



## Regulated Nurses, 2012—Methodology Guide

The page features decorative wavy lines in grey and teal that flow across the background, framing the central content area.

## Our Vision

Better data. Better decisions.  
Healthier Canadians.

## Our Mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

## Our Values

Respect, Integrity, Collaboration,  
Excellence, Innovation

# Table of Contents

About CIHI's Nursing Data .....	iii
Companion Products on CIHI's Website .....	iii
Canada's Regulated Nursing Workforce.....	iv
Data Sources and Collection .....	1
Data Quality.....	1
Assigning the Regulated Nursing Workforce to Health Regions .....	12
Health Region Peer Groups .....	12
2012 Health Region Populations .....	13
Comparability of Data .....	15
Methodological and Historical Changes.....	16
Comparability and Revisions to Registered Nursing Data, 2008 to 2012.....	16
Comparability and Revisions to Licensed Practical Nursing Data, 2008 to 2012.....	18
Comparability and Revisions to Registered Psychiatric Nursing Data, 2008 to 2012 .....	19
References.....	21



# About CIHI's Nursing Data

CIHI's Nursing Database contains demographic, education and employment information on the three groups of regulated nursing professionals in Canada: registered nurses (including nurse practitioners), licensed practical nurses and registered psychiatric nurses.

## Companion Products on CIHI's Website

The following companion products are available from CIHI's website at [www.cihi.ca/hhr](http://www.cihi.ca/hhr):

- *Regulated Nurses, 2012*
  - Summary Report (.pdf)
  - Jurisdictional Profiles and Health Region Analysis (.xlsx)
  - Data Tables (.xlsx)
  - Methodology Guide (.pdf)
  - Summary Presentation (.pptx)
- Previous reports
  - *Regulated Nurses: Canadian Trends* series
  - *Workforce Trends of Regulated Nurses of Canada* series
- Reference documents
  - *Nursing Database Data Dictionary and Processing Manual*
  - Privacy Impact Assessment

For more information, please contact

Program Lead, Health Human Resources  
Canadian Institute for Health Information  
495 Richmond Road, Suite 600  
Ottawa, Ontario K2A 4H6

Phone: 613-241-7860

Fax: 613-241-8120

Email: [hhr@cihi.ca](mailto:hhr@cihi.ca)

Website: [www.cihi.ca](http://www.cihi.ca)

# Canada's Regulated Nursing Workforce

There are three regulated nursing professions within Canada. Each province and territory has its own legislation governing nursing practice, and each jurisdiction has its own regulatory body for the regulation and licensing of its members.

Below is a brief description of each type of regulated nursing professional:

- **Registered nurses** (RNs, including nurse practitioners) work both autonomously and in collaboration with other health care providers to coordinate health care, deliver direct services and support clients in their self-care decisions and actions in health, illness, injury and disability in all stages of life. RNs are currently regulated in all 13 provinces/territories.
  - **Nurse practitioners** (NPs) are RNs with additional educational preparation and experience. NPs may order and interpret diagnostic tests, prescribe pharmaceuticals, medical devices and other therapies and perform procedures.<sup>i</sup> NPs are currently regulated in all 13 provinces/territories.
- **Licensed practical nurses** (LPNs) work independently or in collaboration with other members of a health care team. LPNs assess clients and work in health promotion and illness prevention. They assess, plan, implement and evaluate care for clients. LPNs are currently regulated in all 13 provinces/territories.
- **Registered psychiatric nurses** (RPNs) work both autonomously and collaboratively with clients and other health care team members to coordinate health care and provide client-centred services to individuals, families, groups and communities. RPNs focus on mental and developmental health, mental illness and addictions while integrating physical health care and utilizing biopsychosocial and spiritual models for a holistic approach to care. RPNs are currently regulated in Manitoba, Saskatchewan, Alberta, British Columbia and Yukon.

## Note to Readers

Throughout this guide,

- We have used the terms “nurses” and “regulated nurses” to describe the three groups of regulated nursing professionals as a whole: registered nurses (including nurse practitioners), licensed practical nurses and registered psychiatric nurses.
- We have used the term “nursing” to refer collectively to Canada’s three regulated nursing professions, unless otherwise indicated.
- Data presented excludes NPs and RPNs in Yukon and LPNs in Nunavut.

---

i. Canadian Nurses Association. *Position Statement—The Nurse Practitioner*. [http://www.nurseone.ca/docs/NurseOne/CNAPrimaryCareToolkit/PS\\_Nurse\\_Practitioner\\_e.pdf](http://www.nurseone.ca/docs/NurseOne/CNAPrimaryCareToolkit/PS_Nurse_Practitioner_e.pdf). Accessed July 16, 2013.

# Data Sources and Collection

This document summarizes the strengths and limitations of the nursing data contained in our analytical products and the ways in which it can be effectively used and analyzed. This information is particularly important when making comparisons with other data sources and when drawing conclusions regarding changes over time.

## Data Quality

CIHI is founded upon the principles of data quality, privacy and confidentiality. Data collection, processing, analysis and dissemination are guided by CIHI's commitment to publishing high-quality data in a privacy-sensitive manner. This section outlines the methodologies used to maximize the accuracy, comparability, timeliness, usability and relevance of the Nursing Database.

## Privacy and Confidentiality

To safeguard the privacy and confidentiality of data received by CIHI, guidelines have been developed to govern the publication and release of health information in accordance with provincial privacy legislation. CIHI is a prescribed entity in Ontario, which means that health information custodians in Ontario can provide personal health data to us without the consent of individuals.

## Data Collection

To practise as a regulated nurse in Canada, annual registration with the appropriate provincial or territorial regulatory authority is mandatory, requiring the completion of a registration form. The completed registration form is the property of the provincial/territorial regulatory authority. Through an agreement with CIHI, each regulatory authority submits a set of standardized data to CIHI, collected using the registration forms. These questions pertain to demographic, education/training and employment characteristics.

CIHI and the regulatory authorities jointly review and scrutinize the submitted data. Once the regulatory authority and CIHI approve the final data, it is added to CIHI's Nursing Database for analysis and reporting.

Note that the statistics reported by CIHI may differ from those reported by the regulatory authorities, even though the source of the data (annual registration forms) is the same. Differences are due to the population of reference, the collection period, exclusions from CIHI's data and CIHI's editing and processing methodologies.

## Population of Interest

The population of interest includes all regulated nurses who submit an active practising registration in a Canadian province or territory. The population of interest is also further refined to include only regulated nurses who fit the definition formulated by CIHI in consultation with regulated nursing stakeholders to best serve health human resource planning and research

needs on a national level. As a result, there are some regulated nurses whose data is not collected by CIHI. These include regulated nurses who submit a non-practising registration (where available from the provincial/territorial regulatory authority) and regulated nurses living or working outside Canada who have not maintained a Canadian licence.

