

2008

Health Indicators



Statistics
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Canadian Institute
for Health Information

Institut canadien
d'information sur la santé

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Table of Contents

About the Canadian Institute for Health Information	3
About Statistics Canada	5
Acknowledgements	7
Executive Summary	9
About This Report	11
Health Indicator Framework	15
In Focus: Hospitalization Rates for Ambulatory Care Sensitive Conditions	17
What the Numbers Tell Us	18
Regional Variations	20
Factors Affecting ACSC Hospitalizations	22
Variations by Age	22
Variations by Sex	23
Rural and Urban Variations	24
Variations by Income	25
What Is Being Done	26
Information Gaps	29
References	31
Health Indicators—Region by Region	35
Health Region Profile	36
Health Status	40
Non-Medical Determinants of Health	46
Health System Performance	48
Community and Health System Characteristics	68
General Notes	86
Indicator Index	89
Regional Map	90
Order Form	93

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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It informs Canadians through the analysis and dissemination of its data holdings. Statistics Canada publishes *Health Reports* monthly, a peer-reviewed and indexed journal of population health and health services research.

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- **Dr. Fred Burge**, Professor, Family Medicine, Dalhousie University
- **Dr. Rick Glazier**, Senior Scientist, Institute for Clinical Evaluative Sciences
- **Dr. Alan Katz**, Associate Professor, Departments of Family Medicine and Community Health Sciences, University of Manitoba

It should be noted that the analyses and conclusions in this report do not necessarily reflect the opinions of individual members of the expert advisory group or their affiliated organizations.

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Others from CIHI involved in the development of this report include **Jennifer Zelmer**, **Jacinth Tracey** and **Jenny Lineker**.

The health indicators project is a joint effort of CIHI and Statistics Canada that produces information on a broad range of health indicators. Statistics Canada contributed data and indicators on health status, non-medical determinants of health and community and health system characteristics for the *Health Indicators 2008* report. Special appreciation goes to **Julie McAuley**, **Jillian Oderkirk**, **Brenda Wannell**, **Tim Johnston**, **Helen Johansen** and **Lawson Greenberg** at Statistics Canada for their contribution to this report.

This report could not have been completed without the generous support and assistance of many other CIHI staff members who compiled and validated the data; worked on layout and design, the translation, communications, web design and distribution; and provided ongoing support to the core team.

Executive Summary

Health Indicators 2008, the ninth report in a series of annual reports, provides the most recent health indicator data from the Canadian Institute for Health Information (CIHI) and Statistics Canada. The information in this report is used by health regions and others to track progress on health status and health system performance and to compare results across the country.

This year's report includes results for more health regions with a population greater than 50,000 (encompassing about 98% of Canada's population) and for provinces and territories. This enhancement increases the number of regions included in this report from 71 up to 80. Following the Health Indicator Framework, each indicator is grouped into one of the following four dimensions.

- **Health status**—provides insight on the health of Canadians, including well-being, human function and selected health conditions.
- **Non-medical determinants of health**—reflect factors outside of the health system that affect health.
- **Health system performance**—provides insight on the quality of health services, including accessibility, appropriateness, effectiveness and patient safety.
- **Community and health system characteristics**—provide useful contextual information, rather than direct measures of health status or quality of care.

Additional indicators, data for previous years, definitions and technical notes are available in the *Health Indicators* e-publication on the CIHI and Statistics Canada websites.

Health Indicators 2008 also provides an in-depth analysis of one indicator—hospital admissions for ambulatory care sensitive conditions (ACSC). This indicator includes seven chronic conditions that can potentially be effectively managed in the community but may result in hospitalization in an acute care facility. They are:

- angina;
- asthma;
- chronic obstructive pulmonary disease (COPD);
- diabetes;
- grand mal status and other epileptic convulsions;
- heart failure and pulmonary edema; and
- hypertension.

Research suggests that appropriate access to and quality of primary health care services, along with other factors, may influence ACSC hospitalization rates. Many countries including Canada have implemented initiatives aimed at improving the prevention and management of chronic diseases. However, it is unknown at this time to what degree

these initiatives have contributed to reducing the rate of ACSC hospitalizations. The “In Focus” section of this report looks at trends in ACSC hospitalization rates and shows how some factors are associated with a person’s risk of being hospitalized for an ACSC.

Highlights of This Report

Focus on Ambulatory Care Sensitive Conditions (ACSC)

- In 2006–2007, there were about 87,500 admissions to Canadian hospitals, outside Quebec, for ACSC. This means that of all medical hospitalizations for patients younger than 75 years of age, about 1 in 8 (13%) were for ACSC. Medical hospitalizations comprise one-third (33%) of all hospitalizations and do not include surgical, mental health, obstetric or newborn cases, which make up the rest (67%).
- ACSC hospitalization rates, outside Quebec, have fallen by 22% since 2001–2002. This decrease is more than one and a half times greater than the 14% drop observed for all medical hospitalizations over the same time period.
- ACSC hospitalization rates vary across the provinces and territories. In 2006–2007, these rates ranged from a low of 294 per 100,000 population in British Columbia to a high of 1,204 per 100,000 population in Nunavut. They also vary by region—there was about a five-fold variation in rates between regions over the same time period.
- In 2006–2007, outside Quebec, ACSC hospitalization rates varied due to several factors. For example:
 - ACSC hospitalization rates decreased as income levels increased. For example, the ACSC hospitalization rate in the least affluent group (521 per 100,000 population) was more than twice as high as the rate in the most affluent group (234 per 100,000 population).
 - ACSC hospitalization rates were 60% higher in rural areas (510 per 100,000 population) than in urban areas (318 per 100,000 population).
- About 20% of patients hospitalized for an ACSC in 2005–2006, outside Quebec, came back to the hospital for an ACSC within one year of their first admission.

Other Health Indicators

- There are two-fold or larger differences from region to region for most of the reported health indicators. For example, across the country the combined rate of two cardiac revascularization procedures (angioplasty and cardiac bypass surgery) in 2006–2007 was 251 per 100,000 population (outside Quebec). However, rates for larger health regions ranged from 166 to 393 per 100,000 population.
- Overall, the readmission rate after heart attack, outside Quebec, decreased from 6.2% for the period of 2003–2004 to 2005–2006 to 5.6% for the period of 2004–2005 to 2006–2007, whereas readmission rates after asthma, hysterectomy and prostatectomy remained unchanged. Large provincial and regional variations in readmission rates were observed.
- Injury hospitalization rates continue to fall in most of the provinces and territories. As a result, the Canada rate decreased from 589 per 100,000 in 2001–2002 to 543 in 2005–2006—an 8% decrease after population growth and aging were taken into account. Injury hospitalization rates tend to be higher in the territories, Saskatchewan and Alberta.

About This Report

In 1999, the Canadian Institute for Health Information (CIHI) and Statistics Canada launched a collaborative project on health indicators. The goal of this project is to develop health indicators that can be used to report on the health of Canadians and the health system. The project also aims to disseminate this information to a wide audience, including policy-makers, health system managers, health professionals, researchers and interested members of the public. The groundwork for this project was laid by the first and second consensus conferences on Population Health Indicators.

Health Indicators 2008 is the latest in a series of health indicator reports highlighting the most recently available information about the health system and the health of the population in Canada's health regions, provinces and territories.

New in 2008

As of this year, CIHI reports on several more health regions than in preceding years. Previously, the *Health Indicators* report series presented data for regions with a population of at least 75,000. In order to further support smaller regions, data are now provided for regions with a population of at least 50,000. In addition, the data for regions with a population of 20,000 or higher are included in the *Health Indicators* e-publication (see sidebar—"There's More on the Web"—for more information).

Also new this year is the inclusion of the cardiac revascularization rate. This indicator complements rates of percutaneous coronary intervention (PCI) and coronary artery bypass graft surgery (CABG) by providing a measure of total activity for these two interventions used to improve blood flow to the heart muscle.

The "In Focus" section of this report provides an in-depth look at hospitalization rates for ambulatory care sensitive conditions (ACSC); this indicator represents chronic conditions that can be potentially managed and controlled in the community rather than in hospital. Specifically, this section examines trends in ACSC hospitalization rates across the country, as well as over time. The report looks at ACSC hospitalizations and explores some of the factors—such as age, sex and income—that are associated with ACSC hospitalization rates.

There's More on the Web

CIHI and Statistics Canada jointly produce and maintain the *Health Indicators* e-publication. This free web-based product includes a broad range of additional health indicator data from both CIHI and Statistics Canada in one integrated online publication. This interactive online resource provides easy access to the most recent health indicator data as well as to data for all available years, with maps, complete technical notes and other important information.

Health Indicators e-publication:

To find more information on the latest readings on the health of Canadians—region by region—please visit www.cihi.ca/indicators or www.statcan.ca.

About *Health Care in Canada 2008*

Look for CIHI's annual *Health Care in Canada 2008* report to be released in the fall of 2008. As in previous years, the report will provide updated information on topics of continuing importance to policy-makers, health system managers, health professionals, researchers and the public.

