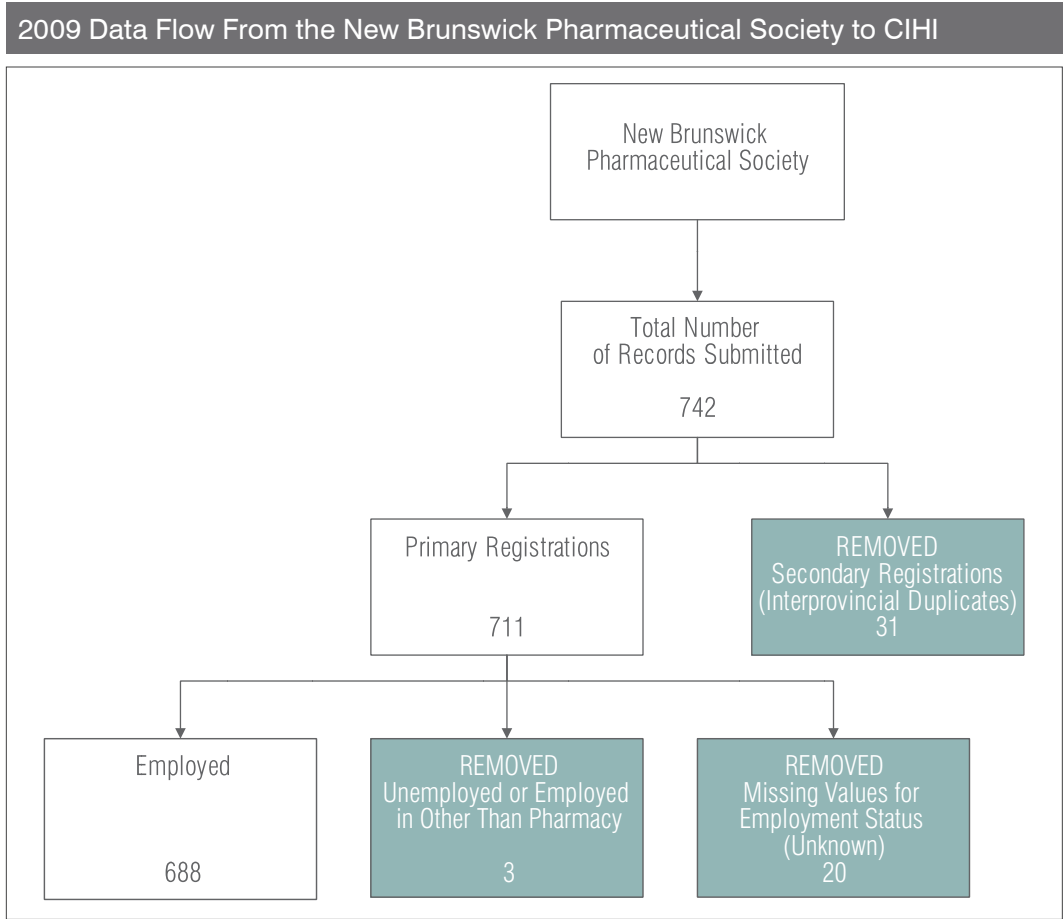
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2009 Highlights for Pharmacists in Ontario

Supply

- From 2006 to 2009, the pharmacist workforce in Ontario grew by 12.0%, reaching a total of 10,423 pharmacists registered and employed in Ontario.

Demographics

- The majority of pharmacists working in Ontario were female (57.4%), slightly lower than the pharmacist workforce (59.2%).ⁱ
- Ontario had the oldest pharmacists, with an average age of 45.1, compared to the pharmacist workforce (43.6).ⁱ
- Ontario had the smallest proportion (9.0%) of younger pharmacists (20 to 29), as well as the largest proportion (35.4%) of older pharmacists (older than 50), compared to other jurisdictions in the report.

Education

- The province of Ontario had two university pharmacy programs (University of Toronto and University of Waterloo).
- The majority (96.0%) of pharmacists in Ontario had a baccalaureate as their current level of academic credential in pharmacy.
- More than three-quarters (76.1%) of pharmacists in Ontario received their current level of education in pharmacy from the University of Toronto.
- Ontario had one of the lowest proportions of new graduates,ⁱⁱ at 3.4%, of all the provinces.
- Similar to the gender distribution of the Ontario pharmacist workforce, the majority of new graduates in Ontario were female (68.9%).

Employment

- Compared to other jurisdictions in the report, Ontario had the highest proportion of pharmacists with multiple employers (26.6%) and, conversely, the lowest proportion (73.4%) of pharmacists with a single employer.
- Ontario had the highest proportion (2.2%) of pharmacists working in the industry/manufacturing/commercial sector across all provinces/territories in the report.

Geography and Mobility

- Ontario had the highest proportion of pharmacists working in urban areas (93.3%) of the jurisdictions in the report.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

ii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

2009 Ontario Pharmacist Workforce Provincial Profile

		Ontario			
		2008		2009	
Pharmacists Employed in Pharmacy		9,813		10,423	
Gender	Male	4,230	43.1%	4,439	42.6%
	Female	5,583	56.9%	5,984	57.4%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	44.7	44.7	45.1	45.1
10-Year Age Group	20-29	916	9.3%	943	9.0%
	30-39	2,734	27.9%	2,838	27.2%
	40-49	2,829	28.8%	2,954	28.3%
	50-59	2,205	22.5%	2,378	22.8%
	60-69	878	8.9%	1,015	9.7%
	70-79	218	2.2%	250	2.4%
	80+	33	0.3%	45	0.4%
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	8,906	90.8%	9,227	88.5%
	Rural	484	4.9%	468	4.5%
	Remote Territories	197	2.0%	195	1.9%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	226	2.3%	533	5.1%
Current Level of Education in Pharmacy	Diploma	93	0.9%	102	1.0%
	Baccalaureate	9,479	96.6%	10,008	96.0%
	Master's	62	0.6%	75	0.7%
	PharmD	179	1.8%	238	2.3%
	Doctorate	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
New Graduates	No	9,466	96.5%	10,069	96.6%
	Yes	344	3.5%	354	3.4%
	Missing Values	3	<0.1%	0	0.0%
Multiple Employment Status	Single Employer	7,238	73.8%	7,443	71.4%
	Multiple Employers	2,575	26.2%	2,697	25.9%
	Missing Values	0	0.0%	283	2.7%
Employment Category	Permanent	9,813	100.0%	10,093	96.8%
	Temporary	0	0.0%	0	0.0%
	Casual	0	0.0%	0	0.0%
	Self-Employed	0	0.0%	0	0.0%
	Missing Values	0	0.0%	330	3.2%
Place of Employment	Hospital and Other Health Care Facility	1,707	17.4%	1,758	16.9%
	Community Pharmacy	7,432	75.7%	7,601	72.9%
	Other Pharmacy	0	0.0%	8	0.1%
	Group Professional Practice/Clinic	0	0.0%	33	0.3%
	Community Health Centre	0	0.0%	17	0.2%
	Other Community-Based Pharmacist Practice	0	0.0%	58	0.6%
	Postsecondary Educational Institution	0	0.0%	0	0.0%
	Association/Government/Para-Governmental	20	0.2%	176	1.7%
	Health-Related Industry/Manufacturing/Commercial	634	6.5%	220	2.1%
	Community Pharmacy Corporate Office	0	0.0%	59	0.6%
	Other	18	0.2%	12	0.1%
	Missing Values	2	<0.1%	481	4.6%
Position	Director of Pharmacy	0	0.0%	*	*
	Pharmacy Owner/Manager	1,942	19.8%	1,945	18.7%
	Pharmacy Manager	1,297	13.2%	1,377	13.2%
	Institutional Leader/Coordinator	0	0.0%	0	0.0%
	Staff Pharmacist	6,071	61.9%	6,247	59.9%
	Pharmacist Consultant	101	1.0%	240	2.3%
	Educator	48	0.5%	56	0.5%
	Researcher	9	0.1%	**	**
	Industrial Pharmacist	325	3.3%	162	1.6%
	Other	0	0.0%	45	0.4%
	Missing Values	20	0.2%	341	3.3%

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2009 Ontario Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
3501	Erie St. Clair LHIN	646,132	452	70
3502	South West LHIN	948,684	629	66
3503	Waterloo Wellington LHIN	741,263	476	64
3504	Hamilton Niagara Haldimand Brant LHIN	1,392,069	1,049	75
3505	Central West LHIN	826,714	439	53
3506	Mississauga Halton LHIN	1,126,683	915	81
3507	Toronto Central LHIN	1,178,191	1,443	122
3508	Central LHIN	1,696,598	1,327	78
3509	Central East LHIN	1,534,623	1,038	68
3510	South East LHIN	488,420	324	66
3511	Champlain LHIN	1,230,670	953	77
3512	North Simcoe Muskoka LHIN	451,626	259	57
3513	North East LHIN	568,133	406	71
3514	North West LHIN	239,376	180	75
	Missing Values	—	533	—

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LHIN: local health integration network.

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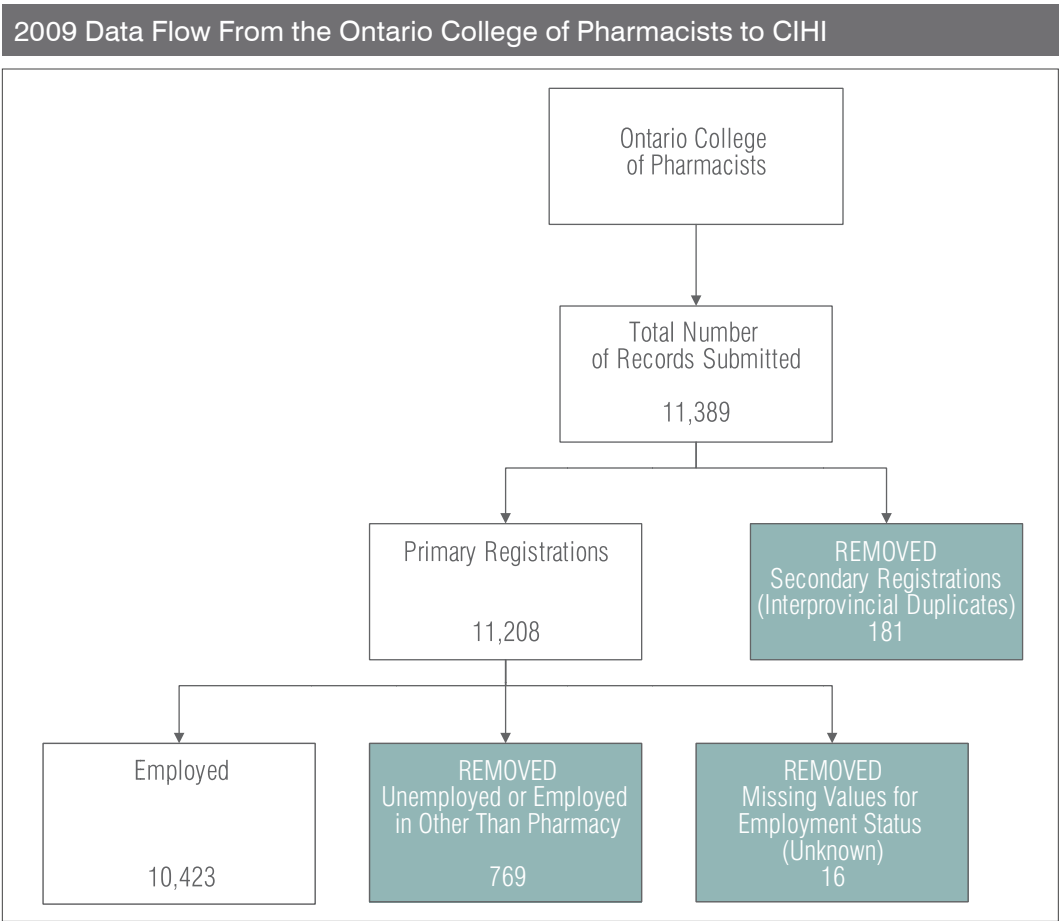
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Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada, Table 109-5325—Estimates of Population (2006 Census and Administrative Data), by Age Group and Sex, Canada, Provinces, Territories, Health Regions (2007 Boundaries) and Peer Groups, Annual (Number) (CANSIM database), accessed July 27, 2010, from <http://cansim2.statcan.gc.ca/cgi-win/cnsmcgi.exe?Lang=E&CNSM-Fi=CII/CII_1-eng.htm>.



2009 Highlights for Pharmacists in Manitoba

Supply

- In 2009, the total pharmacist workforce in Manitoba comprised 1,233 pharmacists who were registered and employed in the province.