## Population of Reference and Collection Period

CIHI takes steps to adjust the population of reference of the Nursing Database to more closely represent the population of interest. To better ensure timeliness, CIHI collects data prior to the end of the 12-month registration period in each jurisdiction. Therefore, the population of reference for the Nursing Database is all regulated nurses who submit an active practising registration in a Canadian province or territory in the first six months of the registration year. The 12-month registration period varies among the provinces and territories, as each jurisdiction is responsible for setting the start and end dates of its own registration period.

This manner of collection enables CIHI to produce more timely data. Analyses completed annually by CIHI indicate that less than 4% of regulated nurses register after the six-month mark, thus ensuring that CIHI's trends are consistent with provincial/territorial trends that include those registering after the six-month mark.

The following definitions apply to the population of reference:

### Non-Practising Registrations

The target population includes regulated nurses who submit an active practising registration; those who submit a non-practising registration are excluded. At present, Quebec and Ontario are the only jurisdictions that do not offer the option of active practising or non-practising registration status to RNs and LPNs (in the case of Ontario); LPNs for Prince Edward Island, Nova Scotia and the Northwest Territories have only one type of registration. While this is not technically a source of over-coverage—because all registrations in these jurisdictions are considered active practising—the result is that some data fields will have a higher proportion of *not stated* values.

### First-Time Registrants

The jurisdictions of Nova Scotia and Ontario do not submit data from first-time RN registrants, and Ontario and Prince Edward Island do not submit data from first-time LPN registrants, whether they are new graduates or individuals new to the jurisdiction. As many first-time registrants are also active practising, this is a source of under-coverage.

Yukon and the Northwest Territories do submit information on some first-time LPN registrants; these two territories do not submit data for registrants coming from other countries. Because many first-time registrants are also active practising LPNs, this is a source of under-coverage.



All four jurisdictions (Manitoba, Saskatchewan, Alberta and British Columbia) submitting RPN data include data on first-time registrants, whether they are new graduates or individuals new to the jurisdiction. However, the initial registration form for the jurisdictions does not consistently ask for employment information. This may create some under-coverage or a higher number of non-responses.

### **Nurses on Leave**

The target population excludes any regulated nurse not currently practising at the time of registration. This creates some confusion for regulated nurses on leave (such as maternity/paternity leave, education leave or short-term illness or injury), as they may or may not be returning to work during the registration period. Therefore, they may submit an active practising registration (where the option exists) but may not actually be practising at the time of registration.

Therefore, the assumption is made that regulated nurses on temporary leave submit active practising registrations with full employment information (when possible) with the intent of returning to that position when the temporary leave ends. While this is not a source of over-coverage, the fact is that some regulated nurses are not practising for the full year of registration.

### **Non-Response**

Tables 1 to 5 present the item non-response, or the percentage of *not stated* responses, for each data element for data years 2008 to 2012. Only responses for regulated nurses in the workforce are included in each table.

**Table 1: Percentage of Records for Those Employed in Nursing Containing Not Stated Responses, by Data Element and Jurisdiction of Registration, Canada, 2008**

	N.L.		P.E.I.		N.S.		N.B.		Que.		Ont.		Man.			Sask.			Alta.			B.C.			Y.T.		N.W.T./Nun.		Canada				
	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RN	LPN	RN	LPN	RPN		
Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Birth Year	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	<0.1	0.2		
Initial/Entry in Nursing Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Year of Graduation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	0.0
Province/Country of Graduation	0.2	0.7	0.2	0.2	0.0	0.0	<0.1	0.3	0.0	0.0	0.1	<0.1	0.0	<0.1	0.0	1.1	0.0	0.1	0.3	0.0	0.0	0.4	0.1	26.4	1.5	0.0	0.2	0.0	0.2	0.1	11.1		
Other Education in Nursing	0.0	100.0	0.0	99.4	0.0	15.9	0.0	100.0	0.0	96.7	0.0	0.0	0.0	10.9	91.6	0.0	17.1	0.1	0.0	0.0	86.7	0.0	59.4	5.1	0.0	14.5	0.0	100.0	0.0	40.5	38.2		
Education in Other Than Nursing	0.0	0.0	0.0	98.1	0.0	16.6	0.0	100.0	84.7	96.7	58.6	45.0	0.0	10.5	84.0	<0.1	15.6	0.0	0.0	0.0	77.4	0.0	48.6	5.1	0.0	16.1	93.0	100.0	42.4	52.7	34.7		
Employment in Nursing	<0.1	0.2	0.5	3.5	1.7	1.5	1.3	3.6	2.0	3.5	0.4	0.7	6.4	5.3	0.4	0.1	0.1	0.0	0.4	0.0	2.2	6.2	1.7	0.4	2.1	0.0	1.1	0.0	1.8	1.8	0.8		
Province/Territory of Employment	1.5	0.9	0.0	0.0	0.1	4.3	0.0	0.1	0.0	7.4	0.1	0.1	0.0	0.5	1.9	0.4	0.0	0.0	1.3	0.0	0.0	8.8	0.2	0.5	0.3	0.0	0.0	0.0	1.2	2.2	0.5		
Place of Work—Primary	0.1	0.2	0.0	0.2	<0.1	0.6	0.0	<0.1	0.0	8.1	1.5	2.9	0.5	0.9	1.5	0.5	0.0	2.4	1.6	0.0	0.2	0.4	0.2	2.1	2.4	0.0	2.5	1.1	0.8	3.3	1.6		
Area of Responsibility—Primary	0.0	1.8	0.0	0.5	3.7	1.4	0.0	<0.1	4.0	7.7	1.4	2.2	0.4	<0.1	1.6	0.7	0.0	4.1	1.8	0.0	0.7	0.4	0.1	4.7	3.3	0.0	2.7	1.1	1.9	3.0	3.1		
Position—Primary	<0.1	0.3	0.0	0.3	0.1	1.4	0.0	<0.1	1.8	9.1	1.2	2.0	0.3	0.0	1.5	0.3	0.0	3.5	1.9	0.0	0.5	0.4	<0.1	0.9	2.7	100.0	2.5	1.1	1.2	3.3	1.4		
Province/Country of Residence	0.2	0.0	0.0	0.0	<0.1	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1	<0.1		

#### Notes

<0.1%: value is actually less than 0.05%; <0.1% is used to prevent the display of 0.0 cells that are not true zero values.

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

#### Source

Nursing Database, Canadian Institute for Health Information.