For More Information

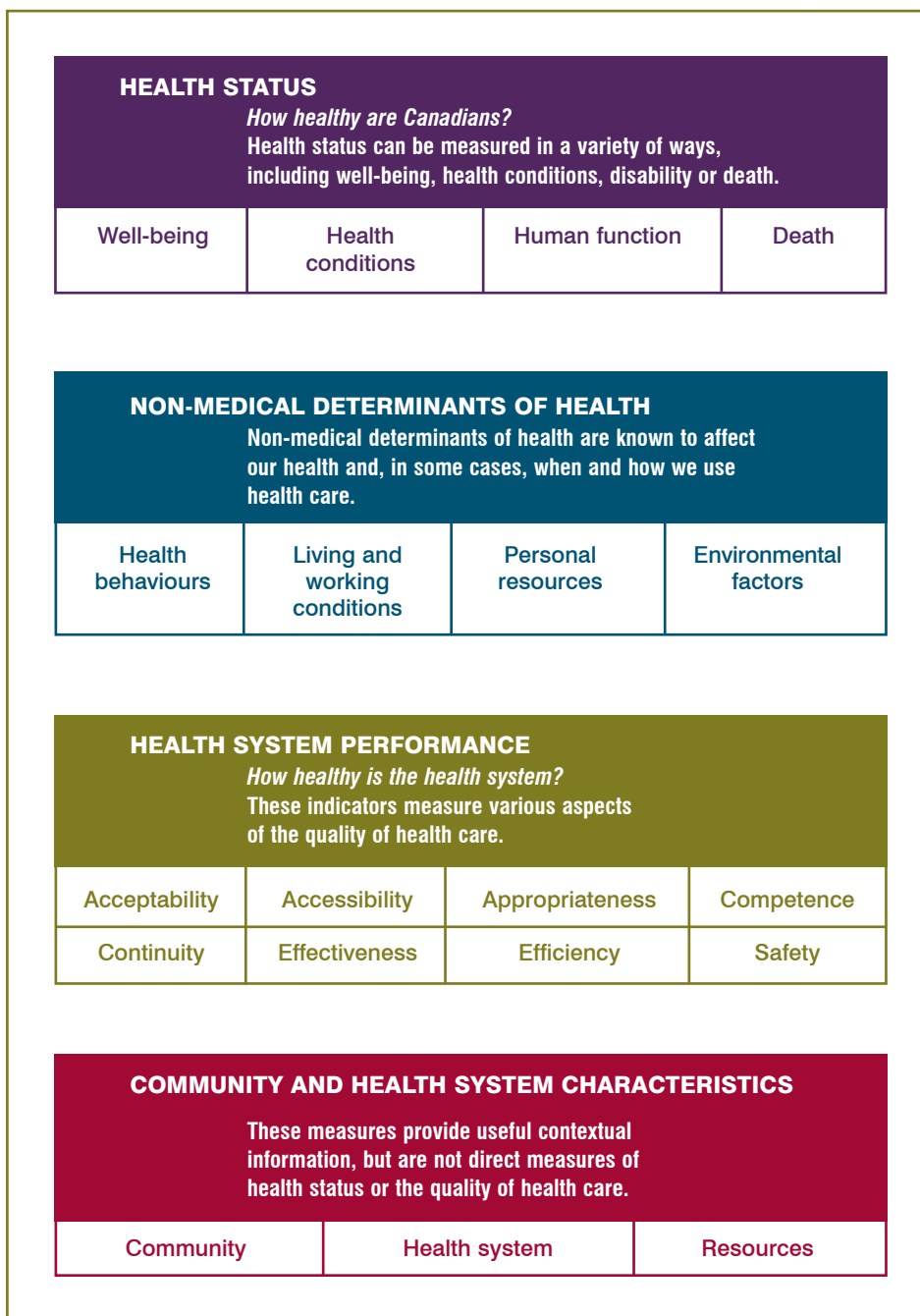
Highlights and the full text of *Health Indicators 2008* are available free of charge in English and French on the CIHI website at www.cihi.ca. CIHI has also added other related reports such as *HSMR: A New Approach for Measuring Hospital Mortality Trends in Canada*, *Health Care in Canada* and *Understanding Emergency Department Wait Times* as well as CIHI's regular series of reports on aspects of health spending, health human resources, population health and health services.

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CIHI welcomes comments and suggestions about this report and about how to make future reports more useful and informative. We encourage you to email your comments to indicators@cihi.ca.

Health Indicator Framework



EQUITY



Statistics Canada / Statistique Canada



Canadian Institute for Health Information
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In Focus: Hospitalization Rates for Ambulatory Care Sensitive Conditions

The burden of chronic disease is on the rise in Canada and abroad.¹ In 2005, about one-third of Canadians aged 12 and older reported having at least one chronic condition.^{i,1} In the same year, it was estimated that about two million Canadians could die from chronic diseases in the coming decade.² Consequently, chronic disease accounts for a significant amount of health spending every year due to illness, disability and death.³

These costs reflect a variety of factors, including hospital care for people with chronic disease. Some chronic illnesses, including those covered in this report, can be potentially managed and controlled in the community, possibly avoiding hospital care. These conditions are sometimes referred to as ambulatory care sensitive conditions (ACSC). Several countries track ACSC hospitalizations, including Canada, the U.S., the U.K., Italy and Australia, although the way they are defined varies.⁴⁻⁸ In some countries, ACSC include both acute and chronic conditions as well as, in some instances, conditions potentially preventable through vaccination or medications.^{4, 6-8} In Canada, however, this indicator reflects hospitalizations for seven specific chronic conditions for which appropriate ambulatory care may prevent or reduce the need for hospitalizations.

i The chronic conditions examined by the Health Council of Canada are arthritis, high blood pressure, chronic obstructive pulmonary disease, heart disease, cancer and mood disorders.

Defining Hospitalization Rates for ACSC

Ambulatory care sensitive conditions (ACSC) are generally defined as conditions where appropriate ambulatory care may prevent or reduce the need for hospitalization. While not all admissions for these conditions are avoidable, appropriate ambulatory care in the community could potentially prevent the onset of this type of condition, control an acute episodic illness or manage a chronic condition. The conditions included in this indicator were chosen after an extensive literature search using these keywords: ambulatory care sensitive conditions, preventable hospitalizations and avoidable hospitalizations. Various methodologies developed to define ACSC were reviewed and, ultimately, an adaptation of the widely used Billings method⁹ was employed, focusing only on chronic conditions. As a result, hospitalization rates* (measured per 100,000 population younger than 75 years of age) for the following conditions were examined:

- angina;†
- asthma;
- chronic obstructive pulmonary disease (COPD);
- diabetes;
- grand mal status and other epileptic convulsions;
- heart failure and pulmonary edema;† and
- hypertension.†

Notes

* Patients who died before being discharged from hospital were not included.

† Excludes cases with a specific cardiac procedure recorded. (For more information, please see Technical Notes online at www.cihi.ca/indicators or www.statcan.ca.)

According to both Canadian and international research, accessible and well-functioning primary health care services play an instrumental role in the management of chronic conditions, and factors such as access to services and quality of care may be related to hospitalization rates for ACSC.⁶⁻⁸ There is some evidence, for example, of an inverse relationship between self-rated access to primary health care and ACSC hospitalizations; that is, residents of communities reporting “poor” access to health care were found to have higher ACSC hospitalization rates.^{7,8}

Prevention, early detection, monitoring and follow-up of chronic conditions—all aspects of primary health care and chronic disease management—may play integral roles in reducing admissions to hospital.^{6,7,10} It is important to note that although ACSC hospitalizations are associated with primary health care, they may also be influenced by other factors. These include the severity of a patient’s condition, the number of comorbidities present, socio-economic status, the prevalence of the chronic condition in the community and health system characteristics (such as admission practices and/or transfers between facilities) to name a few.

What the Numbers Tell Us

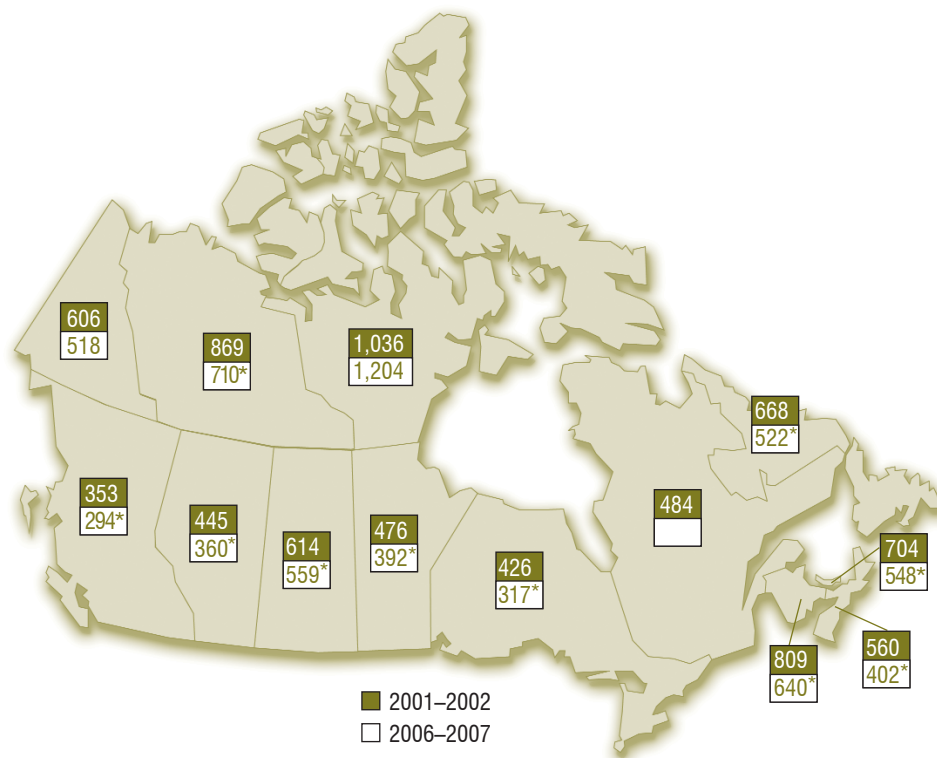
In 2006–2007, there were about 87,500 admissions to Canadian hospitals, outside Quebec, for ACSC. This means that of all medical hospitalizations for patients younger than 75 years of age, about 1 in 8 (13%) were for ACSC. Medical hospitalizations comprise one-third (33%) of all hospitalizations and do not include surgical, mental health, obstetric or newborn cases, which make up the rest (67%).