Demographics

- The majority of pharmacists working in Manitoba were female (54.4%), slightly lower than the pharmacist workforce (59.2%).ⁱ
- The average age of pharmacists in Manitoba was 42.2.
- Manitoba had the second-largest proportion (17.0%) of younger pharmacists (20 to 29) compared to other jurisdictions in the report.

Education

- The province of Manitoba had one university pharmacy program (University of Manitoba).
- The majority (95.5%) of pharmacists in Manitoba had a baccalaureate as their current level of academic credential in pharmacy.
- Manitoba had the highest proportion of new graduates,ⁱⁱ at 7.5%, of all the provinces.

Employment

- Manitoba had a high proportion of pharmacists with single employers (85.1%), higher than the pharmacist workforce (80.5%).ⁱ
- Manitoba had the lowest proportion (3.7%) of pharmacists working as temporary/casual.
- Compared to other participating provinces, Manitoba had the highest proportion (22.8%) working in a hospital setting.

Geography and Mobility

- Manitoba had a higher proportion (77.6%) of pharmacists working in urban settings.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

ii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

2009 Manitoba Pharmacist Workforce Provincial Profile

		Manitoba			
		2008		2009	
Pharmacists Employed in Pharmacy		–	–	1,233	
Gender†	Male	–	–	491	39.8%
	Female	–	–	586	47.5%
	Missing Values	–	–	156	12.7%
Average Age †	Years	–	–	42.2	
10-Year† Age Group	20–29	–	–	208	16.9%
	30–39	–	–	380	30.8%
	40–49	–	–	287	23.3%
	50–59	–	–	235	19.1%
	60+	–	–	116	9.4%
	Missing Values	–	–	7	0.6%
Urban Versus Rural	Urban	–	–	897	72.7%
	Rural	–	–	87	7.1%
	Remote	–	–	172	13.9%
	Territories	–	–	0	0.0%
	Missing Values	–	–	77	6.2%
Current Level of Education in Pharmacy	Diploma	–	–	*	*
	Baccalaureate	–	–	1,177	95.5%
	Master's	–	–	25	2.0%
	PharmD	–	–	25	2.0%
	Doctorate	–	–	**	**
	Missing Values	–	–	0	0.0%
New Graduates	No	–	–	1,137	92.2%
	Yes	–	–	92	7.5%
	Missing Values	–	–	4	0.3%
Multiple Employment Status	Single Employer	–	–	1,046	84.8%
	Multiple Employers	–	–	183	14.8%
	Missing Values	–	–	4	0.3%
Employment Category	Permanent	–	–	1,113	90.3%
	Temporary	–	–	14	1.1%
	Casual	–	–	31	2.5%
	Self-Employed	–	–	71	5.8%
	Missing Values	–	–	4	0.3%
Place of Employment	Hospital and Other Health Care Facility	–	–	279	22.6%
	Community Pharmacy	–	–	865	70.2%
	Other Pharmacy	–	–	24	1.9%
	Group Professional Practice/Clinic	–	–	5	0.4%
	Community Health Centre	–	–	*	*
	Other Community-Based Pharmacist Practice	–	–	17	1.4%
	Postsecondary Educational Institution	–	–	12	1.0%
	Association/Government/Para-Governmental	–	–	8	0.6%
	Health-Related Industry/Manufacturing/Commercial	–	–	0	0.0%
	Community Pharmacy Corporate Office	–	–	5	0.4%
	Other	–	–	**	**
	Missing Values	–	–	9	0.7%
Position	Director of Pharmacy	–	–	29	2.4%
	Pharmacy Owner/Manager	–	–	167	13.5%
	Pharmacy Manager	–	–	183	14.8%
	Institutional Leader/Coordinator	–	–	**	**
	Staff Pharmacist	–	–	790	64.1%
	Pharmacist Consultant	–	–	14	1.1%
	Educator	–	–	12	1.0%
	Researcher	–	–	*	*
	Industrial Pharmacist	–	–	0	0.0%
	Other	–	–	20	1.6%
	Missing Values	–	–	11	0.9%

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2009 Manitoba Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
4610	Winnipeg	689,384	791	115
4615	Brandon	50,395	68	135
4620	North Eastman	43,439	16	37
4625	South Eastman	66,484	31	47
4630	Interlake	82,544	59	71
4640	Central	107,325	76	71
4645	Assiniboine	69,635	46	66
4660	Parkland	40,278	36	89
4670	Norman	23,540	18	76
4685	Burntwood/Churchill	48,940	13	27
	Missing Values	—	77	—

Notes

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- † Manitoba aggregate counts were provided by Manitoba Health.
- Data not applicable or does not exist.

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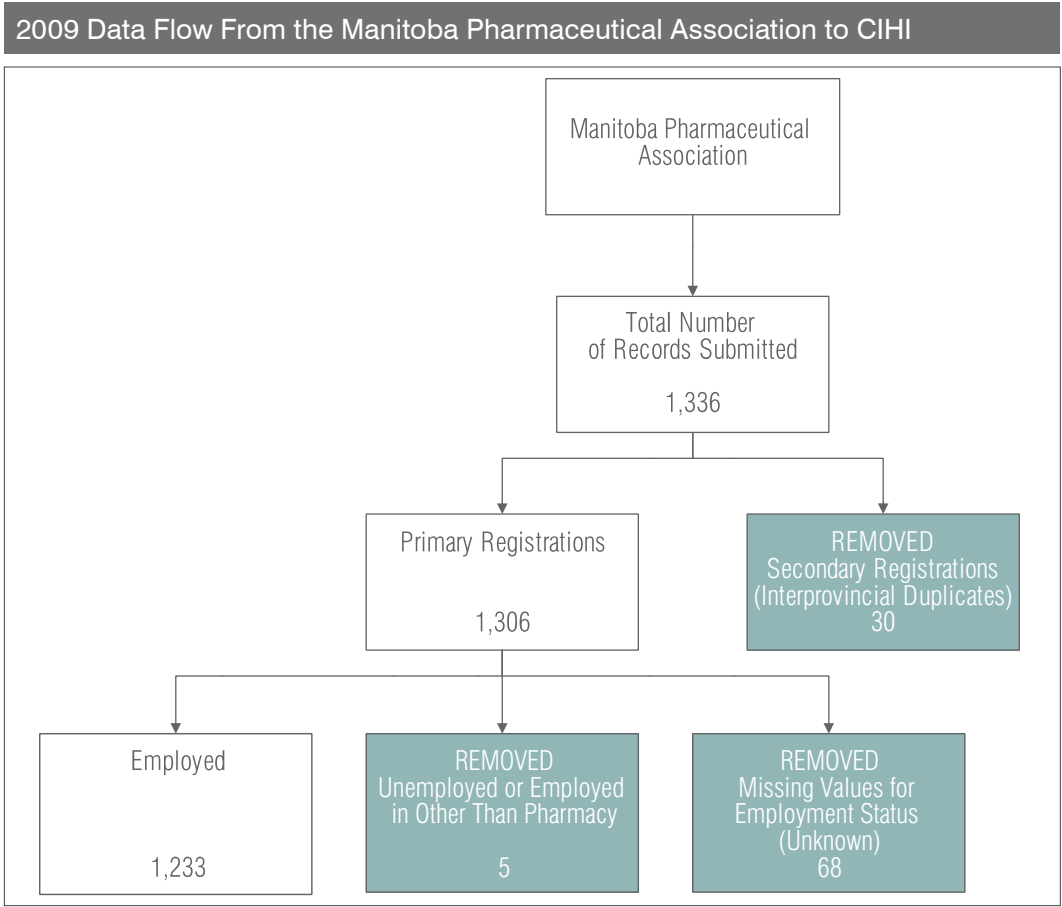
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2009 Highlights for Pharmacists in Saskatchewan

Supply

- From 2006 to 2009, the pharmacist workforce in Saskatchewan grew by 15.8%, reaching a total of 1,189 pharmacists registered and employed in the province.

Demographics

- The majority of pharmacists working in Saskatchewan were female (63.0%), higher than the pharmacist workforce (59.2%).ⁱ
- The average age of pharmacists working in Saskatchewan was 43.0.
- Saskatchewan had one of the highest proportions (11.1%) of pharmacists age 60 or older, compared to other participating provinces.

Education

- The province of Saskatchewan had one university program in pharmacy (University of Saskatchewan).
- Saskatchewan had the highest proportion (97.4%) of pharmacists with a baccalaureate as their current level of education in pharmacy.
- Most (97.5%) pharmacists employed in Saskatchewan graduated from the University of Saskatchewan.
- Saskatchewan had the second-highest proportion (7.1%) of new graduatesⁱⁱ across all provinces/territories in the report.

Employment

- The majority (83.7%) of pharmacists in Saskatchewan had only one employer, slightly higher than the pharmacist workforce (80.5%).ⁱ
- Saskatchewan had the highest proportion (13.2%) of pharmacists who were self-employed of the jurisdictions in the report and, conversely, the lowest proportion of pharmacists with permanent employment (79.1%).
- Across all provinces/territories in the report, Saskatchewan had the highest proportion (71.3%) of pharmacists working as staff pharmacists and the lowest proportion working as pharmacy owners/managers (23.5%).
- Saskatchewan had the highest proportion (51.2%) of pharmacists working 40 or more hours a week, compared to other provinces.

Geography and Mobility

- Almost three-quarters (74.1%) of Saskatchewan's pharmacist workforce were employed in urban areas, while 25.9% were employed in rural/remote areas.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

ii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

2009 Saskatchewan Pharmacist Workforce Provincial Profile

		Saskatchewan			
		2008		2009	
Pharmacists Employed in Pharmacy		1,138		1,189	
Gender	Male	423	37.2%	440	37.0%
	Female	715	62.8%	749	63.0%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	43.2	43.2	43.0	43.0
10-Year Age Group	20–29	175	15.4%	200	16.8%
	30–39	329	28.9%	327	27.5%
	40–49	253	22.2%	278	23.4%
	50–59	250	22.0%	252	21.2%
	60–69	112	9.8%	114	9.6%
	70–79	14	1.2%	13	1.1%
	80+	5	0.4%	5	0.4%
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	796	69.9%	839	70.6%
	Rural	91	8.0%	86	7.2%
	Remote Territories	179	15.7%	208	17.5%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	72	6.3%	56	4.7%
Current Level of Education in Pharmacy	Diploma	*	*	*	*
	Baccalaureate	1,102	96.8%	1,154	97.1%
	Master's	13	1.1%	11	0.9%
	PharmD	13	1.1%	15	1.3%
	Doctorate	**	**	*	*
	Missing Values	2	0.2%	4	0.3%
New Graduates	No	1,062	93.3%	1,104	92.9%
	Yes	76	6.7%	85	7.1%
	Missing Values	0	0.0%	0	0.0%
Multiple Employment Status	Single Employer	985	86.6%	995	83.7%
	Multiple Employers	152	13.4%	194	16.3%
	Missing Values	1	0.1%	0	0.0%
Employment Category	Permanent	840	73.8%	881	74.1%
	Temporary	17	1.5%	32	2.7%
	Casual	51	4.5%	52	4.4%
	Self-Employed	153	13.4%	147	12.4%
	Missing Values	77	6.8%	77	6.5%
Place of Employment	Hospital and Other Health Care Facility	–	–	190	16.0%
	Community Pharmacy	–	–	849	71.4%
	Other Pharmacy	–	–	7	0.6%
	Group Professional Practice/Clinic	–	–	0	0.0%
	Community Health Centre	–	–	6	0.5%
	Other Community-Based Pharmacist Practice	–	–	10	0.8%
	Postsecondary Educational Institution	–	–	11	0.9%
	Association/Government/Para-Governmental	–	–	11	0.9%
	Health-Related Industry/Manufacturing/Commercial	–	–	*	*
	Community Pharmacy Corporate Office	–	–	*	*
	Other	–	–	*	*
	Missing Values	–	–	97	8.2%
Position	Director of Pharmacy	10	0.9%	9	0.8%
	Pharmacy Owner/Manager	0	0.0%	0	0.0%
	Pharmacy Manager	246	21.6%	251	21.1%
	Institutional Leader/Coordinator	*	*	*	*
	Staff Pharmacist	698	61.3%	761	64.0%
	Pharmacist Consultant	*	*	*	*
	Educator	5	0.4%	7	0.6%
	Researcher	*	*	*	*
	Industrial Pharmacist	0	0.0%	0	0.0%
	Other	35	3.1%	36	3.0%
	Missing Values	139	12.2%	121	10.2%