**Table 2: Percentage of Records for Those Employed in Nursing Containing Not Stated Responses, by Data Element and Jurisdiction of Registration, Canada, 2009**

	N.L.		P.E.I.		N.S.		N.B.		Que.		Ont.		Man.			Sask.			Alta.			B.C.			Y.T.		N.W.T./Nun.		Canada		
	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RN	LPN	RN	LPN	RPN
Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
Birth Year	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.1
Initial/Entry in Nursing Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Year of Graduation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	0.0
Province/Country of Graduation	<0.1	1.1	0.1	0.2	0.0	<0.1	<0.1	0.2	<0.1	0.0	0.8	0.1	0.0	0.0	0.0	3.3	0.0	0.0	0.4	0.0	0.4	0.3	0.2	24.8	0.3	0.0	0.1	0.0	0.5	0.1	10.5
Other Education in Nursing	0.0	100.0	0.0	99.1	0.0	21.7	0.0	100.0	0.0	97.2	0.0	0.0	0.0	10.3	92.2	0.0	16.4	0.0	0.0	0.0	86.4	0.0	52.1	5.7	0.0	3.1	0.0	100.0	0.0	39.0	39.1
Education in Other Than Nursing	0.0	0.0	100.0	99.2	<0.1	22.5	0.0	100.0	84.9	99.5	56.2	40.0	0.0	9.8	83.6	1.0	13.0	0.0	0.0	0.0	75.7	0.0	46.5	5.7	0.0	3.1	69.6	100.0	41.8	50.7	35.1
Employment in Nursing	0.0	0.1	5.8	1.2	0.8	1.4	1.7	2.6	1.8	9.0	0.4	0.5	7.1	5.1	0.9	0.1	0.6	1.4	0.8	1.8	1.2	6.9	1.6	0.5	0.3	4.7	3.0	0.0	1.9	3.1	0.9
Province/Territory of Employment	2.1	1.3	0.0	0.5	0.1	14.1	0.3	0.1	0.0	<0.1	0.1	0.1	1.7	0.2	0.3	0.6	0.2	0.0	2.8	0.0	0.0	7.5	0.1	<0.1	0.3	0.0	0.0	0.0	1.4	0.7	0.1
Place of Work—Primary	0.1	<0.1	0.0	0.0	<0.1	1.1	0.0	0.0	0.0	22.4	1.4	2.8	58.9	1.0	0.0	1.1	0.1	0.8	3.0	0.0	0.0	0.1	1.1	1.2	1.1	0.0	0.9	0.0	3.4	6.8	0.7
Area of Responsibility—Primary	0.1	1.2	0.0	2.1	4.2	0.9	0.0	1.0	1.7	0.0	1.2	1.9	2.1	0.0	0.4	0.9	0.1	1.7	3.7	0.0	0.2	0.2	0.9	4.4	11.7	0.0	3.4	0.0	1.6	0.9	2.3
Position—Primary	<0.1	0.1	0.0	0.3	0.1	0.9	0.0	0.0	0.6	0.2	0.9	1.9	2.1	0.0	0.0	1.2	0.1	1.4	4.0	0.0	0.3	0.2	0.5	0.2	1.4	100.0	2.4	0.0	1.1	0.9	0.4
Province/Country of Residence	0.2	0.0	0.0	0.0	<0.1	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	<0.1	<0.1	<0.1

#### Notes

<0.1%: value is actually less than 0.05%; <0.1% is used to prevent the display of 0.0 cells that are not true zero values.

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

#### Source

Nursing Database, Canadian Institute for Health Information.

**Table 3: Percentage of Records for Those Employed in Nursing Containing Not Stated Responses, by Data Element and Jurisdiction of Registration, Canada, 2010**

	N.L.		P.E.I.		N.S.		N.B.		Que.		Ont.		Man.			Sask.			Alta.			B.C.			Y.T.		N.W.T./Nun.		Canada			
	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RN	LPN	RN	LPN	RPN	
Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
Birth Year	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
Initial/Entry in Nursing Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Year of Graduation	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Province/Country of Graduation	0.1	1.1	0.5	0.2	0.0	0.0	<0.1	0.0	0.0	0.0	0.1	<0.1	0.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	1.3	2.9	0.7	23.2	0.3	0.0	0.3	0.0	0.5	0.1	10.3	
Other Education in Nursing Discipline (Degree)—RN	0.0	0.0	100.0	0.0	1.5	0.0	0.0	0.0	75.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	0.0	19.4	0.0	0.0
Education in Other Nursing Discipline—LPN and RPN	0.0	100.0	0.0	99.0	0.0	0.0	0.0	100.0	0.0	98.1	0.0	0.0	0.0	9.8	92.4	0.0	20.8	1.1	0.0	0.0	87.1	0.0	46.1	11.5	0.0	4.8	0.0	100.0	0.0	37.5	41.4	
Education in Other Than Nursing	0.0	0.0	100.0	99.0	2.8	0.0	0.0	100.0	85.0	97.8	54.1	35.5	0.0	9.3	83.9	4.4	15.2	1.4	0.0	0.0	74.4	0.0	41.1	11.0	0.0	4.8	61.0	100.0	41.2	46.9	36.9	
Employment in Nursing	0.0	0.0	2.2	6.3	2.0	0.1	1.8	2.9	1.7	11.5	0.5	0.7	6.0	5.1	1.7	1.4	0.5	0.1	7.3	0.0	3.0	3.3	2.7	0.1	0.0	22.2	1.3	1.2	2.2	3.8	1.0	
Province/Territory of Employment	2.0	1.6	0.0	1.4	0.1	0.0	0.0	27.1	0.0	0.0	<0.1	<0.1	1.1	0.1	0.2	0.7	0.0	0.8	0.1	0.1	0.2	10.3	0.2	0.1	0.0	0.0	0.0	0.0	1.3	1.0	0.3	
Place of Work—Primary	<0.1	0.0	0.0	0.0	0.1	13.1	0.0	0.0	0.0	15.7	1.1	2.0	1.1	0.8	0.0	1.2	0.2	0.5	0.2	0.0	0.1	24.7	1.3	0.4	1.7	0.0	1.4	0.0	3.4	5.4	0.3	
Area of Responsibility—Primary	<0.1	0.7	0.0	2.7	<0.1	0.7	0.0	1.5	1.3	0.1	1.0	1.6	0.9	0.1	0.5	1.2	0.2	0.6	1.0	0.0	0.2	9.3	1.7	0.6	5.0	0.0	2.9	0.0	2.0	0.9	0.5	
Position—Primary	<0.1	<0.1	0.3	0.0	0.2	0.7	0.0	0.1	0.4	0.2	0.7	1.5	1.4	0.0	0.1	1.2	0.2	1.0	1.5	0.0	0.3	9.3	0.2	0.4	1.1	100.0	3.2	0.0	1.7	0.7	0.4	
Province/Country of Residence	0.1	0.0	0.0	0.0	<0.1	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	<0.1	0.0	0.1	0.0	0.0	0.0	<0.1	<0.1	0.0	0.8	0.0	0.1	0.0	<0.1	<0.1	<0.1	

#### Notes

<0.1%: value is actually less than 0.05%; <0.1% is used to prevent the display of 0.0 cells that are not true zero values.