However, ACSC rates have decreased over the past several years. In 2006–2007, there were 351 ACSC hospitalizations per 100,000 population, down from 451 per 100,000 population in 2001–2002. This difference reflects a 22% drop, after population growth and aging are taken into account. Although this change follows the general trend of decreasing inpatient hospital utilization, the reduction in ACSC hospitalization rates is more than one and a half times greater than the 14% decrease observed for all medical hospitalizations over the same time period.

ACSC hospitalization rates vary across the country and over time. For residents of Nova Scotia, for example, the hospitalization rate for ACSC fell 28% from 560 to 402 per 100,000 population between 2001–2002 and 2006–2007, reflecting the largest drop in the country. The ACSC hospitalization rates also declined to varying degrees in all other provinces and most territories over this same period.

Figure 1 The Picture Across Canada

The map below shows age-standardized ACSC hospitalization rates among Canadians younger than 75 years of age in 2001–2002 and 2006–2007 based on where patients lived, not where they were treated. In 2006–2007, these rates varied from a low of 294 per 100,000 population in British Columbia to a high of 1,204 per 100,000 population in Nunavut.



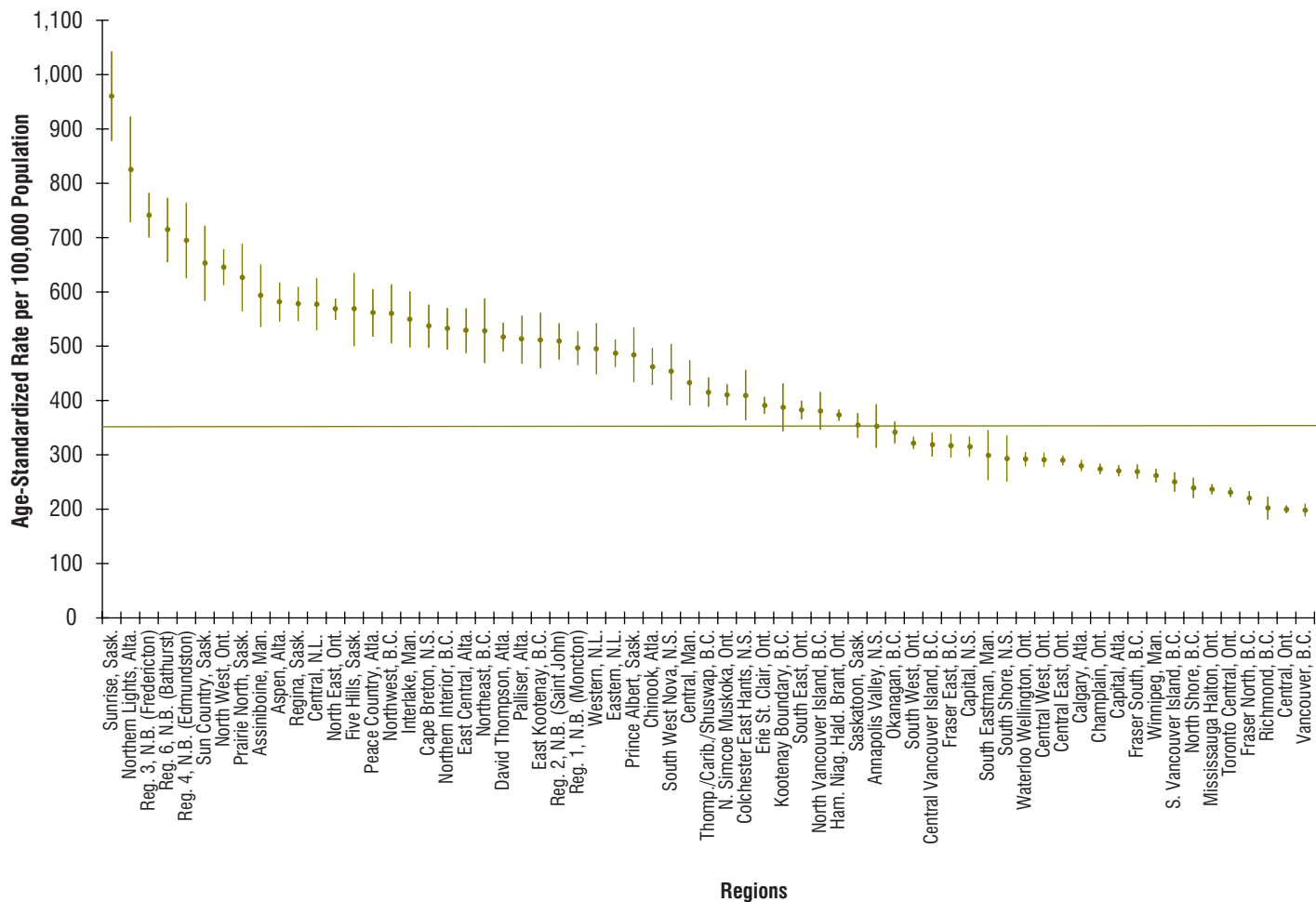
Notes: Data from Quebec were not available for 2006–2007 at the time of publication. Asterisks (*) refer to provinces and territories whose 2006–2007 ACSC hospitalization rates are significantly different at $p < 0.05$ from their 2001–2002 rates.
Source: Discharge Abstract Database, Canadian Institute for Health Information.

Regional Variations

Differences exist between health regions as well as between provinces and territories. In 2006–2007, rates per 100,000 population varied five-fold across regions.

Figure 2 Regional Variations in ACSC Hospitalization Rates

The graph below shows the age-standardized hospitalization rates for ACSC among Canadians, outside Quebec, younger than 75 years of age in 2006–2007 based on where patients lived, not where they were treated. The solid line indicates the overall hospitalization rate (351 per 100,000 population).



Notes: Regions not shown were excluded due to small numbers. Data from Quebec were not available for 2006–2007 at the time of publication.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

Multiple Hospitalizations of ACSC Patients

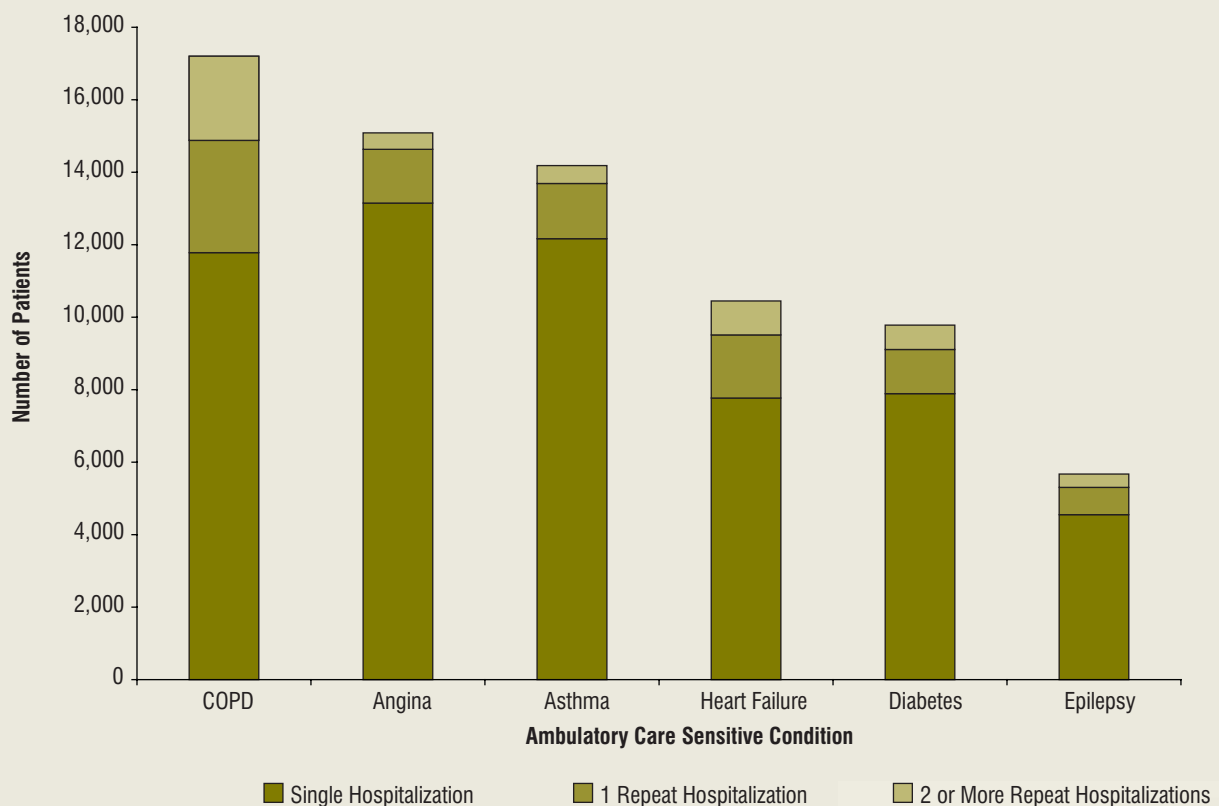
ACSC hospitalization rates also vary by condition. In 2006–2007, for example, outside Quebec, chronic obstructive pulmonary disease (COPD) accounted for the highest per capita age-standardized hospitalization rate (96 per 100,000 population) among all ACSC, whereas hypertension (10 per 100,000 population) accounted for the lowest. These rates, however, include both single and multiple (or repeat) hospitalizations.

The number of times that a patient is admitted to hospital for an ACSC also varies by condition. Such variations may be attributable to a number of factors, including the natural progression of the disease and/or the type of management that the condition requires.¹¹ To examine the variation of multiple hospitalizations by ACSC, patients from 2005–2006 were followed for one year. A repeat hospitalization was defined as an admission of a patient for any ACSC at least 24 hours after being discharged from a previous hospitalization for which the most responsible diagnosis was the same or another ACSC.