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2009 Saskatchewan Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
4701	Sun Country	53,200	52	98
4702	Five Hills	53,214	50	94
4703	Cypress	42,897	44	103
4704	Regina Qu'Appelle	253,546	294	116
4705	Sunrise	54,254	59	109
4706	Saskatoon	307,198	406	132
4707	Heartland	42,731	41	96
4708	Kelsey Trail	40,236	44	109
4709	Prince Albert Parkland	77,461	86	111
4710	Prairie North	70,612	50	71
4714	Mamawetan/Keewatin/Athabasca	34,780	7	20
	Missing Values	—	56	—

Notes

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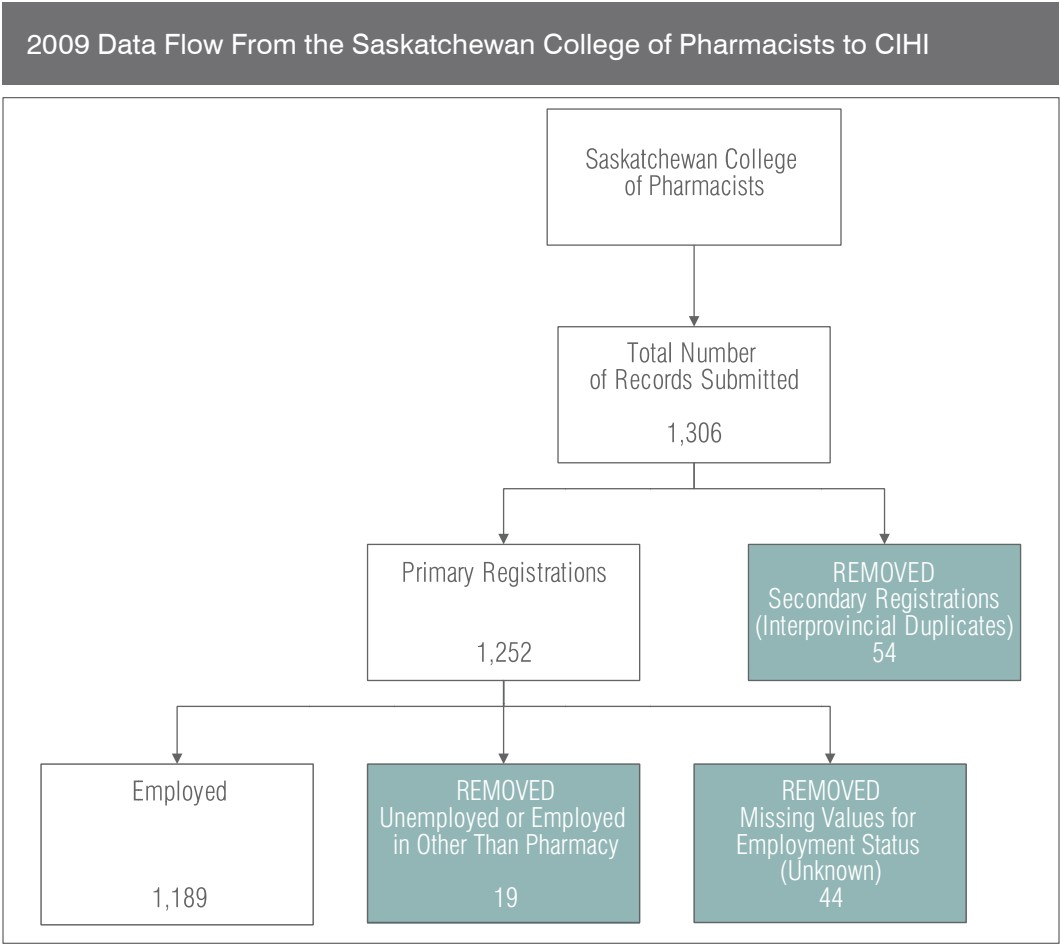
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2009 Highlights for Pharmacists in Alberta

Supply

- From 2006 to 2009, the pharmacist workforce in Alberta grew by 16.1%, reaching a total of 3,712 pharmacists registered and employed in the province.ⁱ

Demographics

- The majority of pharmacists working in Alberta were female (62.7%), higher than the pharmacist workforce (59.2%).ⁱⁱ
- The average age of pharmacists working in Alberta was 41.7.

Education

- The province of Alberta had one university program in pharmacy (University of Alberta).
- The majority (95.6%) of pharmacists in Alberta had a baccalaureate as their current level of education in pharmacy.
- Three-quarters (75.9%) of pharmacists employed in Alberta graduated from the University of Alberta.
- Just more than 6% (6.3%) of the pharmacist workforce in Alberta were new graduates.ⁱⁱⁱ

Employment

- Compared to other jurisdictions in the report, Alberta had the lowest proportion (10.4%) of pharmacists with multiple employers.
- Just more than 10% (11.0%) of the Alberta pharmacist workforce was self-employed, which was higher than the pharmacist workforce (8.3%).^{iv}
- Alberta had 63.1% of pharmacists working in the position of staff pharmacist.
- Among all jurisdictions in the report, the second-highest proportion of pharmacists working in hospitals and other health care facilities was in Alberta (20.9%).
- Alberta had the lowest proportion (78.1%) of pharmacists working 30 or more hours a week, compared to other jurisdictions.

Geography and Mobility

- The majority (86.0%) of pharmacists in Alberta were working in urban areas.

i. The increase in supply in Alberta may be partially attributed to an improvement in data quality. In 2009, 99.3% of pharmacists reported their Employment Status, which represents an increase of 6.2% over 2006.

ii. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

iii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

iv. For this analysis, the pharmacist workforce excludes Quebec, Nunavut and the Yukon.

2009 Alberta Pharmacist Workforce Provincial Profile

		Alberta			
		2008		2009	
Pharmacists Employed in Pharmacy		3,566		3,712	
Gender	Male	1,337	37.5%	1,384	37.3%
	Female	2,229	62.5%	2,328	62.7%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	41.5	41.5	41.7	41.7
10-Year Age Group	20–29	581	16.3%	604	16.3%
	30–39	1,111	31.2%	1,147	30.9%
	40–49	927	26.0%	958	25.8%
	50–59	695	19.5%	736	19.8%
	60–69	225	6.3%	239	6.4%
	70–79	**	**	**	**
	80+	*	*	*	*
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	2,972	83.3%	3,158	85.1%
	Rural	218	6.1%	214	5.8%
	Remote Territories	308	8.6%	299	8.1%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	68	1.9%	41	1.1%
Current Level of Education in Pharmacy	Diploma	*	*	*	*
	Baccalaureate	3,427	96.1%	3,547	95.6%
	Master's	68	1.9%	81	2.2%
	PharmD	55	1.5%	62	1.7%
	Doctorate	**	**	**	**
	Missing Values	0	0.0%	2	0.1%
New Graduates	No	3,343	93.7%	3,480	93.8%
	Yes	223	6.3%	232	6.3%
	Missing Values	0	0.0%	0	0.0%
Multiple Employment Status	Single Employer	3,207	89.9%	3,325	89.6%
	Multiple Employers	359	10.1%	387	10.4%
	Missing Values	0	0.0%	0	0.0%
Employment Category	Permanent	2,987	83.8%	3,075	82.8%
	Temporary	50	1.4%	57	1.5%
	Casual	146	4.1%	173	4.7%
	Self-Employed	383	10.7%	407	11.0%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Place of Employment	Hospital and Other Health Care Facility	718	20.1%	776	20.9%
	Community Pharmacy	2,629	73.7%	2,702	72.8%
	Other Pharmacy	23	0.6%	21	0.6%
	Group Professional Practice/Clinic	16	0.4%	**	**
	Community Health Centre	9	0.3%	*	*
	Other Community-Based Pharmacist Practice	32	0.9%	38	1.0%
	Postsecondary Educational Institution	29	0.8%	27	0.7%
	Association/Government/Para-Governmental	35	1.0%	43	1.2%
	Health-Related Industry/Manufacturing/Commercial	28	0.8%	24	0.6%
	Community Pharmacy Corporate Office	18	0.5%	25	0.7%
	Other	29	0.8%	33	0.9%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Position	Director of Pharmacy	41	1.1%	45	1.2%
	Pharmacy Owner/Manager	387	10.9%	405	10.9%
	Pharmacy Manager	626	17.6%	651	17.5%
	Institutional Leader/Coordinator	31	0.9%	36	1.0%
	Staff Pharmacist	2,282	64.0%	2,344	63.1%
	Pharmacist Consultant	74	2.1%	96	2.6%
	Educator	21	0.6%	21	0.6%
	Researcher	**	**	**	**
	Industrial Pharmacist	*	*	*	*
	Other	87	2.4%	95	2.6%
	Missing Values	0	0.0%	0	0.0%

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2009 Alberta Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
4821	Area 1 (Chinook)	169,989	163	96
4822	Area 2 (Palliser)	111,931	96	86
4823	Area 3 (Calgary)	1,372,755	1,323	96
4824	Area 4 (David Thompson)	330,113	294	89
4825	Area 5 (East Central)	119,198	130	109
4826	Area 6 (Capital)	1,156,839	1,386	120
4827	Area 7 (Aspen)	190,306	137	72
4828	Area 8 (Peace Country)	148,576	92	62
4829	Area 9 (Northern Lights)	87,955	50	57
	Missing Values	—	41	—

Notes

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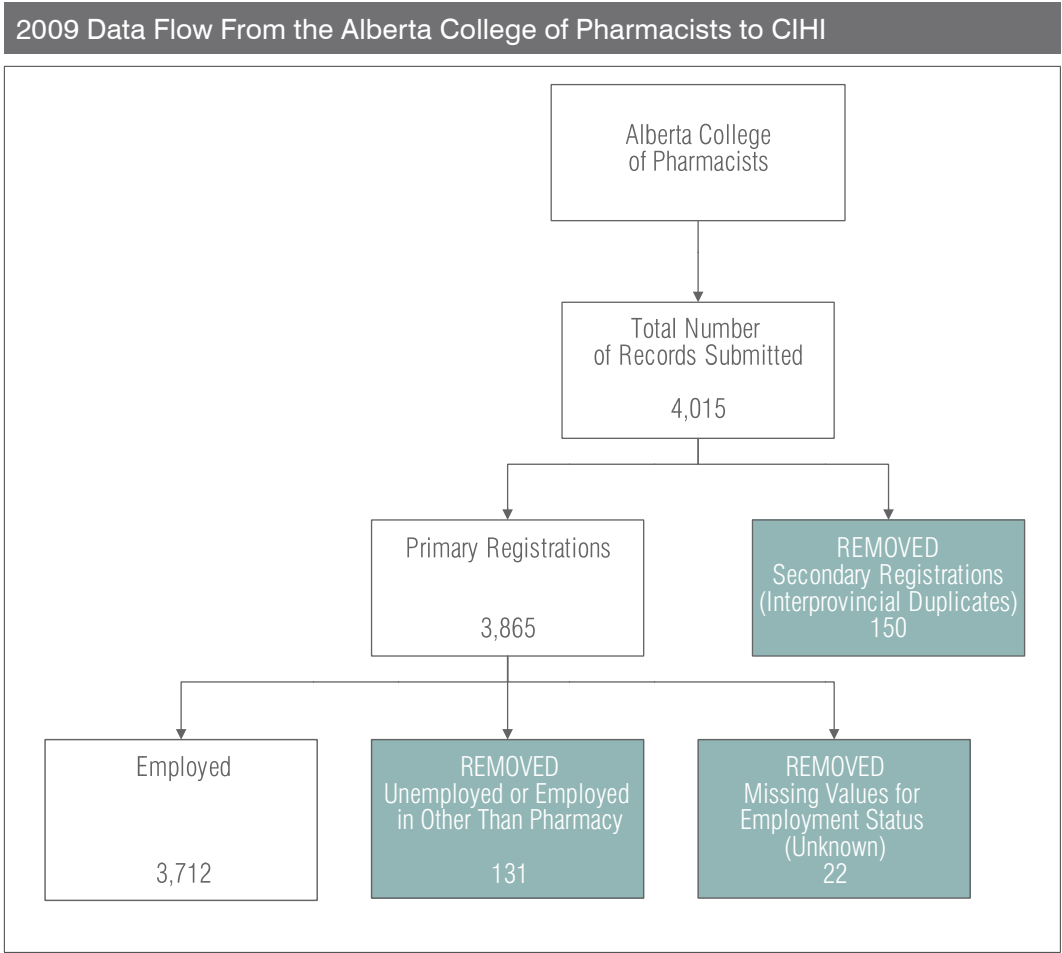
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2009 Highlights for Pharmacists in British Columbia

Supply

- From 2006 to 2009, the pharmacist workforce in British Columbia grew by 25.0%, reaching a total of 3,938 pharmacists registered and employed in the province.ⁱ

Demographics

- The British Columbia pharmacist workforce had a slightly lower proportion of females (57.4%) compared to the pharmacist workforce (59.2%).ⁱⁱ
- The average age of pharmacists working in British Columbia was 42.6.