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

#### Source

Nursing Database, Canadian Institute for Health Information.

**Table 4: Percentage of Records for Those Employed in Nursing Containing Not Stated Responses, by Data Element and Jurisdiction of Registration, Canada, 2011**

	N.L.		P.E.I.		N.S.		N.B.		Que.		Ont.		Man.			Sask.			Alta.			B.C.			Y.T.		N.W.T./Nun.		Canada				
	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RN	LPN	RN	LPN	RPN		
Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Birth Year	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	
Initial/Entry in Nursing Education	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Year of Graduation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	<0.1	0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.8	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	
Province/Country of Graduation	0.0	1.4	0.7	0.2	0.0	0.0	<0.1	0.0	0.0	0.1	0.1	<0.1	0.0	0.0	0.0	1.5	<0.1	0.0	0.4	0.0	0.3	2.8	0.7	21.7	0.3	0.0	0.2	0.0	0.5	0.1	9.5		
Other Education in Nursing Discipline (Degree)—RN and RPN	0.0	0.0	100.0	0.0	0.1	0.0	85.3	0.0	74.6	0.0	0.0	0.0	0.0	0.0	96.2	0.9	0.0	1.9	0.0	0.0	1.0	0.0	0.0	16.4	0.0	0.0	35.7	0.0	21.8	0.0	25.1		
Education in Other Nursing Discipline—LPN and RPN	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	97.7	0.0	0.0	0.0	39.0	93.0	0.0	0.0	1.9	0.0	0.0	90.7	0.0	15.7	16.0	0.0	23.7	0.0	100.0	0.0	34.1	45.1		
Education in Other Than Nursing	0.0	0.0	100.0	0.0	0.1	0.0	92.9	100.0	85.1	97.6	72.4	65.2	0.0	46.8	84.4	2.8	0.0	1.9	0.0	0.0	77.0	0.0	17.0	15.6	0.0	27.6	60.9	100.0	50.2	55.8	40.2		
Employment in Nursing	0.0	0.0	2.4	9.2	1.3	0.1	1.8	3.5	1.5	11.2	2.4	3.2	2.7	0.1	1.3	1.1	0.4	7.4	1.1	0.0	0.0	13.5	14.5	0.4	0.3	1.3	2.9	0.0	3.1	5.7	1.5		
Province/Territory of Employment	1.2	11.7	0.0	15.9	0.1	0.1	0.0	4.0	0.1	0.0	<0.1	<0.1	0.1	0.0	0.1	1.1	0.1	3.6	10.9	<0.1	0.6	10.2	0.5	0.1	0.0	0.0	0.0	0.0	2.5	0.7	0.8		
Place of Work—Primary	0.0	0.0	0.0	2.1	0.1	2.0	0.0	0.0	0.1	23.6	2.6	3.2	0.6	0.1	0.0	1.1	0.1	0.0	10.2	0.0	0.6	36.9	0.6	0.5	1.3	0.0	1.0	0.0	6.3	7.3	0.4		
Area of Responsibility—Primary	<0.1	0.6	0.0	7.6	0.0	0.6	0.0	1.8	1.1	0.1	2.0	2.2	0.2	0.1	0.3	1.1	0.6	2.0	11.6	<0.1	6.3	9.4	0.5	0.9	3.1	0.0	1.9	0.0	3.4	1.1	2.2		
Position—Primary	0.0	0.1	0.2	3.9	0.1	0.6	0.0	0.1	0.4	0.2	2.0	2.1	1.1	1.7	0.1	1.1	0.6	1.1	11.4	0.0	0.6	9.4	0.5	0.8	1.3	0.0	1.9	0.0	3.2	1.0	0.7		
Province/Country of Residence	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	<0.1	0.0	0.0	0.0	0.1	<0.1	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.3	0.0	0.0	0.0	<0.1	<0.1	<0.1		

#### Notes

<0.1%: value is actually less than 0.05%; <0.1% is used to prevent the display of 0.0 cells that are not true zero values.

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

#### Source

Nursing Database, Canadian Institute for Health Information.

**Table 5: Percentage of Records for Those Employed in Nursing Containing Not Stated Responses, by Data Element and Jurisdiction of Registration, Canada, 2012**

	N.L.		P.E.I.		N.S.		N.B.		Que.		Ont.		Man.			Sask.			Alta.			B.C.			Y.T.		N.W.T./Nun.		Canada			
	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RPN	RN	LPN	RN	LPN	RN	LPN	RPN	
Sex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Birth Year	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Initial/Entry in Nursing Education	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	<0.1	0.0	0.0
Year of Graduation	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Province/Country of Graduation	<0.1	2.0	2.1	0.2	0.0	0.0	<0.1	0.0	0.0	0.1	0.1	<0.1	0.0	0.0	0.0	6.5	0.0	0.4	0.3	0.0	0.2	4.5	0.1	20.8	0.3	0.0	0.2	0.0	0.8	0.1	9.1	
Other Education in Nursing Discipline (Degree)—RN and RPN	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	74.3	0.0	0.0	0.0	0.0	0.0	96.1	<0.1	0.0	6.0	0.0	0.0	94.0	0.0	0.0	22.4	0.0	0.0	0.7	0.0	18.4	0.0	49.9	
Education in Other Nursing Discipline—LPN and RPN	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	97.6	0.0	0.0	0.0	90.8	93.2	0.0	0.0	6.0	0.0	0.0	89.9	0.0	11.6	22.0	0.0	37.0	0.0	100.0	0.0	35.3	48.2	
Employment in Nursing Province/Territory of Employment	0.0	0.0	4.4	7.5	3.0	0.3	1.7	3.7	1.5	12.2	3.0	2.8	2.2	0.3	2.3	1.4	2.7	4.5	1.4	0.0	0.0	12.3	13.3	2.3	1.6	5.4	4.0	0.0	3.3	5.8	2.1	
Place of Work—Primary	2.0	11.0	0.0	9.2	0.1	0.1	0.0	0.2	0.1	0.0	<0.1	<0.1	1.1	0.4	1.5	0.4	0.1	7.4	16.0	0.0	2.2	0.2	1.4	11.1	0.0	12.0	0.0	0.0	2.0	0.5	6.7	
Area of Responsibility—Primary	0.1	0.0	0.0	1.1	0.1	0.1	0.0	0.2	0.1	0.8	<0.1	<0.1	0.0	0.4	1.3	0.4	1.2	5.3	16.4	0.0	0.8	3.2	1.3	0.2	0.3	12.0	0.4	0.0	2.3	0.4	1.3	
Position—Primary	0.2	0.0	0.0	2.2	0.0	0.1	0.0	1.7	0.8	0.1	0.1	0.1	0.4	0.0	1.4	0.4	1.6	5.7	18.2	0.0	1.1	0.4	1.5	0.3	2.4	12.0	0.9	0.0	2.4	0.3	1.5	
	0.1	0.0	0.1	0.9	0.1	0.1	0.0	0.2	0.3	<0.1	<0.1	<0.1	0.0	0.0	1.3	0.4	1.7	5.6	17.9	0.0	0.8	0.1	1.9	0.5	0.8	12.0	0.9	0.0	2.2	0.3	1.5	
Province/Country of Residence	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.3	0.0	<0.1	<0.1	0.0	0.0	0.0	0.1	<0.1	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	5.3	0.3	0.0	0.0	0.0	<0.1	<0.1	2.3	