In 2005–2006, outside Quebec, just under 75,000 patients accounted for about 93,000 ACSC hospitalizations. About 20% of these patients had one or more repeat hospitalization(s) for the same or other ACSC within one year of their first admission. There was variation in the multiple admissions patterns by ACSC. For example, of the 17,200 patients who had COPD at first admission, 18% were readmitted once and 14% returned to hospital at least twice for COPD or another ACSC. In contrast, of the 2,600 patients who had a first admission for hypertension, 7% were readmitted once and 2% had two or more repeat hospitalizations for that condition or another.

Figure 3 Repeat Hospitalizations by Condition at First Admission

The graph below shows the number of patients, outside Quebec, with a single hospitalization, one repeat hospitalization and two or more repeat hospitalizations by ACSC at first admission.



Notes: Data from Quebec were not available for 2006–2007 at the time of publication. Hypertension is not shown due to the small number of patients initially admitted for this condition.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

Factors Affecting ACSC Hospitalizations

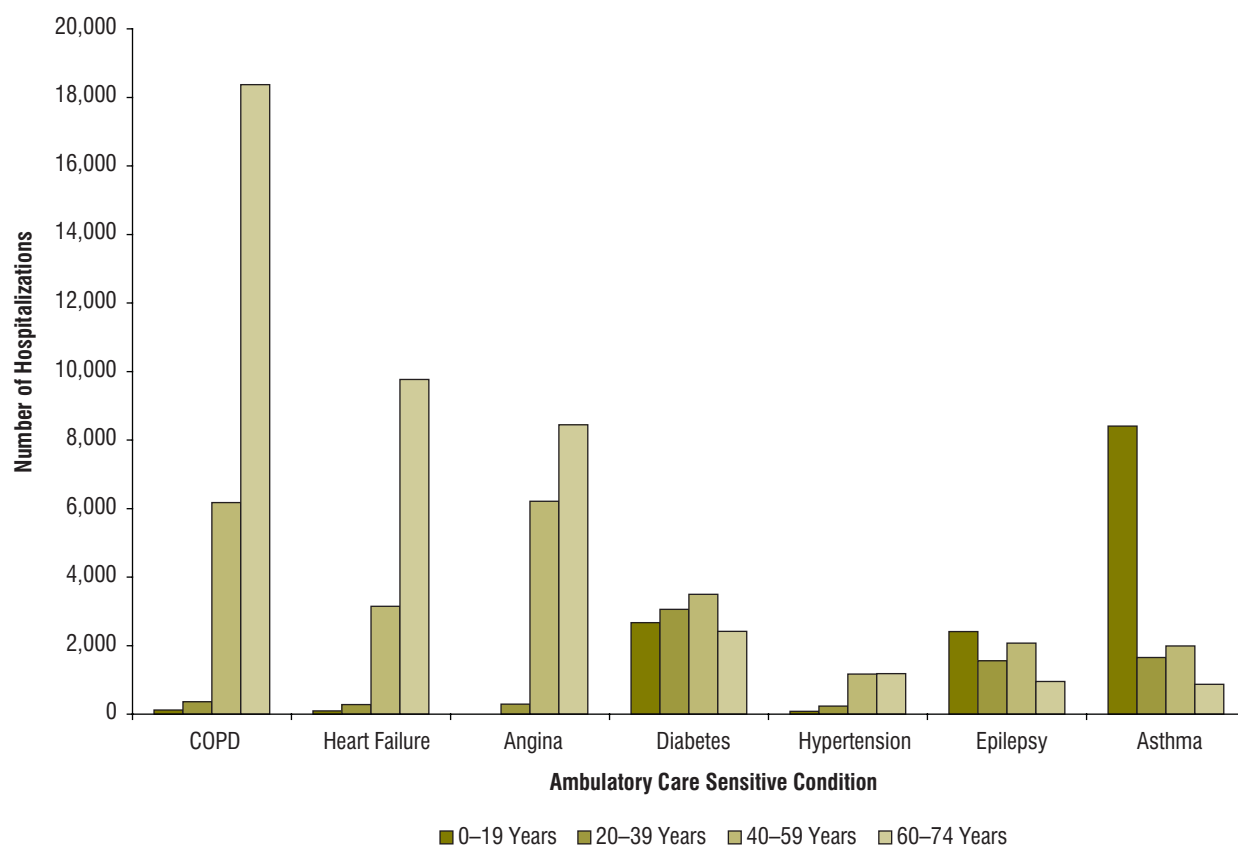
A number of factors can influence a person’s risk of being hospitalized for an ACSC. The following section shows how age, sex, where people live and income are associated with variations in ACSC hospitalizations. However, certain other factors that are not presented in this report may also contribute to ACSC hospitalizations, such as severity of illness, coexisting medical conditions (comorbidities) and health system characteristics (for example, physician supply, transfers between hospitals and continuity of care).^{9, 12–15}

Variations by Age

ACSC hospitalizations differ by age. In 2006–2007, outside Quebec, patients aged 19 years and younger accounted for almost two-thirds (65%) of asthma admissions. However, patients aged 60 to 74 years accounted for about three-quarters (73%) of COPD and heart failure admissions over the same time period. Older patients also had more hospitalizations for angina and hypertension.

Figure 4 ACSC Hospitalized Cases by Age Groups and Condition

The graph below shows the distribution of hospitalization cases by ACSC and by age groups among Canadians younger than 75 years of age, outside Quebec, in 2006–2007.



Note: Data from Quebec were not available for 2006–2007 at the time of publication.

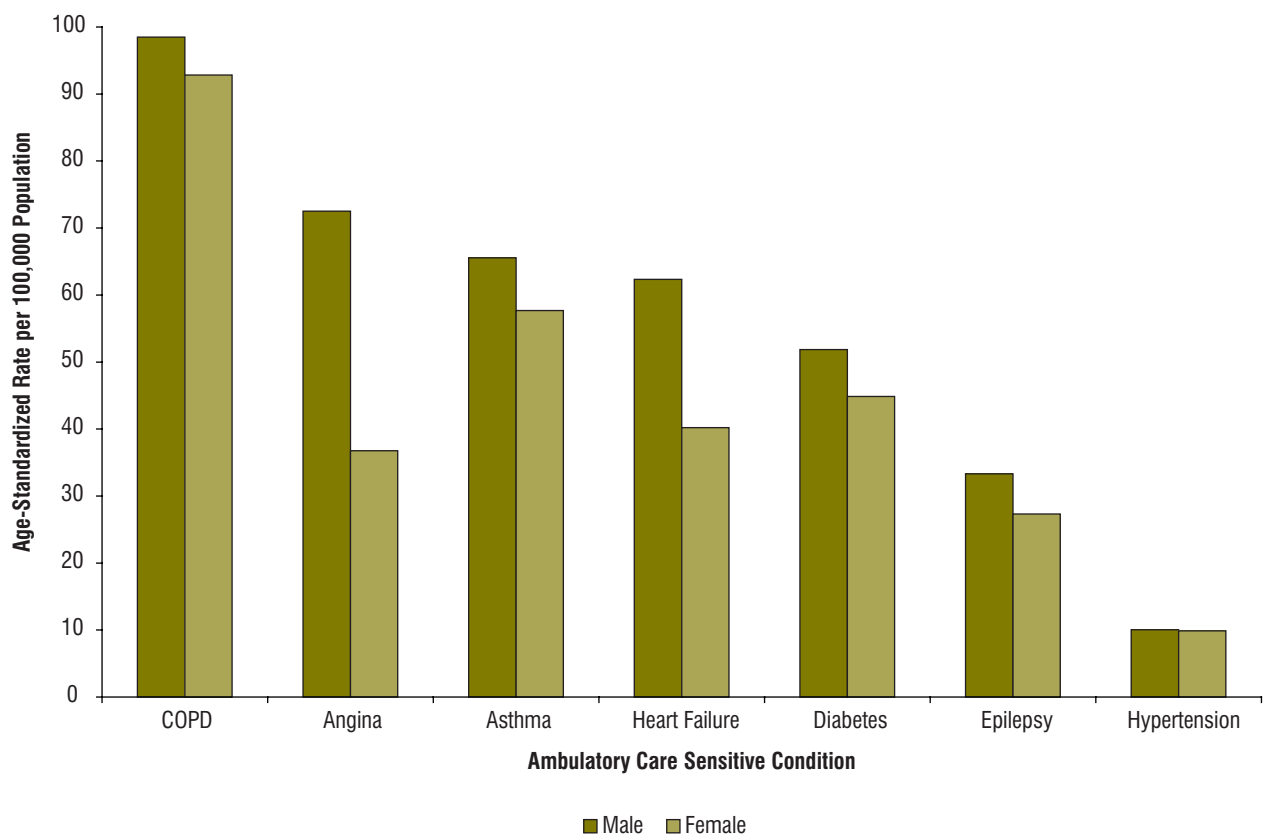
Source: Discharge Abstract Database, Canadian Institute for Health Information.

Variations by Sex

In 2006–2007, more men (55%) than women were hospitalized for an ACSC in Canada (outside Quebec). In addition, hospitalization rates for all ACSC, with the exception of hypertension (hypertension rates were similar among both sexes), were higher for men. For example, the age-standardized hospitalization rate for angina was twice as high for men as it was for women. For diabetes, the hospitalization rate for men was about 16% higher than for women, which is consistent with self-reported data showing that the diabetes rate for men was about 20% higher than for women.¹⁶

Figure 5 Sex Variations in ACSC Hospitalization Rates

The graph below shows age-standardized rates for each condition by sex among Canadians, outside Quebec, younger than 75 years of age in 2006–2007. Men had higher hospitalization rates for all ACSC except hypertension.