Education

- British Columbia had one university program in pharmacy (University of British Columbia).
- The majority (92.6%) of pharmacists in British Columbia had a baccalaureate as their current level of academic credential in pharmacy.
- More than three-quarters (79.1%) of pharmacists employed in British Columbia graduated from the University of British Columbia.
- Less than 5% (4.3%) of the pharmacist workforce in British Columbia were new graduates.ⁱⁱⁱ

Employment

- The majority (84.3%) of the British Columbia pharmacist workforce had a single employer, higher than the pharmacist workforce (80.5%).ⁱⁱ
- The majority (88.5%) of the British Columbia pharmacist workforce worked as permanent employees.
- One-fifth (20.1%) of the British Columbia pharmacist workforce were working in hospitals and other health care facilities.
- Almost half (48.5%) of pharmacists in British Columbia worked more than 40 hours a week.

Geography and Mobility

- B.C. had one of the highest proportions (92.2%) of pharmacists working in urban areas and, conversely, one of the lowest (7.8%) working in rural and remote areas.

i. The increase in supply in B.C. may be partially attributed to an improvement in data quality. In 2009, 92.0% of pharmacists reported their Employment Status, which represents an increase of 11.7% over 2006.

ii. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

iii. For this analysis, new graduates have a Year of Graduation for Basic Education of 2008 or 2009.

2009 British Columbia Pharmacist Workforce Provincial Profile

		British Columbia			
		2008		2009	
Pharmacists Employed in Pharmacy		3,753		3,938	
Gender	Male	1,634	43.5%	1,677	42.6%
	Female	2,119	56.5%	2,261	57.4%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	42.5	42.5	42.6	42.6
10-Year Age Group	20–29	589	15.7%	610	15.5%
	30–39	1,042	27.8%	1,087	27.6%
	40–49	1,022	27.2%	1,058	26.9%
	50–59	812	21.6%	865	22.0%
	60–69	245	6.5%	278	7.1%
	70–79	**	**	**	**
	80+	*	*	*	*
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	3,286	87.6%	3,502	88.9%
	Rural	127	3.4%	129	3.3%
	Remote Territories	172	4.6%	168	4.3%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	168	4.5%	139	3.5%
Current Level of Education in Pharmacy	Diploma	24	0.6%	24	0.6%
	Baccalaureate	3,481	92.8%	3,648	92.6%
	Master's	86	2.3%	95	2.4%
	PharmD	148	3.9%	159	4.0%
	Doctorate	12	0.3%	12	0.3%
New Graduates	Missing Values	2	0.1%	0	0.0%
	No	3,595	95.8%	3,770	95.7%
	Yes	157	4.2%	168	4.3%
Multiple Employment Status	Missing Values	1	<0.1%	0	0.0%
	Single Employer	3,146	83.8%	3,298	83.7%
	Multiple Employers	587	15.6%	612	15.5%
Employment Category	Missing Values	20	0.5%	28	0.7%
	Permanent	3,024	80.6%	3,370	85.6%
	Temporary	37	1.0%	37	0.9%
	Casual	208	5.5%	227	5.8%
	Self-Employed	173	4.6%	176	4.5%
Place of Employment	Missing Values	311	8.3%	128	3.3%
	Hospital and Other Health Care Facility	720	19.2%	778	19.8%
	Community Pharmacy	2,840	75.7%	2,955	75.0%
	Other Pharmacy	11	0.3%	10	0.3%
	Group Professional Practice/Clinic	*	*	*	*
	Community Health Centre	14	0.4%	14	0.4%
	Other Community-Based Pharmacist Practice	9	0.2%	9	0.2%
	Postsecondary Educational Institution	20	0.5%	20	0.5%
	Association/Government/Para-Governmental	44	1.2%	45	1.1%
	Health-Related Industry/Manufacturing/Commercial	**	**	**	**
	Community Pharmacy Corporate Office	22	0.6%	22	0.6%
	Other	17	0.5%	15	0.4%
Position	Missing Values	48	1.3%	60	1.5%
	Director of Pharmacy	40	1.1%	43	1.1%
	Pharmacy Owner/Manager	337	9.0%	345	8.8%
	Pharmacy Manager	686	18.3%	722	18.3%
	Institutional Leader/Coordinator	27	0.7%	29	0.7%
	Staff Pharmacist	2,213	59.0%	2,491	63.3%
	Pharmacist Consultant	44	1.2%	46	1.2%
	Educator	20	0.5%	19	0.5%
	Researcher	**	**	**	**
	Industrial Pharmacist	*	*	*	*
	Other	84	2.2%	100	2.5%
	Missing Values	291	7.8%	129	3.3%

(cont'd on next page)

2009 British Columbia Pharmacist Workforce Provincial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
5911	East Kootenay	79,996	59	74
5912	Kootenay/Boundary	79,305	68	86
5913	Okanagan	350,945	331	94
5914	Thompson/Cariboo	223,039	152	68
5921	Fraser East	279,993	171	61
5922	Fraser North	596,647	479	80
5923	Fraser South	695,983	534	77
5931	Richmond	193,255	141	73
5932	Vancouver	643,208	818	127
5933	North Shore/Coast Garibaldi	277,974	216	78
5941	South Vancouver Island	367,578	340	92
5942	Central Vancouver Island	261,476	202	77
5943	North Vancouver Island	120,315	93	77
5951	Northwest	75,007	47	63
5952	Northern Interior	142,581	109	76
5953	Northeast	67,905	39	57
	Missing Values	—	139	—

Notes

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— Data not applicable or does not exist.

Missing Values

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Postal Code of Primary Employment data was assigned to urban/rural/remote categories using the March 2009 release of Statistics Canada's Postal Code Conversion File.

Employment Category, Place of Employment and Position refer to Primary Employment.

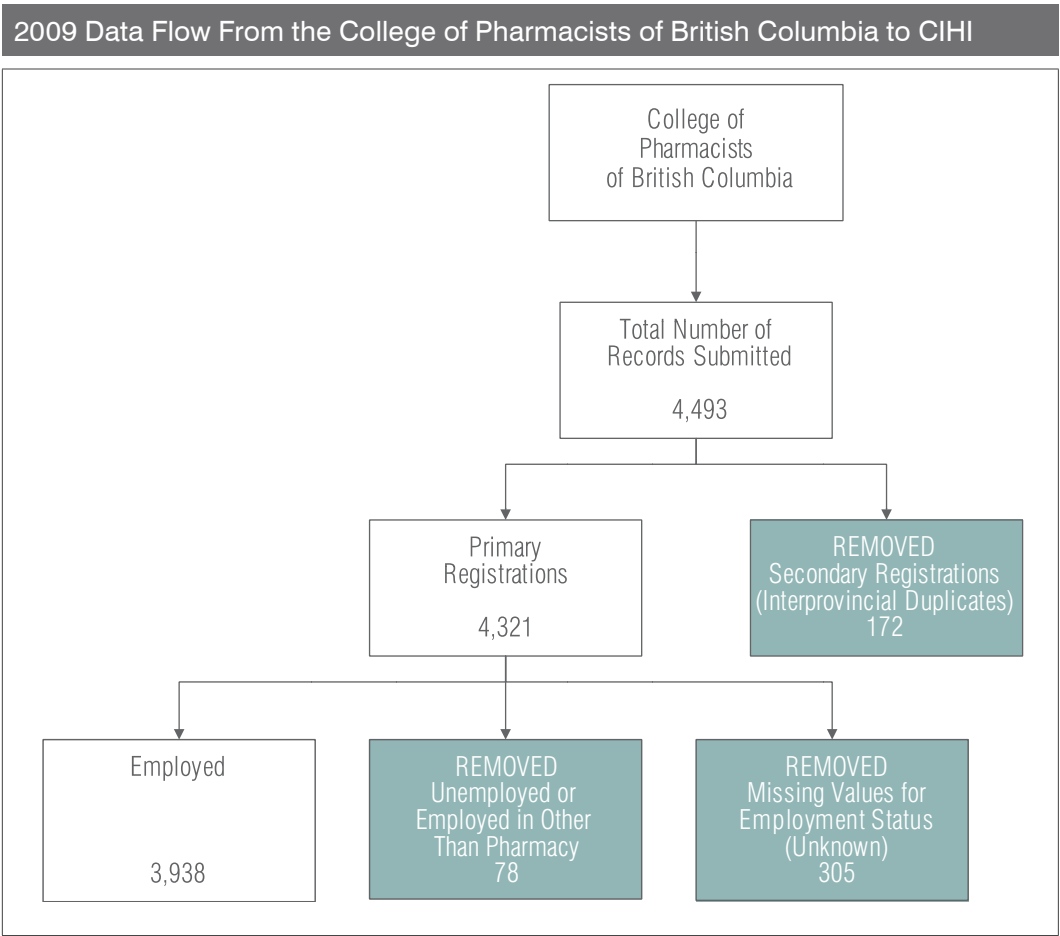
Totals may not sum to 100% due to rounding.

Statistics released by CIHI will differ from statistics released by provincial regulatory authorities and territorial governments due to CIHI's collection, processing and reporting methodologies.

Additional methodological information is available upon request by sending an email to pdb@cihi.ca.

Sources

Pharmacist Database, Canadian Institute for Health Information; Statistics Canada, Table 109-5325—Estimates of Population (2006 Census and Administrative Data), by Age Group and Sex, Canada, Provinces, Territories, Health Regions (2007 Boundaries) and Peer Groups, Annual (Number) (CANSIM database), accessed July 27, 2010, from <http://cansim2.statcan.gc.ca/cgi-win/cnsmcgi.exe?Lang=E&CNSM-Fi=CII/CII_1-eng.htm>.



2009 Highlights for Pharmacists in the Northwest Territories

Supply

- From 2006 to 2009, the pharmacist workforce in the Northwest Territories declined to a total of 20 pharmacists registered and employed in the territory.

Demographics

- The majority of pharmacists working in the Northwest Territories were female (60.0%), slightly higher than the pharmacist workforce (59.2%).ⁱ

Education

- The Northwest Territories did not offer any university programs in pharmacy.

Employment

- The Northwest Territories had the highest proportion (45.0%) of pharmacists working as pharmacy owners/managers; conversely, it had the lowest proportion (55.0%) of pharmacists working as staff pharmacists.

Geography and Mobility

- The majority (56.3%) of pharmacists working in the Northwest Territories were working in rural/remote settings, with the remaining 43.8% working in urban settings.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

2009 Northwest Territories Pharmacist Workforce Territorial Profile

		Northwest Territories			
		2008		2009	
Pharmacists Employed in Pharmacy		20		20	
Gender	Male	8	40.0%	8	40.0%
	Female	12	60.0%	12	60.0%
	Missing Values	0	0.0%	0	0.0%
Average Age	Years	38.4	38.4	38.2	38.2
10-Year Age Group	20–29	*	*	6	30.0%
	30–39	7	35.0%	*	*
	40–49	7	35.0%	7	35.0%
	50–59	*	*	*	*
	60–69	0	0.0%	0	0.0%
	70–79	0	0.0%	0	0.0%
	80+	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Urban Versus Rural	Urban	12	60.0%	7	35.0%
	Rural	0	0.0%	0	0.0%
	Remote Territories	8	40.0%	9	45.0%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	0	0.0%	4	20.0%
Current Level of Education in Pharmacy	Diploma	0	0.0%	0	0.0%
	Baccalaureate	20	100.0%	20	100.0%
	Master's	0	0.0%	0	0.0%
	PharmD	0	0.0%	0	0.0%
	Doctorate	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
New Graduates	No	**	**	**	**
	Yes	*	*	*	*
	Missing Values	0	0.0%	0	0.0%
Multiple Employment Status	Single Employer	20	100.0%	20	100.0%
	Multiple Employers	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Employment Category	Permanent	**	**	**	**
	Temporary	*	*	0	0.0%
	Casual	0	0.0%	*	*
	Self-Employed	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Place of Employment	Hospital and Other Health Care Facility	*	*	*	*
	Community Pharmacy	**	**	**	**
	Other Pharmacy	0	0.0%	0	0.0%
	Group Professional Practice/Clinic	0	0.0%	0	0.0%
	Community Health Centre	*	*	0	0.0%
	Other Community-Based Pharmacist Practice	0	0.0%	0	0.0%
	Postsecondary Educational Institution	0	0.0%	0	0.0%
	Association/Government/Para-Governmental	0	0.0%	0	0.0%
	Health-Related Industry/Manufacturing/Commercial	0	0.0%	0	0.0%
	Community Pharmacy Corporate Office	0	0.0%	0	0.0%
	Other	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
Position	Director of Pharmacy	0	0.0%	0	0.0%
	Pharmacy Owner/Manager	**	**	**	**
	Pharmacy Manager	*	*	*	*
	Institutional Leader/Coordinator	0	0.0%	0	0.0%
	Staff Pharmacist	11	55.0%	11	55.0%
	Pharmacist Consultant	0	0.0%	0	0.0%
	Educator	0	0.0%	0	0.0%
	Researcher	0	0.0%	0	0.0%
	Industrial Pharmacist	0	0.0%	0	0.0%
	Other	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%
	Missing Values	0	0.0%	0	0.0%

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2009 Northwest Territories Pharmacist Workforce Territorial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
6101	Northwest Territories	43,439	16	37
	Missing Values	—	4	—

Notes

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Postal Code of Primary Employment data was assigned to urban/rural/remote categories using the March 2009 release of Statistics Canada's Postal Code Conversion File.