#### Notes

<0.1%: value is actually less than 0.05%; <0.1% is used to prevent the display of 0.0 cells that are not true zero values.

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

#### Source

Nursing Database, Canadian Institute for Health Information.

## Duplicate Records

It is necessary to identify and remove duplicate records within the database. Duplicates may arise when regulated nurses register in more than one jurisdiction. A comparison is done between the jurisdictions of registration and employment for each record; when they do not match, the record is excluded. When the jurisdiction of employment is not stated, a comparison is done between the jurisdiction of registration and the jurisdiction of residence for each record; when they do not match, the record is excluded. In cases where the jurisdiction of residence is not stated, the jurisdiction of employment defaults to the jurisdiction of registration and the record is not excluded.

It is common for regulated nurses to work in the territories on a temporary basis and to return to their home province for part of the year. In these cases, where the jurisdiction of employment is a territory, the duplicates are not excluded so that the nursing workforce in the North will not be underestimated.

Sometimes, double-counting cannot be avoided. For example, a regulated nurse who registers and works in more than one province/territory simultaneously would be double-counted in the Nursing Database, as the jurisdiction of employment would match the jurisdiction of registration in both cases.

For Nunavut and the Northwest Territories, the data for RNs is presented as a combined total throughout this report. The RNs in these territories are governed by the same regulatory authority, and because the specific territory in which the RNs usually worked was not available, combined data was submitted to CIHI. Therefore, any duplicates between the Northwest Territories and Nunavut cannot be resolved.

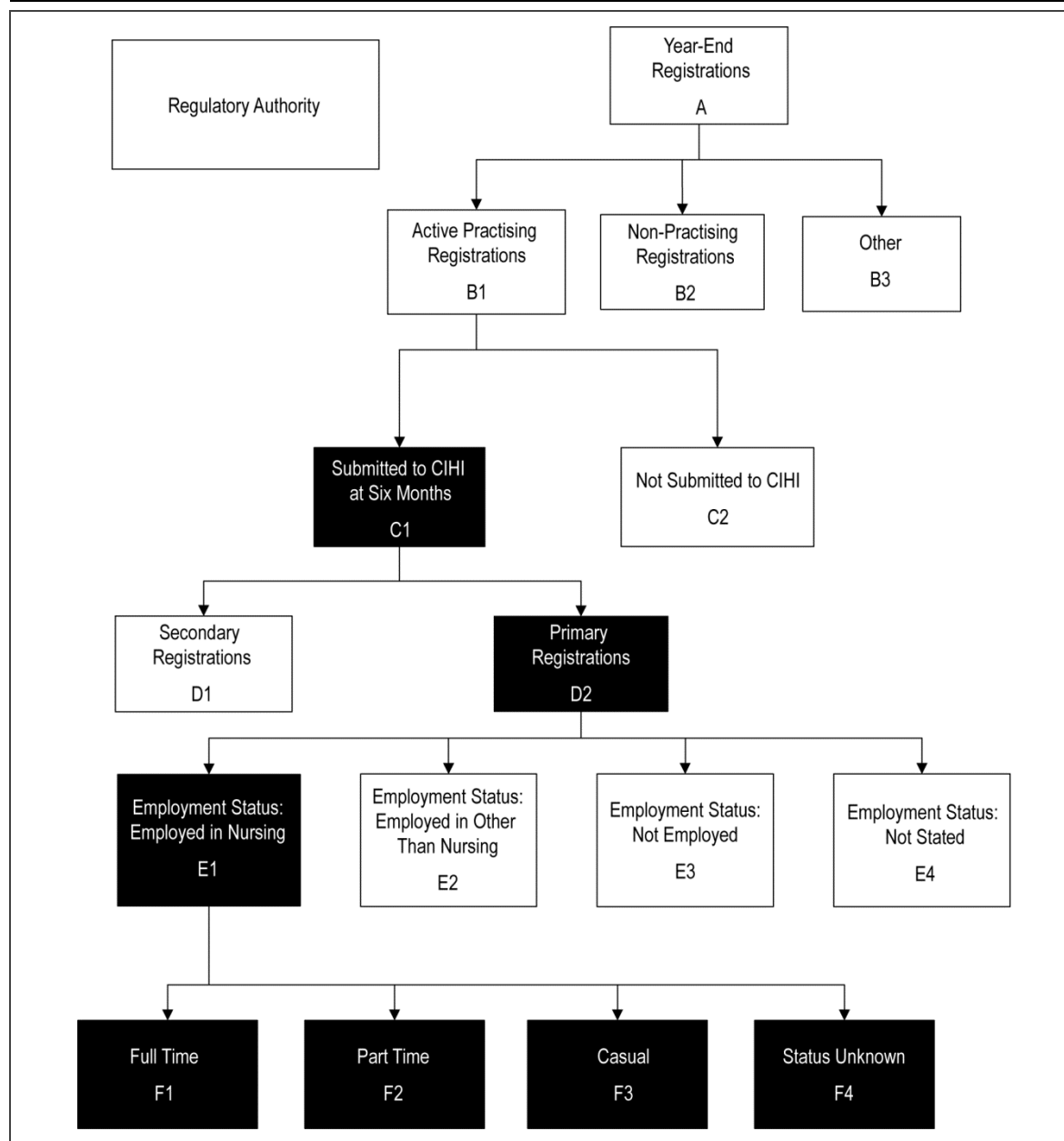
## Defining the Workforce

It is important to note the difference between the terms “Nursing Database” and “the workforce.” The Nursing Database contains all records in the population of reference; the workforce excludes regulated nurses who are not working in nursing (see Figure 1). (This exclusion is achieved with the Employment Status indicator.) Throughout CIHI’s analytical products, the focus is on regulated nurses who are working in nursing, referred to as the regulated nursing workforce.