Notes: Data from Quebec were not available for 2006–2007 at the time of publication. Differences are statistically significant at $p < 0.05$ for angina, asthma, heart failure, COPD, diabetes and epilepsy.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

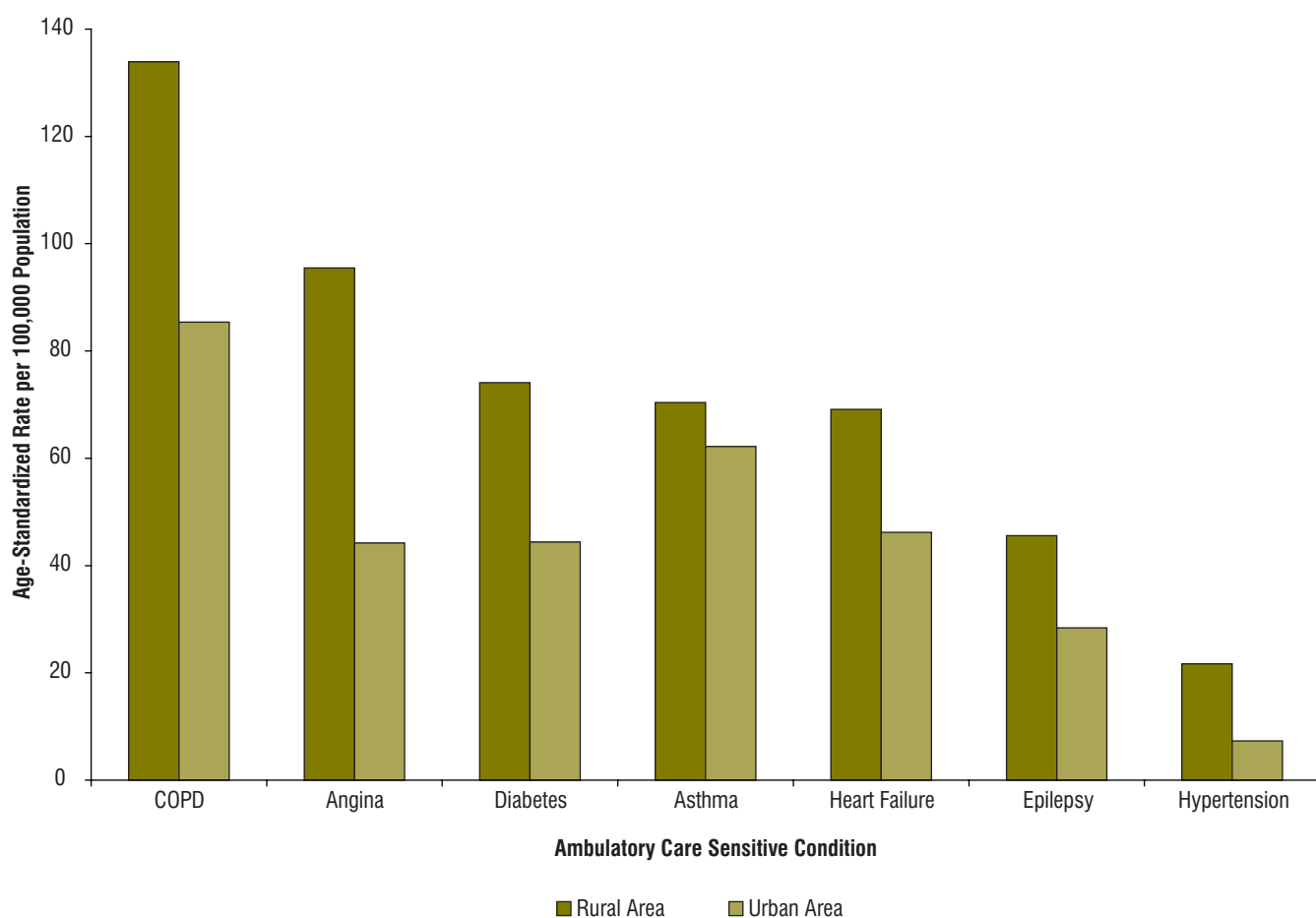
Rural and Urban Variations

Some studies have documented sizable variations in ACSC hospitalization rates between rural and urban areas.^{17, 18} In 2006–2007, the overall age-standardized hospitalization rate for all ACSC in rural areas, outside Quebec, was about 510 per 100,000 population, which is about 60% higher than in urban areas, where the rate was 318 per 100,000 population.

Hospitalization rates for each chronic condition were also higher for rural areas. For example, hospitalizations for hypertension were significantly higher in rural than in urban areas: 22 versus 7 per 100,000 population, respectively.

Figure 6 Rural and Urban Variations in ACSC Hospitalization Rates

The graph below shows the age-standardized rates for each ACSC by residential area (urban/rural) among Canadians younger than 75 years of age, outside Quebec, for 2006–2007. Hospitalization rates were higher in rural areas for each ACSC.



Notes: Data from Quebec were not available for 2006–2007 at the time of publication. Differences are statistically significant at $p < 0.05$ for each ACSC.
Source: Discharge Abstract Database, Canadian Institute for Health Information.

Variations by Income

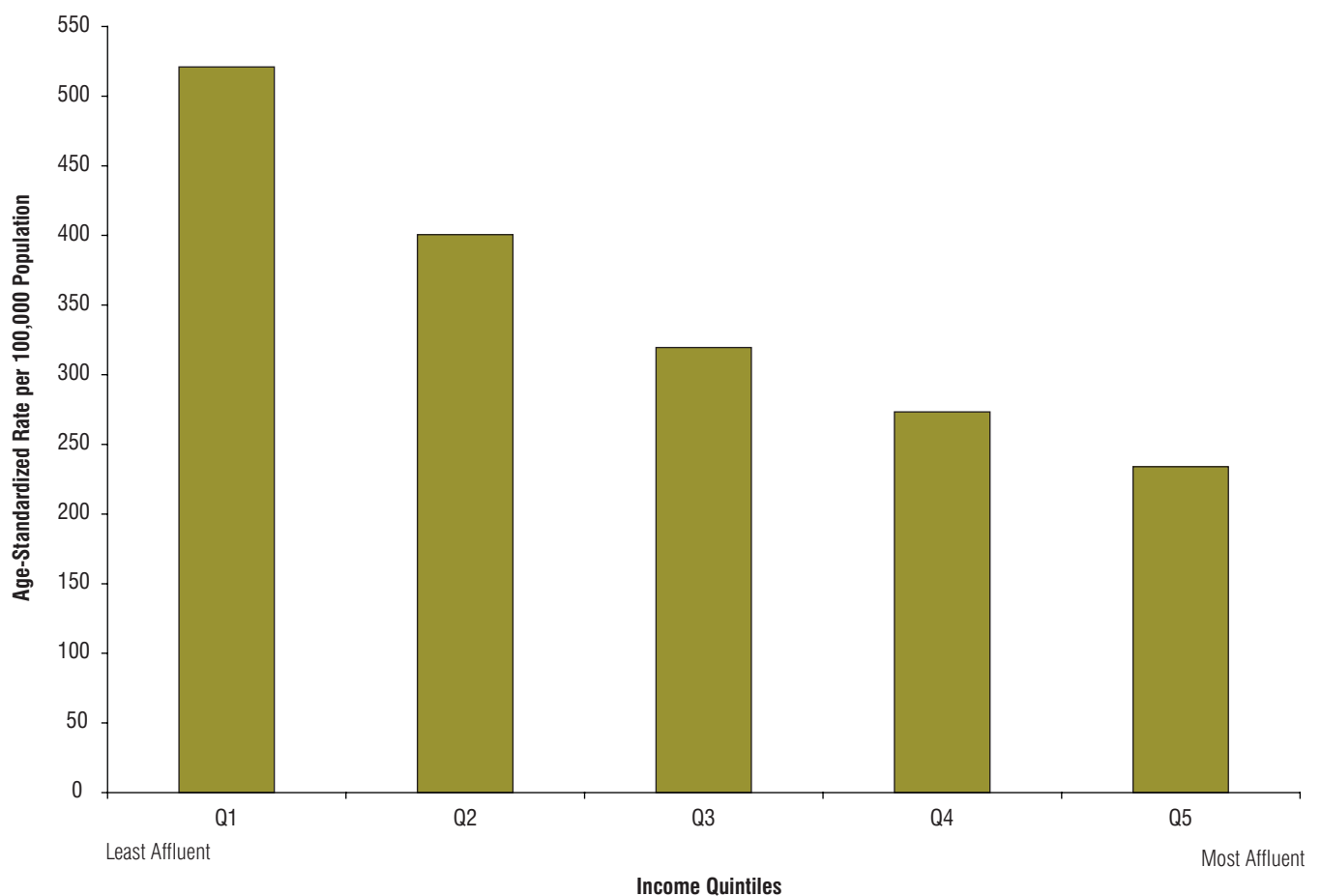
A number of studies have found that there is an inverse relationship between neighbourhood income and ACSC hospitalizations.^{9, 19–21} For example, a study conducted in Ontario indicated that individuals in the lowest income quintile were 44% more likely to be hospitalized for diabetes than those in the most affluent income quintile.²¹

In this report, average neighborhood income was used as a proxy measure of individuals' income levels. This approach is widely used in the existing literature when examining associations between income and ACSC hospitalizations.^{9, 19–21}

In 2006–2007, outside Quebec, hospitalization rates decreased as income levels rose. In the lowest income group, the age-standardized rate for overall ACSC hospitalizations was 521 per 100,000 population, the highest rate among all income quintiles. This rate was more than twice as high as the most affluent income group, which had a rate of 234 per 100,000 population.

Figure 7 Overall ACSC Hospitalizations by Income Quintiles

This graph shows the age-standardized rates for overall ACSC hospitalizations by income quintile among Canadians younger than 75 years of age, outside Quebec, for 2006–2007. Hospitalization rates decreased across income quintiles.