Employment Category, Place of Employment and Position refer to Primary Employment.

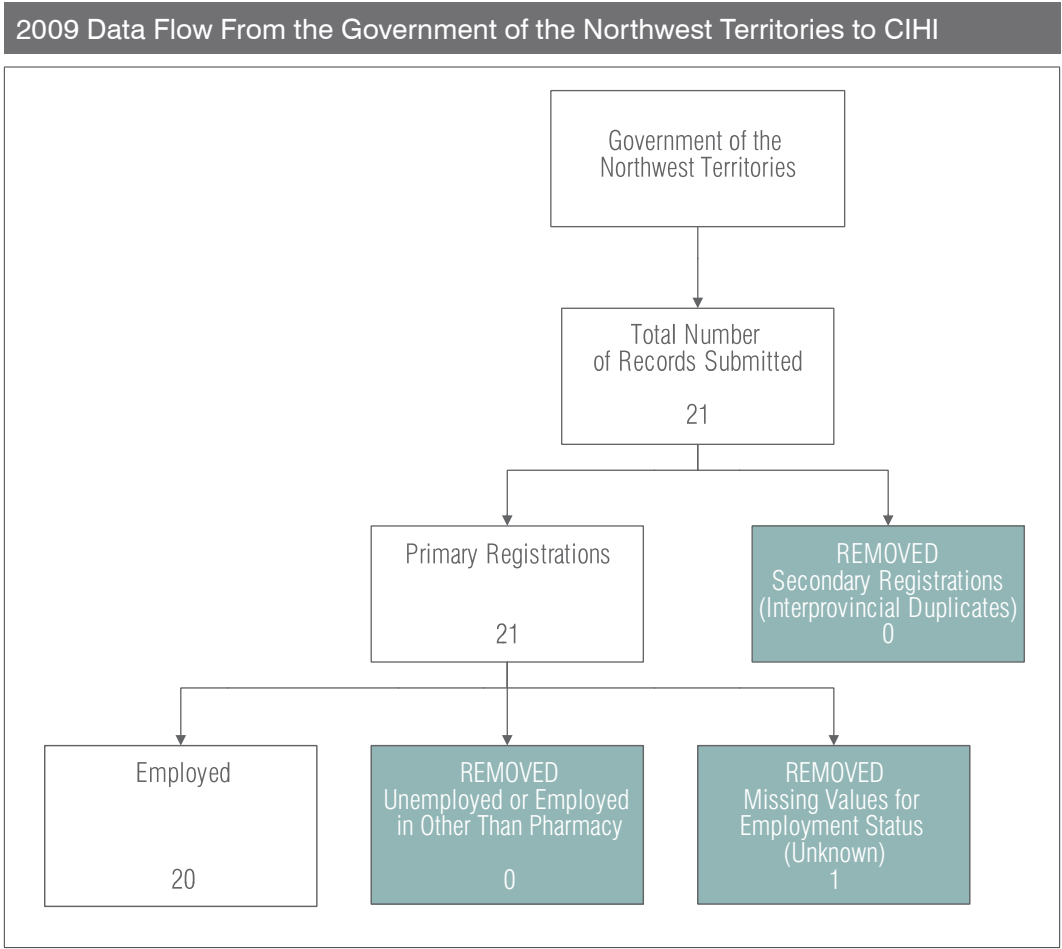
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2009 Highlights for Pharmacists in the Yukon

Supply

- In 2009, the pharmacist workforce in the Yukon reached a total of 29 pharmacists registered and employed in the territory.

Demographics

- The majority of pharmacists working in the Yukon were female (58.6%), slightly lower than the pharmacist workforce (59.2%).ⁱ

Education

- The Yukon did not offer any university programs in pharmacy.

Employment

- Employment data was not collected.

Geography and Mobility

- The majority (82.8%) of pharmacists working in the Yukon were working in urban settings, with the remaining 17.2% working in rural/remote settings.

i. For this analysis, the pharmacist workforce excludes Quebec and Nunavut.

2009 Yukon Pharmacist Workforce Territorial Profile

		Yukon			
		2008		2009	
Pharmacists Employed in Pharmacy				29	29
Gender	Male	–	–	12	41.4%
	Female	–	–	17	58.6%
	Missing Values	–	–	0	0.0%
	Not Collected	–	–	0	0.0%
Average Age	Not Collected	–	–	–	–
10-Year Age Group	Not Collected	–	–	–	–
Urban Versus Rural	Urban	–	–	24	82.8%
	Rural	–	–	0	0.0%
	Remote	–	–	5	17.2%
	Territories	–	–	0	0.0%
	Missing Values	–	–	0	0.0%
Current Level of Education in Pharmacy	Not Collected	–	–	–	–
New Graduates	No	–	–	**	**
	Yes	–	–	*	*
	Not Collected	–	–	0	0.0%
	Missing Values	–	–	5	17.2%
Multiple Employment Status	Single Employer	–	–	29	100.0%
	Multiple Employers	–	–	0	0.0%
	Missing Values	–	–	0	0.0%
Employment Category	Not Collected	–	–	–	–
Place of Employment	Hospital and Other Health Care Facility	–	–	*	*
	Community Pharmacy	–	–	20	69.0%
	Other Pharmacy	–	–	5	17.2%
	Group Professional Practice/Clinic	–	–	0	0.0%
	Community Health Centre	–	–	0	0.0%
	Other Community-Based Pharmacist Practice	–	–	0	0.0%
	Postsecondary Educational Institution	–	–	0	0.0%
	Association/Government/Para-Governmental	–	–	*	*
	Health-Related Industry/Manufacturing/Commercial	–	–	0	0.0%
	Community Pharmacy Corporate Office	–	–	0	0.0%
	Other	–	–	0	0.0%
	Not Collected	–	–	0	0.0%
	Missing Values	–	–	0	0.0%
Position	Not Collected	–	–	–	–

(cont'd on next page)

2009 Yukon Pharmacist Workforce Territorial Profile (cont'd)

Health Region Code	Health Region Name	Population Estimate	Pharmacist Count	Per 100,000 Population
6001	Yukon	33,653	29	86
	Missing Values	—	0	—

Notes

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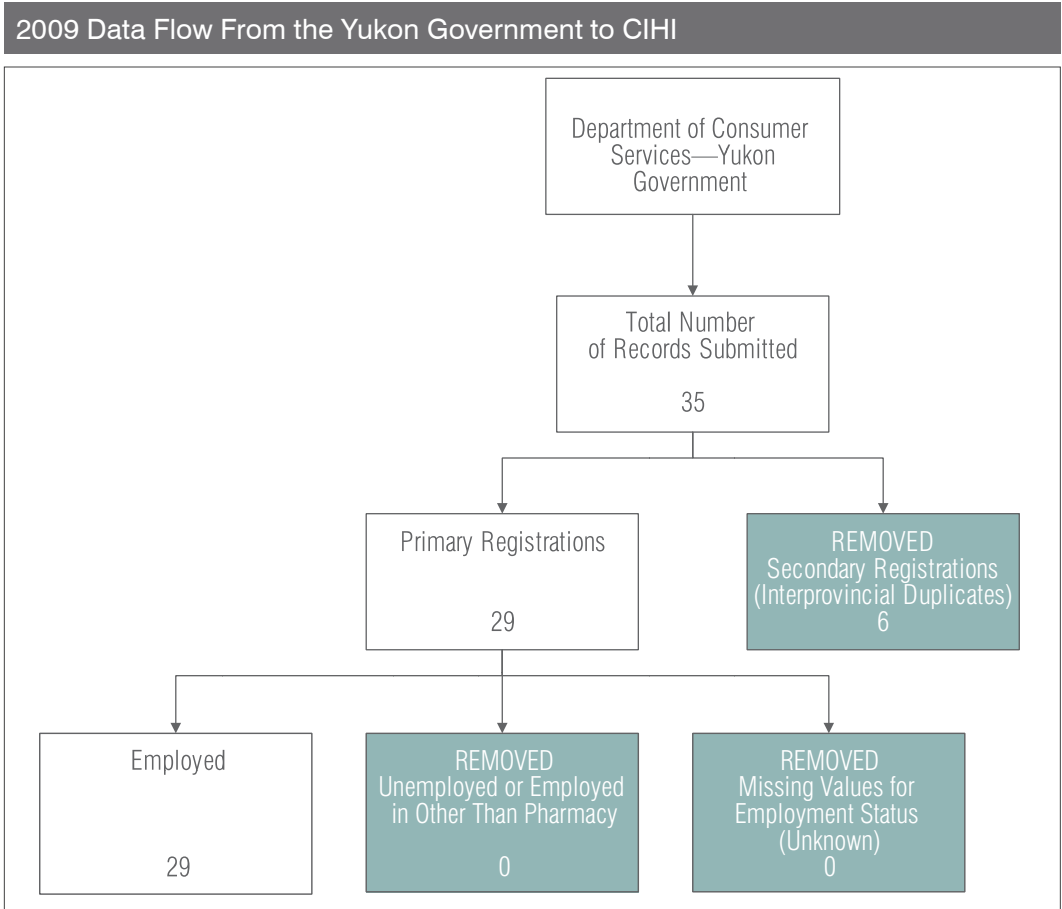
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Methodological Notes

These notes outline the basic concepts behind the data provided in this publication and the underlying methodology of the data collection, as well as key aspects of data quality. They will help to provide a better understanding of the strengths and limitations of the data and show how the data can be used effectively. This information is of particular importance when comparisons are made with data from other sources and in regard to conclusions based on changes over time.

The Canadian Institute for Health Information relies on superior principles of data quality, privacy and confidentiality. CIHI's commitment to ensuring the collection of quality data in a privacy-sensitive manner is applied to data collection, processing, analysis and dissemination. For further details regarding CIHI's privacy principles, outlined in *Privacy and Confidentiality of Health Information at CIHI: Principles and Policies for the Protection of Health Information*, go to www.cihi.ca.

Background

Purpose of This Report

This is the fourth edition of the annual report *Pharmacists in Canada*. It will provide the reader with the most recent statistics on the pharmacist workforce. It includes information on demographic, geographic, education and employment dimensions. Analyses are supplemented with detailed information about the data collection process, pertinent limitations of the current data and an explanation of the analytical methods.

The information in this publication will be used by a wide variety of government and non-governmental organizations to better understand the changing supply and distribution of pharmacists throughout Canada. Accordingly, it will contribute to policy formulation and decision-making at both the pan-Canadian and provincial/territorial levels.

Value of the Information

The supply and distribution information presented here is a key component to health human resource planning at the pan-Canadian and provincial/territorial levels. Any planning or projection of the number of health professionals required for a particular jurisdiction must begin with an understanding of the current supply and how that supply is changing.

The presentation of clear, objective data and data analysis enables informed decision-making and supports policy formulation.

History

Policy reports and research papers have consistently demonstrated that there is very little standardized data available on health professionals on a pan-Canadian basis, with the exception of physicians and regulated nurses. Based on consultations with federal and provincial/territorial ministries of health, the pharmacy profession has been identified as a priority for the development of standards to collect such data. The collection of data from across Canada for the Pharmacist Database (PDB) began in 2006.

Scope of the Data

Population of Interest

The population of interest for the PDB includes all pharmacists registering with a regulatory authority within a Canadian province or territory.