## Recoding Employment Status

Regulated nurses who do not indicate their employment status (that is, full time, part time or casual) on their registration form risk being excluded from the workforce population. However, in cases where employment status is not stated but employment information is provided, CIHI, in consultation with the regulatory authority, will change the Employment Status element to *employed in nursing discipline—status unknown* to ensure that the record is included in the workforce. This methodology has been applied to all nursing types since 2003, with the exception of British Columbia’s RNs in 2005.

**Figure 1: Tracking Regulatory Authority Data to CIHI: The Regulated Nursing Workforce**



**Source**

Nursing Database, Canadian Institute for Health Information.



**A: ALL REGISTRATIONS**

Number of registrations submitted to a regulatory authority for nursing.

**B: TYPES OF REGISTRATIONS**

Box B1 is the number of active practising registrations received by the regulatory authority.

Box B2 is the number of non-practising registrations received by the regulatory authority.

Box B3 is the number of other registrations received by the regulatory authority.

**C: RECORDS SUBMITTED TO CIHI**

Box C1 is the number of active practising registrations submitted during the first six months of the registration year.

Box C2 is the number of registrations not submitted to CIHI.

**D: PRIMARY AND SECONDARY REGISTRATION**

Box D1 is the number of regulated nurses whose jurisdiction of registration differs from the jurisdiction of employment. These records are outside of the population of reference, except where one of the jurisdictions (registration or employment) is a territory.

Box D2 is the number of regulated nurses whose jurisdiction of registration is the same as the jurisdiction of employment.

**E: EMPLOYMENT STATUS**

Box E1 is the number of regulated nurses for whom Employment Status is *employed in nursing*. These regulated nurses are included in the workforce.

Boxes E2 to E4 are the numbers of regulated nurses who are excluded from the workforce, as they are not reported as *employed in nursing*.

**F: POSITION STATUS**

Boxes F1 to F4 represent the number of regulated nurses included in the nursing workforce. A regulated nurse may have a Position Status of *full time*, *part time*, *casual* or *unknown*.

The boxes in black are included in the workforce; the boxes in white are either not submitted or are excluded by CIHI.

## Assigning the Regulated Nursing Workforce to Health Regions

Health regions are legislated administrative areas defined by provincial and territorial ministries of health. These administrative areas represent geographic areas of responsibility for hospital boards or regional health authorities. Health regions, being provincial and territorial administrative areas, are subject to change.<sup>1</sup>

Health region boundaries presented here correspond to the health regions as of 2011 (the most recent year available from Statistics Canada). While the Northwest Territories had eight and Nunavut had three health regions in 2011, the health region analysis in our analytical products is presented at the territorial level to ensure confidentiality.

The health region data includes only regulated nurses who worked in direct patient care and whose postal code was within the province or territory of analysis; those employed in administration, education or research are excluded from the health region totals. There were 326,239 individuals in the regulated nursing direct care workforce, representing 89% of the total regulated nursing workforce.

Postal code data and Statistics Canada's Postal Code Conversion File were used to assign the regulated nursing workforce to health regions. Postal Code of Employer (Work Site) was used first; in cases where this element was not reported or the value was invalid, the six-digit Postal Code of Residence was used. The workforce of the territories may be under-represented due to the number of nurses providing short-term relief work who may not have been identified using this methodology.

## Health Region Peer Groups

In order to facilitate comparison among health regions, Statistics Canada developed a methodology that groups health regions with similar socio-economic and socio-demographic characteristics; these are referred to as peer groups. The health region peer groups defined by Statistics Canada are presented in Table 6.

**Table 6: Peer Group Principal Characteristics, as Defined by Statistics Canada**

Peer Group	Number of Health Regions	Percentage of Population	Principal Characteristics
A	35	34.0%	Urban–rural mix from coast to coast Average percentage of Aboriginal population Average percentage of immigrant population
B	8	16.7%	Mainly urban centres in Ontario and Alberta with moderately high population density Low percentage of Aboriginal population Very high employment rate Higher than average percentage of immigrant population
C	20	10.1%	Sparsely populated urban–rural mix in eastern and central provinces Average percentage of Aboriginal population Average employment rate Low percentage of immigrant population
D	17	4.7%	Mainly rural regions from Quebec to British Columbia Average percentage of Aboriginal population High employment rate
E	6	3.1%	Mainly rural and remote regions in the western provinces and the territories High proportion of Aboriginal population Average percentage of immigrant population
F	5	0.4%	Northern and remote regions Very high proportion of Aboriginal population Very low employment rate Low proportion of immigrants
G	3	15.7%	Largest metro centres with an average population density of 4,065 people per square kilometre Very low proportion of Aboriginal population Average employment rate Very high proportion of immigrant population
H	10	2.0%	Rural northern regions from coast to coast High proportion of Aboriginal population Low proportion of immigrants
I	7	1.7%	Mainly rural eastern regions Average percentage of Aboriginal population Low employment rate Very low percentage of immigrant population
J	6	11.6%	Mainly urban centers in Ontario and British Columbia with high population density Low proportion of Aboriginal population High proportion of immigrants

**Note**

Percentage of population refers to the percentage of the Canadian population living in a specific type of peer group.

**Sources**

Statistics Canada. Table 4: Summary table of peer groups and principal characteristics. Web page. <http://www.statcan.gc.ca/pub/82-221-x/2013001/regions/hrt4-eng.htm>. Accessed May 31, 2013. Statistics Canada. Health region peer groups—user guide. Web page. <http://www.statcan.gc.ca/pub/82-221-x/2013001/regions/hrpg2007-eng.htm>. Accessed May 31, 2013.

## 2012 Health Region Populations

Using 2012 calendar year population estimates from Statistics Canada, rates were calculated for RNs, LPNs, RPNs and the regulated nursing workforce (that is, all three regulated nursing professions) employed in direct care, per 100,000 population for each health region. Table 7 lists Statistics Canada's population estimates by province and territory for 2008 to 2012.

Table 7: Statistics Canada Population Estimates for Canada, by Province and Territory, 2008 to 2012

Year	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.
2008	33,317,662	506,352	139,548	937,472	746,910	7,750,518	12,932,480	1,205,691	1,013,784	3,592,191	4,384,310	33,100	43,692	31,614
2009	33,726,915	509,095	141,054	940,565	749,945	7,825,803	13,068,845	1,219,904	1,029,499	3,672,728	4,459,900	33,747	43,637	32,193
2010	34,126,547	511,872	143,077	945,152	752,892	7,905,087	13,223,789	1,235,723	1,044,363	3,723,756	4,529,508	34,632	43,873	32,823
2011	34,483,975	512,900	145,695	948,458	755,335	7,977,989	13,366,294	1,251,690	1,057,804	3,778,072	4,576,577	35,398	44,212	33,551
2012	34,880,491	512,659	146,105	948,695	755,950	8,054,756	13,505,900	1,267,003	1,079,958	3,873,745	4,622,573	36,101	43,349	33,697

**Source**

Statistics Canada. Table 109-5325: Estimates of population (2006 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2011 boundaries) and peer groups, annual (number). CANSIM (database). <http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=1095325>. Accessed May 31, 2013.