Notes: Data from Quebec were not available for 2006–2007 at the time of publication. Q1 represents the lowest neighborhood income quintile and Q5 represents the highest. Population by income quintile for 2006 was projected from 2001 Canadian census definitions.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

Factors Associated With ACSC Hospitalization Rates

The many factors that contribute to and potentially increase the risk of ACSC hospitalizations are not only related but may also interact with each other. The Health Indicator Framework, developed by CIHI and Statistics Canada, helps to understand the various aspects of health and the health care system that may contribute to variations across the country. Some examples are shown below.

HEALTH STATUS

- More than 4.9% of Canadians aged 12 and older reported having diabetes; 8.3% reported having asthma.¹⁶

NON-MEDICAL DETERMINANTS OF HEALTH

- The number of ACSC hospitalizations is highest among the lowest income group for all conditions.
- Unhealthy behaviours such as smoking, alcohol use, lack of exercise and poor eating habits are associated with chronic illness.^{1,22}

HEALTH SYSTEM PERFORMANCE

- Of the 14,200 patients who were hospitalized for asthma at first admission, about 11% were readmitted once and 3% returned to hospital at least twice for asthma or another ACSC.

COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

- An association between low physician supply and higher ACSC hospitalization rates has been reported.^{14, 23, 24}
- Hospitalization rates are substantially higher in rural areas than urban areas for all ACSC.

What Is Being Done

As reported earlier, ACSC hospitalizations have fallen over time. Although many factors may be responsible for this trend, according to both Canadian and international research,^{6, 7, 25} accessible and well-functioning primary health care services play an instrumental role in the management of chronic conditions, including those included in the ACSC indicator.

Initiatives designed to enhance access to and the quality of primary health care services have been implemented in various countries. These include increasing physician supply, promoting coordination and continuity of care, setting standards for treatment of major chronic diseases and introducing pay-for-performance contracts with family physicians and general practitioners.^{12, 26, 27}

In Canada, various primary health care initiatives aimed at improving the management of chronic diseases have been implemented.³¹ These include improving access to services, patient education and the implementation of interdisciplinary teams and telehealth networks to help facilitate patient follow-up and continuity of care.

Clinical Practice Guidelines: A Strategy for Diabetes

People who have diabetes may be particularly vulnerable to a number of complications related to their condition. To help mitigate these complications and prevent potentially avoidable hospitalizations, pan-Canadian guidelines have been developed to help monitor, treat and manage these conditions.

In 2003, the Canadian Diabetes Association (CDA) developed clinical practice guidelines to aid in the prevention and management of diabetes in Canada. They include recommendations concerning when and how frequently blood sugar, blood pressure, kidney and other tests and procedures should be completed.^{28, 29}

The ultimate goal of the guidelines is to establish best practices to improve the health and quality of life for people with diabetes.²⁹ Research suggests that good preventive care can result in better health and fewer complications.³⁰

However, the 2005 Canadian Community Health Survey conducted by Statistics Canada found that less than 50% of those Canadians who reported having diabetes said they had completed all lab tests and procedures recommended by the CDA.² For example, while 74% reported that they had had their blood sugar (hemoglobin A1C) measured, only 48% reported having had their feet examined by a health care professional within the last 12 months prior to survey completion.^{2, 16, 28} As well, one-third reported that they or a family member/friend never examined their feet.^{16, 28}

Information Gaps

What We Know

- How the hospitalization rates for ACSC vary over time and across provinces, territories and regions.
- How ACSC hospitalizations vary by factors such as age, sex, where one lives and income.
- What ACSC hospitalization rates may represent; that is, this indicator may flag potential issues related to access to or quality of primary health care services.

What We Don't Know

- How other factors may affect ACSC hospitalization rates, such as prevalence, number of comorbidities and severity of illness.
- How effective primary health care and chronic disease management initiatives are at reducing ACSC hospitalizations.

What's Happening

- In 2008, CIHI will release a chartbook—*Primary Health Care in Canada*. The chartbook will draw on existing survey data, analyses from regional primary health care (PHC) quality studies, CIHI data holdings and other sources. Where data are available, historical trends and interprovincial and international comparisons will be included. The chartbook will help identify gaps in information about primary health care in Canada and serve as a resource for health care providers, health system decision-makers and researchers.
- In early summer 2008, Statistics Canada will conduct a survey on Canadians' experiences with the primary health care system. The new survey was co-funded by CIHI and the Health Council of Canada to produce provincial and pan-Canadian estimates for several PHC measures and indicators, including some related to the effective management of chronic conditions.
- The Organisation for Economic Co-operation and Development (OECD) launched the Health Care Quality Indicators Project, which includes several health care quality measures, including asthma admission rates. While the OECD will continue reporting asthma rates, it will also collect data to improve admission rate comparability across countries for other conditions, such as diabetes and hypertension.

References

1. Health Council of Canada, *Why Health Care Renewal Matters: Learning From Canadians With Chronic Health Conditions* (Toronto: Health Council of Canada, 2007).
2. World Health Organization, *The Impact of Chronic Disease in Canada* (2005), cited March 17, 2008, from <http://www.who.int/chp/chronic_disease_report/media/canada.pdf>.
3. Health Canada, *Economic Burden of Illness in Canada, 1998* (Ottawa, Ont.: Minister of Public Works and Government Services Canada, 2002), cited May 1, 2008, from <<http://www.phac-aspc.gc.ca/publicat/ebic-femc98/pdf/ebic1998.pdf>>.
4. A. Giuffrida, H. Gravelle and M. Roland, "Measuring Quality of Care With Routine Data: Avoiding Confusion Between Performance Indicators and Health Outcomes," *British Medical Journal* 319 (1999): pp. 94–98.
5. J. Billings, G. M. Anderson and L. S. Newman, "Recent Findings on Preventable Hospitalizations," *Health Affairs* 15, 3 (1996): pp. 239–249.
6. J. Caminal, B. Starfield, E. Sánchez, C. Casanova and M. Morales, "The Role of Primary Care in Preventing Ambulatory Care Sensitive Conditions," *European Journal of Public Health* 14 (2004): pp. 246–251.
7. P. Rizza, A. Bianco, M. Pavia and I. F. Angelillo, "Preventable Hospitalization and Access to Primary Health Care in an Area of Southern Italy," *BMC Health Services Research* 7 (2007): pp. 134–145.
8. Z. Ansari, J. N. Laditka and S. B. Laditka, "Access to Health Care and Hospitalization for Ambulatory Care Sensitive Conditions," *Medical Care Research and Review* 63, 6 (2006): pp. 719–741.
9. J. Billings, L. Zeitel, J. Lukomnik, T. S. Carey, A. E. Blank and L. Newman, "Datawatch: Impact of Socioeconomic Status on Hospital Use in New York City," *Health Affairs* 12, 1 (1993): pp. 162–173.
10. R. Peleg, Y. Press, M. Asher, T. Pugachev, H. Glicensztain, M. Lederman and A. Biderman, "An Intervention Program to Reduce the Number of Hospitalizations of Elderly Patients in a Primary Care Clinic," *BMC Health Services Research* 8 (2008): pp. 36–42.
11. L. C. Camberg, N. E. Smith, M. Beaudet, J. Daley, M. Cagan and G. Thibault, "Discharge Destination and Repeat Hospitalizations," *Medical Care* 35, 8 (1997): pp. 756–767.
12. M.-C. Cyr, A. C. Martens, D. Berbiche, S. Perreault and L. Blais, "Continuity of Care in the Ambulatory Treatment of Adolescents With Asthma," *Journal of Adolescent Health* 39, 6 (2006): pp. 926.e11–926.e17.
13. V. H. Menec, M. Sirski, D. Attawar and A. Katz, "Does Continuity of Care With a Family Physician Reduce Hospitalization Among Older Adults?," *Journal of Health Services Research & Policy* 11, 4 (2006): pp. 196–201.
14. J. N. Laditka, S. B. Laditka and J. C. Probst, "More May Be Better: Evidence of a Negative Relationship Between Physician Supply and Hospitalization for Ambulatory Care Sensitive Conditions," *Health Services Research* 40, 4 (2005): pp. 1148–1166.
15. A. S. O'Malley, H. H. Pham, D. Schrag, B. Wu and P. B. Bach, "Potentially Avoidable Hospitalizations for COPD and Pneumonia: The Role of Physician and Practice Characteristics," *Medical Care* 45, 6 (2007): pp. 562–570.
16. Statistics Canada, *Health Reports* (Ottawa: Statistics Canada, 2007), catalogue no. 82-003-XIE.
17. D. Cloutier-Fisher, M. J. Penning, C. Zheng and E. B. Druyts, "The Devil Is in the Details: Trends in Avoidable Hospitalization Rates by Geography in British Columbia, 1990–2000," *BMC Health Services Research* 6 (2006): p. 104.