Population of Reference

The population of reference includes all pharmacists submitting active registrations with a Canadian provincial licensing authority or territorial government.

Period of Reference

For any given year, the population includes those pharmacists who registered between the start of the individual regulatory authority/territorial government registration period and October 1.

Data Inclusions

Data collected for the PDB includes the following:

- Registration information from the provincial registrars/territorial governments (except Quebec and the government of Nunavut [2006 to 2009], Manitoba [2006 to 2008] and the Yukon government [2008]).
- All active registrations received by the participating jurisdictions before October 1, 2009.
- Depending on the individual business process, some provinces/territories include pharmacists who are on temporary leave (such as maternity/paternity leave or short-term illness/injury leave) and have maintained their active registration with their provincial regulatory authority or territorial government.

Data Exclusions

Data collected for the PDB does not include the following:

- For 2009, data from the province of Quebec and the territory of Nunavut.
- For 2008, data from the provinces of Manitoba and Quebec and the territories of the Yukon and Nunavut.
- For 2007, data from the provinces of Manitoba and Quebec and the territory of Nunavut.
- For 2006, data from the provinces of Newfoundland and Labrador, New Brunswick, Quebec and Manitoba and the territory of Nunavut.
- Pharmacists who registered with a provincial regulatory authority or governmental authority for the Northwest Territories after October 1, 2009.
- Pharmacists with an inactive registration type.

Data Flow From Primary Data Collector to CIHI

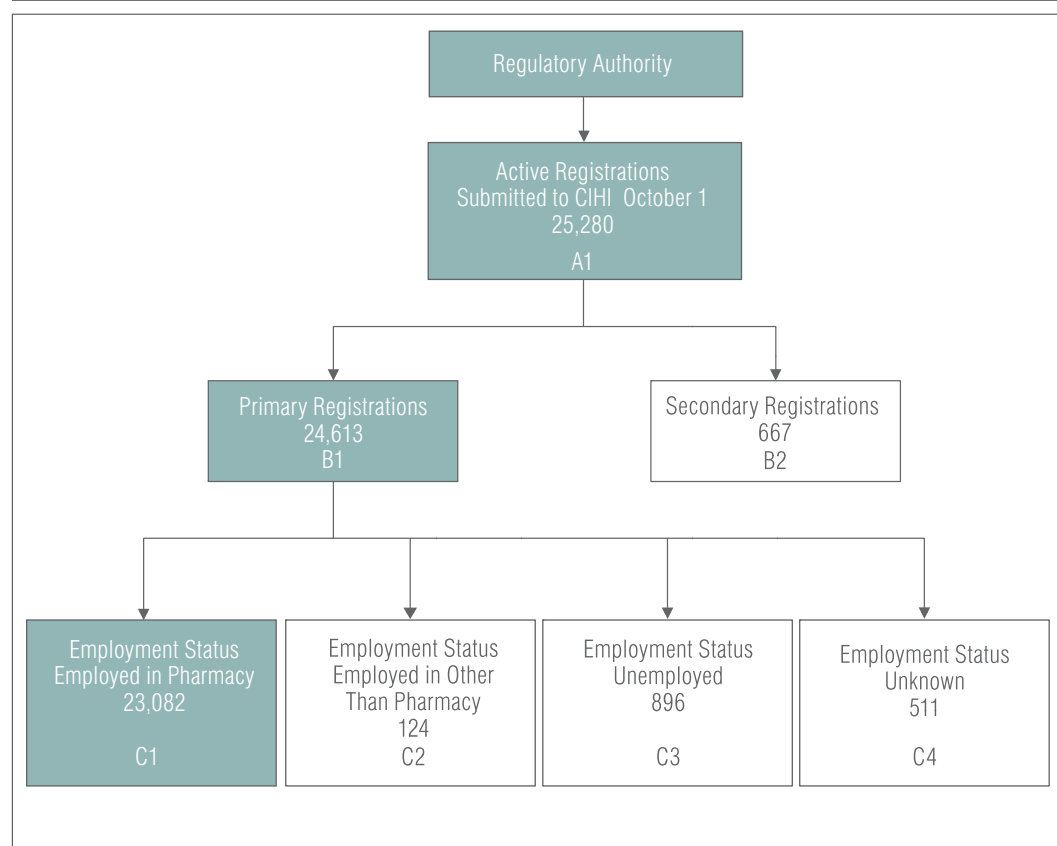
As part of their registration/licensing process, the regulatory authorities collect membership data on an annual basis. They collect data for all members applying for active and inactive registrations.

The purpose of this database is to gain information on the pharmacist workforce in Canada, so the population of reference for the PDB focuses on pharmacists who are currently authorized to engage in practice, meaning that they have active registration as of October 1, 2009.

Since the data collected by the provincial regulatory authorities and territorial governments is wider in scope than the population of reference for the PDB, a filtering methodology is applied by CIHI from the point of data collection through data processing. It targets the relevant records that meet the criteria for the population of reference for the PDB and also meet the information needs addressed in the annual report for the analysis.

Figure 13 illustrates the data flow when this methodology is applied. Explanations of each step within the data flow are provided in the text following the diagram.

Figure 13: Tracing Data Flow From Primary Data Collector to CIHI



Source

Pharmacist Database, Canadian Institute for Health Information.

The total number of registrations submitted by a pharmacist regulatory authority is composed of both active and inactive registration types.

Box A1: Of all the registrations received by the provincial regulatory authorities and territorial governments, only the data of active registrants as of October 1 is submitted to CIHI.

Box B1: This represents the primary registrations, where the province or territory of registration is the registrant's primary jurisdiction of practice (see also Box B2).

Box B2: Pharmacists in Canada can work in more than one jurisdiction concurrently as long as they are registered/authorized by the proper authorities. In the interest of preventing double-counting of pharmacists who work in more than one jurisdiction, this box represents the secondary registrations or interprovincial duplicates. The methodology that identifies primary and secondary registrations is explained in detail in the Data Processing Methods section.

Boxes C1 to C4: In most cases, statistics produced by provincial regulatory authorities and territorial governments include all active practising registrations, regardless of employment status. In contrast, CIHI statistics typically include only those registrants who explicitly state their employment in pharmacy (Box C1). Those pharmacists employed in a profession other than pharmacy (Box C2), those not employed (Box C3) and those whose Employment Status is *unknown* (Box C4) are excluded from the final statistics.

The results of this CIHI methodology are presented in Table 19 below.

Table 19: The PDB Pharmacist Workforce Counts by Province or Territory of Registration, 2009

	N.L.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	N.W.T.	Yukon	Total
Total Active Registrants Submitted to CIHI	598	169	1,176	742	11,389	1,336	1,306	4,015	4,493	21	35	25,280
Primary Registrants	592	162	1,146	711	11,208	1,306	1,252	3,865	4,321	21	29	24,613
Employed in Pharmacy	591	161	1,098	688	10,423	1,233	1,189	3,712	3,938	20	29	23,082

Note

Data from Quebec and Nunavut was not available.

Source

Pharmacist Database, Canadian Institute for Health Information..

Point-in-Time Data Collection

The point-in-time approach to data collection provides a snapshot of the pharmacist workforce across jurisdictions. Using the same point consistently will enable comparability in time, which is necessary for the accurate determination of a trend. However, depending on the jurisdiction, this approach may not capture the entire year-end totals equally in every province and territory. Data collection begins at the onset of the data provider's respective annual registration period and ends on October 1. This collection period was identified as the period that captures most of the registrants renewing or applying for membership, including new graduates.

How CIHI Defines the Pharmacist Workforce

By carefully selecting the reporting population for the pharmacist workforce, CIHI is able to provide standardized comparable data suitable for analysis and trending purposes. As explained previously, population of reference includes all employed pharmacists who hold active registration authorizing them to practise as of October 1, 2009, and are not considered as secondary registrations. The population of reference may differ from reporting by provincial regulatory authorities/territorial governments for various reasons, such as differences in the time frame used, inclusion of other registration types (such as inactive and others), differences in employment status (employed versus unemployed) and the inclusion of secondary registrations.

Discrepancies between the data in the CIHI publications and data presented by provincial regulatory authorities/territorial governments (PDB data providers) are often the result of these differences. We therefore caution readers to be mindful of these differences when comparing PDB data with other data holdings and publications.

Data Collection Methods

Data Sources

The sources of data for the PDB are the provincial regulatory authorities and the governments of the Yukon and the Northwest Territories. Annual registration with a regulatory body is mandatory for pharmacists seeking employment in the provinces and territories. The data is held by the respective provincial regulatory bodies and the governmental authorities of the Northwest Territories, which are considered primary data collectors.

Data Collection

Paper or online registration forms completed by the registrant for registration/licensing purposes are the usual methods of primary data collection for the provincial regulatory authorities and the governmental authorities of the Northwest Territories. Once in electronic format, an extract of the data is prepared for submission to CIHI. Only those data elements defined in the *Pharmacist Database Data Dictionary* (available at www.cihi.ca) are submitted to CIHI. The data extract must conform to the specifications of the PDB, as outlined in the *Pharmacist Database Data Submission Specifications Manual* (available at www.cihi.ca). The data is transmitted from the data provider to CIHI via a secure online system. A letter of agreement governs CIHI's collection of pharmacist data. Each year, those provincial regulatory authorities and territorial governments participating in the PDB review the core set of elements each data provider collects on its registration form. Under the current agreement, each data provider agrees to make every reasonable effort to collect and submit the 38 data elements for each registrant according to the definitions outlined in the *Pharmacist Database Data Dictionary*.

Key Concepts and Definitions

Only data elements used in the analysis of this publication are described below. For a complete list of data elements in the PDB, as well as definitions, please visit the CIHI website (www.cihi.ca) to download the *Pharmacist Database Data Dictionary*.

Demographics

Gender

The reported sexual category of a registrant at the time of registration or renewal, used for administrative purposes.

Year of Birth

Year of birth of the registrant.

Age

Derived from the Year of Birth of the registrant.

Geography

Province/Territory of Residence

At the time of registration or renewal.

Country of Residence

At the time of registration or renewal.

Province/Territory of Registration

Based on the jurisdiction of the organization submitting the data.

Urban/Rural/Remote (for Primary Employment)

Please see the definition for Postal Code of Employment (for Primary Employment).

Health Region

Please see the definition for Postal Code of Employment (for Primary Employment).

Education

Level of Basic Education in Pharmacy

Basic educational program used to prepare a pharmacist for practice. This refers to initial education in pharmacy used, in whole or in part, for consideration of licensure as a pharmacist in Canada. Master's and doctorate credentials would only be identified as initial education in pharmacy if the education permitted direct entry to practice (for example, entry-level PharmD). All other pharmacy-related post-secondary education is captured under Highest Level of Post-Basic Education in Pharmacy.

Year of Graduation for Basic Education in Pharmacy

The year of completion of an initial educational program that prepares a pharmacist for practice.

Canadian University of Graduation for Basic Education in Pharmacy

Name of the Canadian university where the initial educational program that prepares a pharmacist for practice was completed.

Country of Graduation for Basic Education in Pharmacy

Name of country of completion of initial educational program used to prepare a pharmacist for practice.

Highest Level of Post-Basic Education in Pharmacy

This includes other post-secondary education achieved in pharmacy, which resulted in a degree (such as bridging or upgrade education).

Current Level of Education in Pharmacy

This represents the highest and the most recently acquired level of education in pharmacy reported by the registrant. The Current Level of Education in Pharmacy is derived from the data elements Level of Basic Education in Pharmacy and Highest Level of Post-Basic Education in Pharmacy. If Highest Level of Post-Basic Education in Pharmacy exists, then the Level of Basic Education in Pharmacy is compared to the Highest Level of Post-Basic Education in Pharmacy. Whichever one is greater becomes the Current Level of Education in Pharmacy. If the Level of Basic Education in Pharmacy is the same as Highest Level of Post-Basic Education in Pharmacy, then whichever one is acquired later becomes the Current Level of Education in Pharmacy. However, if the Highest Level of Post-Basic Education in Pharmacy doesn't exist, then the Level of Basic Education in Pharmacy becomes the Current Level of Education in Pharmacy. The Current Level of Education in Pharmacy represents the highest and the most recently acquired level of education in pharmacy reported by the registrant.

Years Since Graduation From Basic Education in Pharmacy

This is derived from the difference between the data element Year of Graduation for Basic Education in Pharmacy and the current reporting year (2009) for each registrant.

Employment**Employment Status**

A registrant's work status (employed or unemployed) at the time of registration or renewal.