The rates were not adjusted to account for differences in population that may change health status, such as age or sex. While adjusted rates can be quite useful for certain types of analysis, this report presents the actual number of nurses providing direct care who work in each health region.

## Urban/Rural Statistics<sup>ii</sup>

Using Statistics Canada's Postal Code Conversion File, postal codes were assigned to statistical area classifications—Urban, Rural, Remote and Territories. Urban areas are defined (in part) by Statistics Canada as communities with populations greater than 10,000 people; rural/remote is equated with communities outside the urban 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 with larger urban centres. Metropolitan influenced zone (MIZ) categories disaggregate the RST population into four subgroups: strong MIZ, moderate MIZ, weak MIZ and no MIZ. These categories may be interpreted in the following simple manner:

- Urban = greater than 10,000 people;
- Rural = strong/moderate MIZ and are located relatively close to larger urban centres;
- Remote = weak/no MIZ and are distant from large urban centres.
- Territories are a separate category and are defined as areas outside of Whitehorse and Yellowknife in the Northern Region.

Urban and rural analysis for Northwest Territories and Nunavut was completed differently from analysis for the other provinces or territories. Urban areas were identified as postal codes within Yellowknife and Iqaluit, and rural areas were identified as postal codes outside of Yellowknife and Iqaluit.

## Comparability of Data

CIHI would like to acknowledge that each regulatory authority has been extremely cooperative and helpful in improving its data collection methods and in helping CIHI develop methodologies to enhance data quality. As part of the data submission process, the regulatory authorities submit to CIHI the changes that have been made to their databases for inclusion in this publication. A review of this information is helpful when looking at trends over time and comparing jurisdictions.

---

ii. Details of the RST and MIZ classification schemes can be found in McNiven, et al. (2000)<sup>2</sup>, du Plessis, et al. (2001)<sup>3</sup> and CIHI (2002)<sup>4</sup>.

Table 8 indicates the nursing provider type data each Canadian jurisdiction submitted to CIHI in 2012.

Table 8: Data Submitted to CIHI, by Jurisdiction and Nurse Type, 2012													
Nurse Type	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.
RN (excl. NP)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
LPN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
RPN*							✓	✓	✓	✓			

**Note**

\* RPNs are regulated separately from other regulated nursing professionals in four provinces and one territory: Manitoba, Saskatchewan, Alberta, British Columbia and Yukon.

**Source**

Nursing Database, Canadian Institute for Health Information.

## Methodological and Historical Changes

Methodological and historical changes to the data have the potential to make it difficult to compare data across time. CIHI and the regulatory authorities are continually striving to improve data quality; therefore, the following information should be taken into consideration when making historical comparisons and consulting previous CIHI publications. In all cases, comparisons should be made with caution and in consideration of the historical and methodological changes made.

### Data Limitations

Visit CIHI's website at [www.cihi.ca](http://www.cihi.ca) for a complete list of the data elements:

- *Nursing Database Data Dictionary and Processing Manual*

Please note that there has been variation in the *not stated* values of certain data elements over the period 2008 to 2012 among many jurisdictions and across the nursing profession. Caution should therefore be used when comparing data within this time period, and an evaluation of the *not stated* values in tables 1 to 5 should be considered.

## Comparability and Revisions to Registered Nursing Data, 2008 to 2012

### Nurse Practitioner

In the 2008 calendar year, the NP data was incorporated into the Nursing Database, back to data year 2003. Consistent methodology was applied to the NP records, including the removal of duplicates and the six-month cut-off for data collection, resulting in a change from NP totals published in previous reports. Refer to table 9 below to see the year of implementation of NPs for each jurisdiction.

Table 9: Year of Implementation of Nurse Practitioner Legislation, by Jurisdiction

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.
<b>First Year of Regulation</b>	1997	2006	2002	2002	2003	1997	2005	2003	2002	2005	2012	2004	2004

**Notes**

From 1996 to 2002, NPs in Alberta were referred to as RNs providing extended services. In June 2002, regulations were changed to refer to these nurses as nurse practitioners. Refer to the College and Association of Registered Nurses of Alberta for additional information.

**Source**

Canadian Institute for Health Information.

## Employment

### Northwest Territories and Nunavut—Employment Status

The RN workforce relies on a core of full-time resident RNs plus a large number of short-term relief staff from across Canada each year. While some RNs return each year, some register in the northern territories only once. This lack of stability in the workforce will result in greater variability in the data.

Data for the Northwest Territories and Nunavut is provided by the Registered Nurses Association of the Northwest Territories and Nunavut (RNANT/NU). For data years 2008 to 2012, it is not possible to accurately attribute the number of RNs to the two territories; as a result, data for the Northwest Territories and Nunavut is combined under a single set of statistics.

### Quebec—Place of Work

In 2005, the ministère de la Santé et des Services sociaux du Québec merged most of the province's public-sector hospitals, long-term care facilities and community health centres into 95 health and social services centres (centres de santé et de services sociaux, or CSSS). Since then, it has become increasingly difficult to accurately determine in which of the three institution types nurses are working; and, in fact, some nurses are working in all three. CIHI does not have a value in its data dictionary that corresponds to this scenario, which has resulted in an increase in the number of nurses reporting *other place of work* and, consequently, an artificial decrease in the number of nurses with the values *hospital*, *community health* and *nursing home/LTC*.

### Quebec—Position

In 2011, the title Clinical Specialist became a reserved title for those RNs who had obtained the regulated clinical nurse specialist certificate specializing in infection prevention and control. Consequently, in 2012, those RNs who would have been previously classified under *Clinical Specialist* were classified under *Other Position*, and only regulated Clinical Specialist RNs were included in the position category *Clinical Specialist*.

## Education

### Saskatchewan—Location of Graduation

In 2008, the Saskatchewan Registered Nurses' Association (SRNA) data submission did not include Location of Graduation for data for nurse practitioners.

### Quebec—Postal Code

For all data years, the Ordre des infirmières et infirmiers du Québec (OIIQ) did not submit postal codes to CIHI for the elements Postal Code of Employer (Worksite) and Postal Code of Residence. Urban/rural and health region analyses were contributed by the OIIQ.

### Manitoba—Postal Code

In the 2008 and 2012 data years, the College of Registered Nurses of Manitoba (CRNM) did not submit to CIHI the Postal Code of Employer (Worksite); however it did provide partial Postal Code of Residence.