18. G. M. Anderson, "Common Conditions Considered Sensitive to Ambulatory Care, Variations in Selected Surgical Procedures and Medical Diagnoses by Year and Region," in *Patterns of Health Care in Ontario. The ICES Practice Atlas*, eds. V. Goel, J. I. Williams, G. M. Anderson, P. Blackstien-Hirsch, C. Fooks and C. D. Naylor (Ottawa: Canadian Medical Association, 1996), pp. 104–110.
19. L. L. Roos, R. Walld, J. Uhanova and R. Bond, "Physician Visits, Hospitalizations, and Socioeconomic Status: Ambulatory Care Sensitive Conditions in a Canadian Setting," *Health Services Research* 40, 4 (2005): pp. 1167–1185.
20. M. M. Agha, R. H. Glazier and A. Guttmann, "Relationship Between Social Inequalities and Ambulatory Care–Sensitive Hospitalizations Persists for up to 9 Years Among Children Born in a Major Canadian Urban Center," *Ambulatory Pediatrics* 7, 3 (2007): pp. 258–262.
21. G. L. Booth and J. E. Hux, "Relationship Between Avoidable Hospitalizations for Diabetes Mellitus and Income Level," *Archives of Internal Medicine* 163, 1 (2003): pp. 101–106.
22. World Health Organization, *Preventing Chronic Diseases: A Vital Investment* (Geneva, Switzerland: WHO Global Report, 2005), cited January 29, 2008, from <http://www.who.int/chp/chronic_disease_report/contents/en/index.html>.
23. C. Gulliford, "Availability of Primary Care Doctors and Population Health in England: Is There an Association?," *Journal of Public Health Medicine* 24 (2002): pp. 252–254.
24. J. Basu, B. Friedman and H. Burstin, "Primary Care, HMO Enrollment, and Hospitalization for Ambulatory Care Sensitive Conditions: A New Approach," *Medical Care* 40, 12 (2002): pp. 1260–1269.
25. B. R. Shah, N. Gunraj and J. E. Hux, "Markers of Access to and Quality of Primary Care for Aboriginal People in Ontario, Canada," *American Journal of Public Health* 93, 5 (2003): pp. 798–802.
26. B. Starfield, L. Shi and J. Macinko, "Contribution of Primary Care to Health Systems and Health," *The Milbank Quarterly* 83, 3 (2005): pp. 457–502.
27. S. Campbell, D. Reeves, E. Kontopantelis, E. Middleton, B. Sibbald and M. Roland, "Quality of Primary Care in England With the Introduction of Pay for Performance," *New England Journal of Medicine* 357, 2 (2007): pp. 181–190.
28. C. Sanmartin and J. Gilmore, "Diabetes Care in Canada: Results From Selected Provinces," in *Statistics Canada. Smoking and Diabetes Care: Results From the CCHS Cycle 3.1* Catalogue No. 82-621-XIE (2006).
29. Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, "Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada," *Canadian Journal of Diabetes* 27, 2 (2003): pp. S1–S163.
30. Health Council of Canada, *Why Health Care Renewal Matters: Lessons From Diabetes* (Toronto, Ont.: Health Council of Canada, 2007).
31. P. Sargious, *Primary Health Care Transition Fund, Chronic Disease Prevention and Management: Glass Half Empty, Glass Half Full* (Ottawa: Health Canada, 2007), cited March 18, 2008, from <http://www.hc-sc.gc.ca/hcs-sss/prim/phctf-fassp/index_e.html>.

Health Indicators—Region by Region

Health indicators are standardized measures which can be used to compare health status, health system performance and characteristics over time and across the country. As in previous years, the *Health Indicators* annual report provides up-to-date comparable information for health regions as well as for provinces and territories. This information can be used by health regions to monitor the health of their populations and the performance of their health systems, as well as to identify areas for improvement.

What Are Health Regions?

Health regions are legislated administrative areas which are defined by the provincial ministries of health and represent geographical areas of responsibility for providing health services to residents. The role of health regions in determining how resources are allocated and their relationship with the hospitals located in the region can vary between provinces.

For this report, data are provided for all regions with a population of at least 50,000. In addition, data for the smaller regions are included in the *Health Indicators* e-publication (www.cihi.ca/indicators or www.statcan.ca).

Please see page 90 for a map of all health regions in Canada.

Interpreting the Indicators

Unless otherwise specified, health indicators are reported based on the region of the patient's residence, not region of hospitalization. Consequently, these figures reflect the hospitalization experience of residents of the region wherever they are treated, including out-of-province, as opposed to reflecting the comprehensive activity of the region's hospitals (which may also treat people from outside of the region).

Confidence intervals are provided for most indicators to aid interpretation. The width of the confidence interval illustrates the degree of variability associated with the rate. Indicator values are estimated to be accurate within the upper and lower confidence interval 19 times out of 20 (95% confidence interval).

Please see page 86 for additional important interpretive notes.

Symbols and Abbreviations

..	Figures not available	ASSS	Agence de santé et de services sociaux
*	Figures suppressed due to small numbers or incomplete data	HSDA	Health service delivery area
▼	Interpret with caution	LHIN	Local health integration network
95% CI	95% confidence interval	RHA	Regional health authority
★	Statistically significantly different from the average (Canada) rate ($p \leq 0.05$)		

Map Code	Health Region	Legend Name	Population ('000) 2006	% Population Age 65+ 2006	Dependency Ratio 2006
Newfoundland and Labrador		N.L.	509	13.6	55.0
1011	Eastern Regional Integrated Health Authority	Eastern, N.L.	296	12.9	53.0
1012	Central Regional Integrated Health Authority	Central, N.L.	96	16.0	58.7
1013	Western Regional Integrated Health Authority	Western, N.L.	80	15.3	58.5
Prince Edward Island		P.E.I.	139	14.4	64.0
Nova Scotia		N.S.	934	14.6	58.9
1211	South Shore District Health Authority	South Shore, N.S.	60	18.6	61.9
1212	South West Nova District Health Authority	South West Nova, N.S.	62	16.7	63.6
1213	Annapolis Valley District Health Authority	Annapolis Valley, N.S.	83	16.5	65.0
1214	Colchester East Hants Health Authority	Colchester East Hants, N.S.	73	14.8	62.3
1218	Cape Breton District Health Authority	Cape Breton, N.S.	127	16.8	65.3
1219	Capital District Health Authority	Capital, N.S.	403	11.6	52.3
New Brunswick		N.B.	748	14.3	57.4
1301	Region 1	Region 1, N.B. (Moncton area)	196	14.3	55.1
1302	Region 2	Region 2, N.B. (Saint John area)	175	14.0	61.0
1303	Region 3	Region 3, N.B. (Fredericton area)	171	13.0	57.6
1304	Region 4	Region 4, N.B. (Edmundston area)	51	14.9	56.7
1306	Region 6	Region 6, N.B. (Bathurst area)	81	15.1	53.4
Quebec		Que.	7,669	14.1	57.5
2401	ASSS du Bas-Saint-Laurent	Bas-Saint-Laurent	202	16.8	60.3
2402	ASSS du Saguenay-Lac-Saint-Jean	Saguenay-Lac-Saint-Jean	274	14.6	58.0
2403	ASSS de la Capitale nationale	Capitale nationale	671	15.3	53.5
2404	ASSS de la Mauricie et du Centre-du-Québec	Mauricie et Centre-du-Québec	489	16.4	60.9
2405	ASSS de l'Estrie	Estrie	302	14.9	60.0
2406	ASSS de Montréal	Montréal	1,874	15.2	55.8
2407	ASSS de l'Outaouais	Outaouais	347	11.1	54.5
2408	ASSS de l'Abitibi-Témiscamingue	Abitibi-Témiscamingue	145	12.9	59.2
2409	ASSS de la Côte-Nord	Côte-Nord	96	12.0	56.0
2411	ASSS de la Gaspésie-Îles-de-la-Madeleine	Gaspésie-Îles-de-la-Madeleine	96	17.6	60.5
2412	ASSS de Chaudière-Appalaches	Chaudière-Appalaches	398	14.2	58.4
2413	ASSS de Laval	Laval	377	14.1	60.8
2414	ASSS de Lanaudière	Lanaudière	435	11.9	58.0
2415	ASSS des Laurentides	Laurentides	519	12.2	58.2
2416	ASSS de la Montérégie	Montérégie	1,387	12.7	57.8
Ontario		Ont.	12,722	13.0	60.1
3501	Erie St. Clair LHIN	Erie St. Clair	648	13.8	63.6
3502	South West LHIN	South West	932	14.6	64.8
3503	Waterloo Wellington LHIN	Waterloo Wellington	708	11.8	59.9
3504	Hamilton Niagara Haldimand Brant LHIN	Hamilton Niagara Haldimand Brant	1,372	14.8	64.3
3505	Central West LHIN	Central West	763	9.6	57.0
3506	Mississauga Halton LHIN	Mississauga Halton	1,111	9.8	57.7
3507	Toronto Central LHIN	Toronto Central	1,159	13.2	54.9
3508	Central LHIN	Central	1,608	11.4	56.5
3509	Central East LHIN	Central East	1,481	13.2	60.0
3510	South East LHIN	South East	484	16.2	64.2
3511	Champlain LHIN	Champlain	1,187	12.8	58.2
3512	North Simcoe Muskoka LHIN	North Simcoe Muskoka	429	14.4	65.4
3513	North East LHIN	North East	568	15.8	63.6
3514	North West LHIN	North West	238	13.5	64.4
Manitoba		Man.	1,178	13.6	67.2
4610	Winnipeg RHA	Winnipeg	662	13.7	60.7
4625	South Eastman Health	South Eastman	63	10.2	74.3
4630	Interlake RHA	Interlake	80	14.6	71.1
4640	RHA—Central Manitoba Inc.	Central	102	13.3	78.4
4645	Assiniboine RHA	Assiniboine	70	18.7	80.9