Primary Employment

The employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

Employment Category (for Primary Employment)

At the time of registration or renewal.

Province/Territory of Employment (for Primary Employment)

At the time of registration or renewal.

Postal Code of Employment (for Primary Employment)

The postal code assigned by Canada Post for a registrant's employment at the time of registration or renewal. It reflects the site where service is delivered, with the employer or business office postal code provided as an alternate (for example, if the employer or business office location is different from the site where service is delivered and only the employer or business office postal code is available). This refers to the location where the registrant is directly engaged in a pharmacy area of practice, direct service, client management, administration, education or research.

The Postal Code of Primary Employment is used to derive the geographic distribution of the workforce into urban, rural and remote areas using the Postal Code Conversion File (PCCF) from Statistics Canada. For more information on the methodology used for this geographic classification scheme, please see the Analytical Methods section within the Methodological Notes. The PCCF is also used to assign health regions.

Position (for Primary Employment)

The main role within the place of employment (for registrants with multiple roles within an employment, reflects the role associated with the most worked hours) at the time of registration or renewal.

Place of Employment (for Primary Employment)

The primary place of employment, whether an employee or self-employed, at the time of registration or renewal. This is at the service-delivery level. Service-delivery level refers to the worksite where the registrant is directly engaged in employment associated with the profession of pharmacy, as a pharmacist or in a pharmacy-related field.

Range of Estimated Weekly Practice Hours (for Primary Employment)

At the time of registration or renewal, the range of usual (that is, typical or average) weekly hours of work in employment related to practice. For registrants in an employee–employer employment category, range indicated is inclusive of all practice hours but should not exceed the hours (including overtime) for which registrant is scheduled/approved and recognized. For registrants who are in a self-employed employment category, range indicated is inclusive of all practice hours (for example, travel time, preparation and service provision).

Data Processing Methods

File Processing

Once data files are received by CIHI, all records undergo two stages of processing before they are included in the national database. The first ensures that data is in the proper format and that all responses pass specific validity and logic tests. If the data submitted does not match the standardized CIHI codes, an exception report and data file summary (identifying and explaining the errors) is sent to the data provider. In addition, the data is tested for a logical relationship between specific fields. (For example, an error is identified in the exception report if the year of graduation is earlier than the year of birth). Errors are reviewed jointly by CIHI and the respective data provider representative. In cases where the data provider is not able to make the corrections, CIHI may make them directly with the explicit consent of the provider. If a correction cannot be made, the code is changed to the appropriate default/missing value.

Identification of Secondary Registrations

Once the file has passed all validity and logic tests, the second stage of processing begins. Since pharmacists are able to register simultaneously in more than one jurisdiction, a methodology has been developed to identify those pharmacists who are living outside of Canada or are registered in more than one province or territory in order to ensure an accurate count of the number of pharmacists registered and working in Canada only. For example, there are administrative incentives for pharmacists to maintain their Canadian pharmacy licence while living and/or working outside of the country. A pharmacist living abroad may continue to register with a Canadian pharmacy regulatory authority each year, even though she or he may have no intention of returning to Canada in the subsequent 12-month period. CIHI must identify these pharmacists living abroad and remove their data from analysis, since it only reports on the pharmacist workforce within Canada.

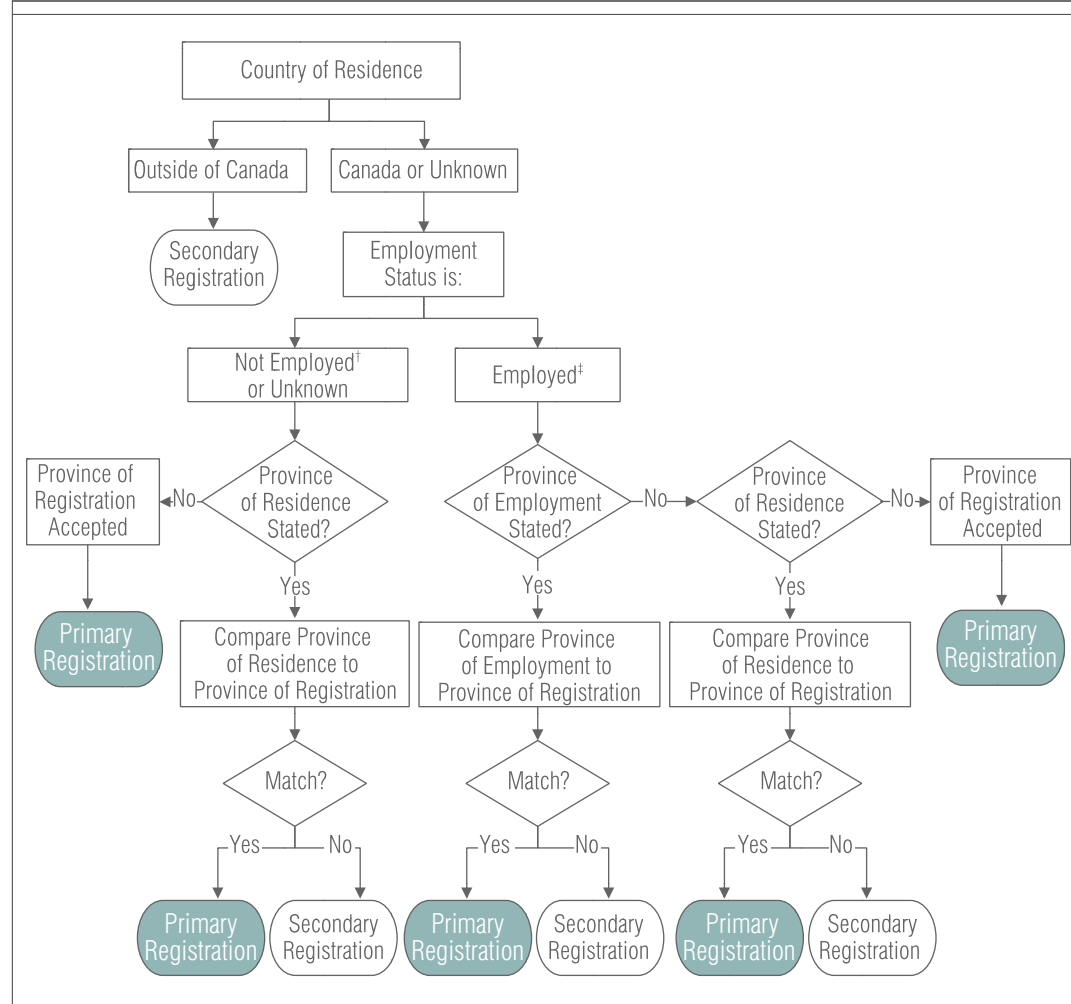
For those living and working in Canada, CIHI must also identify registrations that do not reflect the primary jurisdiction of practice. Similar to the international situation, there are administrative incentives for pharmacists to maintain their provincial/territorial pharmacy licence while living and/or working in another Canadian jurisdiction.

To avoid double-counting, CIHI evaluates each registration to ensure that it reflects the primary jurisdiction of practice. These secondary registrations are also termed “interprovincial duplicates.”

Primary registrations are defined as records meeting the following conditions:

- Province/Country of Residence is either in Canada or *unknown*.
- For pharmacists employed in pharmacy, Province of Employment equals Province of Registration; if Province of Employment is *unknown*, then Province of Residence equals Province of Registration.
- For pharmacists not employed in pharmacy (or for pharmacists with Employment Status of *unknown*), Province of Residence equals Province of Registration; if Province of Residence is *unknown*, then Province of Registration is accepted.

Figure 14: The Process for Identifying Secondary Registrations



Notes

† Not Employed in Pharmacy includes *employed in other than the profession of pharmacy, seeking employment in the profession of pharmacy, employed in other than the profession of pharmacy, not seeking employment in the profession of pharmacy, unemployed and seeking employment in the profession of pharmacy, unemployed and not seeking employment in the profession of pharmacy and unknown*.

‡ Employed in the profession of pharmacy.

The methodology for the removal of secondary registrations/interprovincial duplicates has remained relatively consistent over time. However, it is not without its limitations. For example, a pharmacist living in the United States but working in Canada will be erroneously removed as living abroad. Also, when a pharmacist is registered and employed in a Canadian province and decides to provide short-term relief staffing in another province, the temporary residence information may result in a double count.

Analytical Methods

Urban/Rural Statistics

For analytical purposes, urban areas are defined (in part) as communities with populations that are greater than 10,000 people and are labelled by Statistics Canada as either a census metropolitan area (CMA) or a census agglomeration (CA). Rural/remote is equated with those communities outside the CMA/CA boundaries and is referred to as rural and small town (RST) by Statistics Canada.

RST communities are further subdivided by identifying the degree to which they are influenced, in terms of social and economic integration, by larger urban centres. Metropolitan influenced zone (MIZ) categories disaggregate the RST population into four subgroups: strong, moderate, weak and none. These urban/rural/remote categories are applied to those communities (cities, town, villages) that can be equated with the Statistics Canada designation census subdivision (CSD).

For the purpose of this report, the CMA/CA and MIZ categories were collapsed and may be interpreted in the following simple manner:

CMA/CA: large urban centre (urban).

Strong/Moderate MIZ: small towns and rural areas located relatively close to larger urban centres (rural).

Weak/No MIZ: small towns and rural and remote communities distant from large urban centres (remote).

Details of the RST and MIZ classification schemes can be found in McNiven et al.,² du Plessis et al.³ and CIHI.⁴

Missing Values in Urban/Rural Statistics

Missing values listed in the urban/rural statistics signify a sum of *not stated* and *unknown* responses. For example, where the data provider has not submitted a postal code for a registrant, then it is coded as *not stated*. If the data provider has submitted a postal code for a registrant but it does not match the PCCF, then it is coded as *unknown*.

Data Suppression

CIHI is committed to protecting the confidential information of each pharmacist. Guidelines have been developed to govern the publication and release of health information in order to safeguard the privacy and confidentiality of the data received by CIHI. These policies also govern CIHI's release of data through ad hoc queries and special analytical studies. To ensure the anonymity of individual pharmacists, cells with counts from 1 to 4 are suppressed in the data tables presented in this publication and have been replaced by a single asterisk (*). However, presenting accurate row and column totals also necessitates the suppression of a second value to prevent the reader from determining the suppressed value through subtraction.

Therefore, in each row and column with a suppressed value, a second value is also suppressed, which generally is the next smallest value. However, if the second value suppressed is greater than 4, it must be replaced by a different symbol. In this case, the pharmacist publication uses a double asterisk (**).

Note: Cell suppression does not apply to missing values (such as *not collected*, *not applicable* and *unknown*) in the data tables.

Symbols

Wherever possible, standard symbols and numerical presentations are used in this report:

- * Value suppressed in accordance with CIHI privacy policy; cell value is from 1 to 4.
- ** Value suppressed to ensure confidentiality; cell value is 5 or greater.
- Data not applicable or does not exist.
- .. Data not currently collected.

When necessary, other symbols are noted at the bottom of the respective tables or figures.

Data Quality Assessment

To ensure a high level of accuracy and usefulness, CIHI developed a framework for assessing and reporting the quality of data contained in its databases and registries. This framework focuses on the five dimensions of data quality: timeliness, usability, relevance, accuracy and comparability. The Methodological Notes section outlines the limitations of data interpretation in detail. Briefly, they are as follows:

Timeliness is achieved by collecting data at a point in time determined and agreed upon by the data providers and which reflects a majority of total records. This allows CIHI to analyze and release the data in a timely manner.

Usability includes the availability and documentation of the data and the ease of interpretation.

Relevance of the data set includes the adaptability and value of the data when used by decision-makers, policy developers, researchers and the media.

Accuracy is an assessment of how well the data reflects reality or how closely the data presented in this publication reflects the population of reference—specifically, those pharmacists holding active membership in Canada as of October 1 who are employed in the profession of pharmacy.

Comparability measures how well the data for the current year compares to the data from previous years and how data from the PDB compares to data from other sources. This publication presents pharmacist data for the registration years 2006 to 2009. Previous data years are only available in aggregate counts from the Health Personnel Database at CIHI.

It is important to note that the levels of accuracy and completeness necessary to meet the financial and administrative requirements of a registry can differ from those required for research. An extensive mapping exercise took place collaboratively with each data provider to ensure alignment between the data collected on the registration forms and the data elements of the CIHI *Pharmacist Database Data Dictionary*. When discrepancies were detected, these differences were documented and accounted for in the analysis and described in either the Methodological Notes or the footnotes. In some cases, data providers included CIHI definitions of some of the data elements and/or values in their registration guides, which facilitated a higher level of data accuracy.