### Yukon—Postal Code

In the 2012 data year, coding changes were implemented to the element Postal Code of Employer (Worksite) by the Yukon Registered Nurses Association (YRNA). This change affects the number of nurses assigned to either an urban or rural area, and therefore caution should be used when comparing 2012 urban and rural data with data from previous years. CIHI is working with the YRNA to further evaluate and increase the accuracy of this field.

## Comparability and Revisions to Licensed Practical Nursing Data, 2008 to 2012

## Employment

### Manitoba—Employment Status

In the 2011 data year, the College of Licensed Practical Nurses of Manitoba (CLPNM) migrated to a new database. Following the migration, the CLPNM noticed a decrease in the number of Employed—*part time* and an increase in the number of Employed—*casual*. While the issue has been resolved for future data years, these two classifications are not an accurate reflection of the employment status for LPNs in Manitoba in 2011.

### Alberta—Place of Work

According to the College of Licensed Practical Nurses of Alberta (CLPNA), the increase in responses for the value *community health centre* in 2010 is the result of a reorganization of the health system, which saw many rural hospitals changing to community health centres.



## **British Columbia—Employment Status**

As of 2011, the College of Licensed Practical Nurses of British Columbia (CLPNBC) continued to emphasize accuracy and modified their renewal form to include *part time* and *casual*. Previously, these values were combined.

## **Education**

### **Quebec—Location of Graduation**

As of 2011, the Ordre des infirmières et infirmiers auxiliaires du Québec (OIIAQ) provided complete Location of Graduation data, which included values in addition to *not stated* and *Quebec*. In 2008 and 2009, all Location of Graduation values were defaulted to Quebec.

### **British Columbia—Year of Graduation**

The College of Licensed Practical Nurses of British Columbia (CLPNBC) receives registration requests from students enrolled in Bachelor of Science in Nursing programs. If registrants fulfill the academic competencies, they are permitted to work as licensed practical nurses. As these registrants have not yet graduated from their BSN program, no data is provided for Year of Graduation.

## **Comparability and Revisions to Registered Psychiatric Nursing Data, 2008 to 2012**

## **Employment**

### **Manitoba—Employment Status**

In the 2011 data year, the College of Registered Psychiatric Nurses of Manitoba (CRPNM) migrated to a new database. Following the migration, the CRPNM noticed that a high volume of the Employment Status data had been converted incorrectly. Caution should therefore be used when comparing 2008, 2009 and 2010 data.

### **Manitoba—Place of Work, Area of Responsibility and Position**

For data years 2009 and 2010, the College of Registered Psychiatric Nurses of Manitoba (CRPNM) reported that the variations for Place of Work (Primary Employer), Area of Responsibility and Position were the result of the migration to a new database.

## **Education**

### **Manitoba—Other Education in Psychiatric Nursing and Highest Level of Education in Psychiatric Nursing**

According to the College of Registered Psychiatric Nurses of Manitoba (CRPNM), the variances for Other Education in Psychiatric Nursing are due to coding changes in the 2009 and 2010 data years.

This variance also affects responses for the Highest Level of Education in Psychiatric Nursing as it is derived, in part, by Other Education in Psychiatric Nursing.



# References

1. Statistics Canada. *Health Regions: Boundaries and Correspondence With Census Geography, 2007 (updates)*. Ottawa, ON: Statistics Canada Health Statistics Division; 2009. <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=82-402-XIE&lang=eng#formatdisp>. Accessed June 17, 2013. 82-402-XIE.
2. McNiven C, Puderer H, Janes D. *Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ): A Description of the Methodology*. (Geography Working Paper Series.) Ottawa, ON: Statistics Canada; 2000. <http://www.statcan.gc.ca/pub/92f0138m/92f0138m2000002-eng.pdf>. Accessed June 17, 2013. 92F0138MIE.
3. du Plessis, V, et al. "Definitions of Rural," *Rural and Small Town Canada Analysis Bulletin*. Ottawa, ON: Statistics Canada; 2001. [http://www5.statcan.gc.ca/access\\_acces/archive.action?loc=/pub/21-006-x/21-006-x2001003-eng.pdf](http://www5.statcan.gc.ca/access_acces/archive.action?loc=/pub/21-006-x/21-006-x2001003-eng.pdf). Accessed June 17, 2013. 21-006-XIE.
4. Canadian Institute for Health Information. *Supply and Distribution of Registered Nurses in Rural and Small Town Canada, 2000*. Ottawa, ON: CIHI; 2002. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC49>. Accessed June 17, 2013.



Production of this report is made possible by financial contributions from Health Canada and provincial and territorial governments. The views expressed herein do not necessarily represent the views of Health Canada or any provincial or territorial government.

All rights reserved.

The contents of this publication may be reproduced unaltered, in whole or in part and by any means, solely for non-commercial purposes, provided that the Canadian Institute for Health Information is properly and fully acknowledged as the copyright owner. Any reproduction or use of this publication or its contents for any commercial purpose requires the prior written authorization of the Canadian Institute for Health Information. Reproduction or use that suggests endorsement by, or affiliation with, the Canadian Institute for Health Information is prohibited.

For permission or information, please contact CIHI:

Canadian Institute for Health Information  
495 Richmond Road, Suite 600  
Ottawa, Ontario K2A 4H6

Phone: 613-241-7860

Fax: 613-241-8120

[www.cihi.ca](http://www.cihi.ca)

[copyright@cihi.ca](mailto:copyright@cihi.ca)

ISBN 978-1-77109-218-0 (PDF)

© 2013 Canadian Institute for Health Information

How to cite this document:

Canadian Institute for Health Information. *Regulated Nurses, 2012—Methodology Guide*. Ottawa, ON: CIHI; 2013.

Cette publication est aussi disponible en français sous le titre *Les infirmières et infirmiers réglementés 2012 : guide méthodologique*.

ISBN 978-1-77109-219-7 (PDF)

## Talk to Us

**CIHI Ottawa**

495 Richmond Road, Suite 600  
Ottawa, Ontario K2A 4H6  
Phone: 613-241-7860

**CIHI Toronto**

4110 Yonge Street, Suite 300  
Toronto, Ontario M2P 2B7  
Phone: 416-481-2002

**CIHI Victoria**

880 Douglas Street, Suite 600  
Victoria, British Columbia V8W 2B7  
Phone: 250-220-4100

**CIHI Montréal**

1010 Sherbrooke Street West, Suite 300  
Montréal, Quebec H3A 2R7  
Phone: 514-842-2226

**CIHI St. John's**

140 Water Street, Suite 701  
St. John's, Newfoundland and Labrador A1C 6H6  
Phone: 709-576-7006