Definitions for Missing Values

Missing values are those attributed in instances where a data provider is unable to provide information for a registrant for a specific data element. This involves three potential situations:

- *Not collected*—where the information is not collected by the data provider on the registration form or a data provider cannot submit the information.
- *Unknown*—where the information was not provided by the registrant.
- *Not applicable*—where the data element is not relevant to the situation of the registrant. (For example, when a pharmacist resides in the United States, Province of Residence is *not applicable*.)

For the missing values *unknown* and *not applicable*, CIHI implemented the following validation and correction methodology:

- When a registrant provided valid data to one or more data elements within the same education or employment grouping and other related elements are missing values, then the value *unknown* (rather than *not applicable*) is appropriate.
- When a registrant did not provide any data for all data elements within the same education or employment grouping, the value *not applicable* (rather than *unknown*) is appropriate.
- When pharmacists are not currently employed in pharmacy, all employment data in the PDB is coded as *not applicable*. The format of Table 20 removes all pharmacists not currently employed in pharmacy so that *unknown* values accurately represent non-responses for the pharmacist workforce.

Some of the results with a large percentage of missing values were not included in the data analysis section of this publication or in the data tables available on the CIHI website because their questionable accuracy limits their usability and opens the door to erroneous interpretations. In other cases, the number of missing values is clearly identified in the analysis and noted for explanation when necessary.

Under-Coverage

Under-coverage results when data that should be collected for the database is not included. There are no known sources of under-coverage for the PDB.

Over-Coverage

Over-coverage is the inclusion of data beyond the target population. Over-coverage may occur when a pharmacist is on leave for a certain reason, such as maternity/paternity leave, education leave or short-term illness or injury. She or he may have the option to register as on leave, active or inactive, or to not register at all. However, those who choose to register as active and submit employment information will be included in the workforce numbers when, in fact, they are not working. Data for all pharmacists submitted by the Newfoundland and Labrador Pharmacy Board for 2007 and by the New Brunswick Pharmaceutical Society for 2007 and 2008 was included as *employed in the profession of pharmacy*, as Employment Status was not available.

For 2007, the New Brunswick Pharmaceutical Society submitted aggregate data for active pharmacists who registered between the start of their registration period and July 2, 2008. The data for New Brunswick may include different membership categories for registrants.

Non-Response

In the PDB, item non-response refers to the percentage of *unknown* responses for each data element, as presented in Table 21.

Quebec, Manitoba, Nunavut and Yukon Data

Quebec and Nunavut data was not available from 2006 to 2009; Manitoba data was not available from 2006 to 2008; Yukon data was not available for 2008. Therefore, Quebec and Nunavut data is not included in the 2009 PDB.

Table 20: Percentage of Pharmacist Records With Unknown Responses by Data Element and Province or Territory of Registration, 2009

	N.L.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	N.W.T.	Y.T.
	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009
Gender (%)	0.3	0.0	0.0	0.2	0.0	12.7	0.0	0.0	0.0	0.0	0.0
Year of Birth (%)	0.5	0.0	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.0	..
Year of Graduation for Basic Education in Pharmacy (%)	5.8	0.0	0.0	1.0	0.0	0.3	0.0	0.0	0.0	0.0	17.2
Country of Graduation for Basic Education in Pharmacy	5.8	0.0	2.6	2.0	0.4	0.0	2.2	0.0	0.6	0.0	17.2
Current Level of Education in Pharmacy (%) [†]	5.8	0.0	0.0	0.2	0.0	0.0	0.3	0.1	0.0	0.0	..
University of Graduation for Current Education (%)	5.8	0.0	0.6	0.0	11.7	0.0	3.2	0.0	15.3	0.0	20.7
Employment Category for Primary Employment (%)	1.2	0.0	0.4	0.7	0.0	0.3	6.3	0.0	3.3	0.0	..
Position for Primary Employment (%)	1.0	0.0	0.4	1.9	0.1	0.5	10.2	0.0	3.3	0.0	..
Place of Employment for Primary Employment (%)	1.0	0.0	0.0	88.5	1.5	0.0	8.1	0.0	1.5	0.0	0.0
Urban Versus Rural Flag (%) [‡]	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Range of Estimated Weekly Practice Hours for Primary Employment	5.4	0.0	0.8	3.1	..	0.5	10.9	0.0	3.6	0.0	..

Notes

† Current level of education is derived from the highest value submitted for Level of Basic Education in Pharmacy and the Highest Level of Education in Pharmacy.

‡ Urban versus rural is derived from the Postal Code of Primary Employment.

.. Not collected or not submitted.

Source

Pharmacist Database, Canadian Institute for Health Information.

Table 21: Pharmacist Records Where Data Is Not Collected by Data Element and Province or Territory of Registration, 2009

	N.L.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009
Gender											
Year of Birth										X	
Year of Graduation for Basic Education in Pharmacy											
Country of Graduation for Basic Education in Pharmacy											
Current Level of Education in Pharmacy †										X	
University of Graduation for Current Education											
Primary Employment Category										X	
Primary Position										X	
Place of Primary Employment											
Urban Versus Rural‡											
Range of Estimated Weekly Practice Hours for Primary Employment					X					X	

Notes

† Current level of education is derived from the highest value submitted for Level of Basic Education in Pharmacy and the Highest Level of Education in Pharmacy.

‡ Urban versus rural is derived from the Postal Code of Primary Employment.

X Indicates that the percentage of *not collected* was 100.

Source

Pharmacist Database, Canadian Institute for Health Information.

Data Limitations

The major limitation of the data presented in this report is the lack of information regarding the pharmacist workforce in Quebec and Nunavut. The ultimate aim of the PDB is to provide a pan-Canadian profile of the pharmacist workforce that can be used to observe trends over time. Without full participation of all jurisdictions, the picture of the health human resource issues facing pharmacists today is incomplete.

In addition, not all participating jurisdictions were able to completely align with the data standard specified in the *Pharmacist Database Data Dictionary*. Therefore, for some jurisdictions, some data elements were not collected for the 2006, 2007, 2008 and 2009 registration years.

For 2007 and 2008, data for all pharmacists submitted by the New Brunswick Pharmaceutical Society was included as *employed in the profession of pharmacy*, as Employment Status was not available. For 2007, data for all pharmacists submitted by the Newfoundland and Labrador Pharmacy Board was included as *employed in the profession of pharmacy*, as Employment Status was not available.

Provincial/Territorial Participation

The PDB includes data from Newfoundland and Labrador, P.E.I., Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, B.C., the Northwest Territories and the Yukon for 2009.

Data from the Yukon was not available for 2008. Data from Quebec and Nunavut was not available for 2006 to 2009. Data from Manitoba was not available from 2006 to 2008. Data on active registered pharmacists in Newfoundland and Labrador and New Brunswick was not available for 2006.

Demographics

Year of Birth

- *Manitoba*—the Manitoba Pharmaceutical Association does not provide record-level information on birth year; however, aggregate data was provided by Manitoba Health.
- *Newfoundland and Labrador*—not collected for 2007.
- *Northwest Territories and Nunavut*—excluded for 2006 to 2009.

Gender

- *Manitoba*—the Manitoba Pharmaceutical Association does not provide record-level information on birth year; however, aggregate data was provided by Manitoba Health.
- *Yukon*—excluded for 2009.

Geography

Urban/Rural/Remote (for Primary Employment)

- *New Brunswick*—due to the high proportion of missing values for 2008, the urban/rural analysis for New Brunswick was not included.

Education

Level of Basic/Highest Education in Pharmacy

- *Newfoundland and Labrador and Nova Scotia*—not collected for 2007.
- *New Brunswick*—not collected for 2007 and 2008.
- *Yukon*—not collected for 2007 and 2009.

University of Graduation for Basic/Highest Education in Pharmacy

- *Newfoundland and Labrador and Nova Scotia*—not collected for 2007.
- *New Brunswick*—not collected for 2007 and 2008.
- *Northwest Territories*—not collected for 2006.
- *Newfoundland and Labrador*—due to the high proportion of missing values for 2008, university for current education analysis for Newfoundland and Labrador was not included.

New Graduate

- Data from the Northwest Territories and the Yukon for new graduates was suppressed due to small cell sizes and was not included in the new graduate analysis.

Employment

Employment Status for Primary Employment

- For 2008, data for all pharmacists submitted by the New Brunswick Pharmaceutical Society and, for 2007, data for all pharmacists submitted by the New Brunswick Pharmaceutical Society and the Newfoundland and Labrador Pharmacy Board was included as *employed in the profession of pharmacy*, as Employment Status was not available.
- In addition, for 2007 only, aggregate data for the pharmacist workforce in New Brunswick was submitted by the New Brunswick Pharmaceutical Society. The 2006 to 2009 PDB does not specifically identify registrants who are on leave.

Primary Employment for Primary Employment

The employment, with an employer or in a self-employed arrangement, that is associated with the highest number of usual weekly hours worked.

- *Newfoundland and Labrador, Nova Scotia and the Northwest Territories*—not collected for 2006.
- *New Brunswick*—not collected for 2007 and 2008.
- *Yukon*—not collected for 2006, 2007 and 2009.

Employment Position for Primary Employment

- As employment information was not collected/submitted for 2008, employment position analysis for New Brunswick was not included.
- *Newfoundland and Labrador, Nova Scotia, Saskatchewan, British Columbia and the Northwest Territories*—not collected for 2006.
- *New Brunswick*—not collected for 2007 and 2008.
- *Yukon*—not collected for 2006, 2007 and 2009.

Employment Category for Primary Employment

- For 2006 to 2008, the Ontario College of Pharmacists was unable to identify the employment categories and therefore assumed that 100% of its active registrants were permanent employees.
- Data from the Northwest Territories for Employment Category was suppressed due to small cell sizes and was not included in the analysis.
- *Newfoundland and Labrador, Nova Scotia and the Northwest Territories*—not collected for 2006.
- *New Brunswick*—not collected for 2007 and 2008.
- *Yukon*—not collected for 2006, 2007 and 2009.

Place of Employment for Primary Employment

- As place of employment information was not collected/submitted for 2008, the analysis for Saskatchewan and New Brunswick was not included. Data from the Northwest Territories for Place of Employment was suppressed due to small cell sizes and was not included in the analysis.
- *Newfoundland and Labrador, Nova Scotia and the Northwest Territories*—not collected for 2006.
- *New Brunswick*—not collected for 2007 and 2008.
- *Yukon*—not collected for 2006, 2007 and 2009.

Range of Estimated Weekly Practice Hours for Primary Employment

- As information on hours worked was not collected/submitted for 2008, the analysis for Ontario and New Brunswick was not included. Data from the Northwest Territories for Range of Estimated Weekly Practice Hours was suppressed due to small cell sizes and was not included in the analysis.
- *Newfoundland and Labrador, Nova Scotia, British Columbia and the Northwest Territories*—not collected for 2006.
- *New Brunswick*—not collected for 2007 and 2008.
- *Ontario*—not collected from 2006 to 2009.
- *Yukon*—not collected for 2006, 2007 and 2009.

Multiple Employments

- *Newfoundland and Labrador, Nova Scotia and British Columbia*—primary and/or secondary and third employment information was not collected for 2006.
- *New Brunswick*—primary and/or secondary and third employment information was not collected for 2007 and 2008.
- *Yukon*—primary and/or secondary and third employment information was not collected for 2006, 2007 and 2009.
- *Northwest Territories*—primary and/or secondary and third employment information was not collected from 2006 to 2009.

Privacy and Confidentiality

The Privacy Secretariat at CIHI developed a set of guidelines to safeguard the privacy and confidentiality of data received by CIHI. These policies govern the release of data in publications, media releases, the CIHI website and through ad hoc requests and special studies. The documents entitled *Privacy and Confidentiality of Health Information at CIHI: Principles and Policies for the Protection of Personal Information* and *Pharmacist Database Privacy Impact Assessment* can be found on the CIHI website (www.cihi.ca).

PDB Workforce Products and Services

The following publications relevant to this report may be downloaded in electronic (PDF) format, free of charge, at www.cihi.ca:

- *Pharmacist Database Data Dictionary* (for data elements and definitions)
- *Pharmacist Database Data Submission Specifications Manual* (for file specifications for the data elements sent by the provincial regulatory authorities and territorial governments)

Request for Services

CIHI completes ad hoc requests and special analytical projects on a cost-recovery basis using data from the PDB. Such requests are short queries that generally can be handled through standard reports and do not require major programming resources, while special analytical projects require project planning and the commitment of extra resources.

For an estimate of the costs associated with these products and services, please contact

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