Map Code	Health Region	Legend Name	Population ('000) 2006	% Population Age 65+ 2006	Dependency Ratio 2006
Saskatchewan		Sask.	986	14.9	72.2
4701	Sun Country Health Region	Sun Country	52	17.7	76.6
4702	Five Hills Health Region	Five Hills	53	18.5	75.0
4704	Regina Qu'Appelle Health Region	Regina	240	14.0	65.0
4705	Sunrise Health Region	Sunrise	55	22.2	85.2
4706	Saskatoon Health Region	Saskatoon	285	13.4	65.5
4709	Prince Albert Parkland RHA	Prince Albert	74	15.1	80.7
4710	Prairie North Health Region	Prairie North	67	12.4	81.3
Alberta		Alta.	3,413	10.4	57.3
4821	Chinook Health	Chinook	159	12.8	68.7
4822	Palliser Health Region	Palliser	104	13.2	65.1
4823	Calgary Health Region	Calgary	1,237	9.5	52.4
4824	David Thompson Health Region	David Thompson	307	11.0	61.5
4825	East Central Health	East Central	116	15.2	71.5
4826	Capital Health	Capital	1,054	11.0	56.3
4827	Aspen Regional Health	Aspen	181	11.0	69.0
4828	Peace Country Health	Peace Country	141	8.1	62.9
4829	Northern Lights Health Region	Northern Lights	75	3.2	51.1
British Columbia		B.C.	4,327	14.0	57.4
5911	East Kootenay HSDA	East Kootenay	79	14.8	62.0
5912	Kootenay Boundary HSDA	Kootenay Boundary	78	18.2	63.0
5913	Okanagan HSDA	Okanagan	335	20.0	70.8
5914	Thompson/Cariboo/Shuswap HSDA	Thompson/Cariboo/Shuswap	218	14.8	61.5
5921	Fraser East HSDA	Fraser East	266	14.2	67.7
5922	Fraser North HSDA	Fraser North	581	12.2	52.1
5923	Fraser South HSDA	Fraser South	647	12.2	60.7
5931	Richmond HSDA	Richmond	185	12.2	51.2
5932	Vancouver HSDA	Vancouver	624	12.2	42.5
5933	North Shore/Coast Garibaldi HSDA	North Shore	283	12.8	59.4
5941	South Vancouver Island HSDA	South Vancouver Island	350	17.4	58.2
5942	Central Vancouver Island HSDA	Central Vancouver Island	257	18.9	67.3
5943	North Vancouver Island HSDA	North Vancouver Island	118	14.8	61.5
5951	Northwest HSDA	Northwest	79	10.0	61.6
5952	Northern Interior HSDA	Northern Interior	146	9.8	56.8
5953	Northeast HSDA	Northeast	66	7.8	57.9
Yukon Territory		Y.T.	31	7.6	49.1
Northwest Territories		N.W.T.	42	4.9	59.2
Nunavut		Nun.	31	2.9	84.6
Canada		Canada	32,730	13.0	59.2

Population

The number of people living in a geographic area. A population's size and age/sex composition may affect the health status of a region and its need for health services. Population data also provide the denominators used to calculate rates for most health and social indicators.

Sources: Demography Division, Statistics Canada. Data are derived from the census and administrative sources on births, deaths and migration. Population growth for health regions in Alberta and British Columbia were supplied by Alberta Health and Wellness and BC Stats, respectively.

Dependency ratio

The ratio of the combined population aged 0 to 19 years old and the population aged 65 years and older to the population aged 20 to 64 years old. This ratio is presented as the number of dependents for every 100 people in the working-age population. Canadians aged 65 and older and those younger than age 20 are more likely to be socially and/or economically dependent on working-age Canadians and they may also put additional demands on health services.

Source: Demography Division (special tabulation), Statistics Canada.

Map Code	Health Region	Aboriginal Population 2006 %	Immigrant Population 2006 %	Rural Population 2006 %
Newfoundland and Labrador		4.7	1.7	42.4
1011	Eastern, N.L.	1.0	2.1	34.0
1012	Central, N.L.	3.1	0.8	60.0
1013	Western, N.L.	9.2	1.2	48.1
Prince Edward Island		1.3	3.6	55.3
Nova Scotia		2.7	5.0	44.7
1211	South Shore, N.S.	1.9	4.2	75.4
1212	South West Nova, N.S.	8.3	3.0	82.0
1213	Annapolis Valley, N.S.	1.9	5.0	62.6
1214	Colchester East Hants, N.S.	3.6	4.0	62.0
1218	Cape Breton, N.S.	4.8	2.0	36.8
1219	Capital, N.S.	1.4	7.2	25.1
New Brunswick		2.5	3.7	49.1
1301	Region 1, N.B. (Moncton area)	2.4	3.4	41.4
1302	Region 2, N.B. (Saint John area)	1.1	4.5	38.4
1303	Region 3, N.B. (Fredericton area)	3.1	5.3	55.2
1304	Region 4, N.B. (Edmundston area)	2.2	3.0	49.6
1306	Region 6, N.B. (Bathurst area)	1.7	1.1	65.4
Quebec		1.5	11.5	20.0
2401	Bas-Saint-Laurent	0.9	1.0	49.8
2402	Saguenay-Lac-Saint-Jean	2.8	0.9	31.2
2403	Capitale nationale	0.6	3.9	12.7
2404	Mauricie et Centre-du-Québec	1.4	1.9	32.2
2405	Estrie	0.8	4.6	36.4
2406	Montréal	0.5	30.7	0.0
2407	Outaouais	4.0	7.0	27.3
2408	Abitibi-Témiscamingue	4.6	1.3	46.3
2409	Côte-Nord	13.4	1.0	33.0
2411	Gaspésie-Îles-de-la-Madeleine	2.5	0.9	75.3
2412	Chaudière-Appalaches	0.4	1.2	41.9
2413	Laval	0.4	20.2	0.0
2414	Lanaudière	1.1	3.0	28.2
2415	Laurentides	0.8	3.9	31.4
2416	Montérégie	0.6	7.5	17.8
Ontario		2.0	28.3	14.9
3501	Erie St. Clair	2.4	18.1	20.3
3502	South West	1.4	14.8	28.7
3503	Waterloo Wellington	1.0	20.6	12.2
3504	Hamilton Niagara Haldimand Brant	1.7	20.3	12.0
3505	Central West	0.6	45.6	6.8
3506	Mississauga Halton	0.4	43.2	2.1
3507	Toronto Central	0.8	40.8	0.0
3508	Central	0.4	47.9	4.7
3509	Central East	1.2	33.2	14.3
3510	South East	2.8	9.3	45.9
3511	Champlain	2.0	17.6	20.8
3512	North Simcoe Muskoka	3.3	11.3	33.0
3513	North East	9.5	6.3	30.4
3514	North West	19.8	8.0	36.8
Manitoba		15.5	13.3	28.7
4610	Winnipeg	10.0	18.5	0.8
4625	South Eastman	9.3	12.4	70.6
4630	Interlake	21.7	5.7	79.0
4640	Central	11.3	9.8	63.1
4645	Assiniboine	9.6	4.8	72.4

Map Code	Health Region	Aboriginal Population 2006 %	Immigrant Population 2006 %	Rural Population 2006 %
Saskatchewan		14.9	5.0	35.2
4701	Sun Country	5.1	3.0	55.6
4702	Five Hills	4.4	4.2	31.4
4704	Regina	11.6	6.8	18.2
4705	Sunrise	8.5	3.2	47.2
4706	Saskatoon	9.3	6.9	19.3
4709	Prince Albert	35.6	3.2	51.5
4710	Prairie North	29.0	2.6	55.2
Alberta		5.8	16.2	18.0
4821	Chinook	7.5	10.8	29.7
4822	Palliser	3.1	9.0	23.1
4823	Calgary	3.0	22.1	7.2
4824	David Thompson	6.9	6.6	38.7
4825	East Central	3.5	5.0	50.8
4826	Capital	5.1	18.5	9.2
4827	Aspen	16.8	4.9	54.1
4828	Peace Country	14.5	5.3	42.4
4829	Northern Lights	19.0	9.5	27.6
British Columbia		4.8	27.5	14.7
5911	East Kootenay	5.6	10.6	37.9
5912	Kootenay Boundary	4.1	11.2	45.9
5913	Okanagan	4.6	14.4	25.6
5914	Thompson/Cariboo/Shuswap	11.2	10.3	39.1
5921	Fraser East	5.7	20.0	18.6
5922	Fraser North	1.9	37.7	2.4
5923	Fraser South	2.1	32.3	5.6
5931	Richmond	0.7	57.4	0.0
5932	Vancouver	2.0	45.6	0.0
5933	North Shore	3.9	28.4	12.3
5941	South Vancouver Island	3.3	19.3	9.9
5942	Central Vancouver Island	7.8	14.9	30.4
5943	North Vancouver Island	9.9	12.0	30.1
5951	Northwest	30.2	11.5	42.4
5952	Northern Interior	13.1	9.6	36.5
5953	Northeast	12.4	6.6	40.2
Yukon Territory		25.1	10.0	40.5
Northwest Territories		50.3	6.8	41.8
Nunavut		85.0	1.6	56.8
Canada		3.8	19.8	19.9

Aboriginal population

Proportion of Aboriginal People living in a geographic area. Aboriginal People are those persons who reported identifying with at least one Aboriginal group (for example, North American Indian, Métis or Inuit) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* and/or those who were members of an Indian Band or First Nation. Health status characteristics and non-medical determinants of Aboriginal People differ from the non-Aboriginal population.

Source: 2006 Census, Statistics Canada.

Immigrant population

Proportion of immigrants living in a geographic area. Refers to people who are or have ever been landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities. Studies have shown that immigrants, particularly non-European immigrants, generally have a longer life expectancy and lower risk of certain chronic conditions than the native-born population.

Source: 2006 Census, Statistics Canada.

Rural population

Proportion of people living in rural areas. A rural area is defined as having a population of less than 1,000 and a population density of less than 400 people per square kilometre.

Source: 2006 Census, Statistics Canada.

	Life Expectancy at Birth			Perinatal Mortality	Infant Mortality	Low Birth Weight
	Male Years	2005 Female Years	Both Years	2005	2005	2005
		Rate per 1,000 Total Births		Rate per 1,000 Live Births	%	
N.L.	75.6	80.9	78.2	6.9	6.2	5.9
PE.I.	77.4	82.1	79.8	4.5	2.2	5.4
N.S.	76.7	81.8	79.3	6.2	4.0	6.3
N.B.	77.2	82.4	79.8	5.2	4.1	5.9
Que.	77.7	82.9	80.4	5.5	4.6	5.7
Ont.	78.5	82.7	80.7	6.6	5.6	6.2
Man.	76.6	81.4	79.0	7.9	6.6	5.4
Sask.	76.6	82.1	79.3	8.0	8.3	5.7
Alta.	77.8	82.7	80.3	7.1	6.8	6.6
B.C.	78.8	83.5	81.2	5.4	4.5	5.7
Y.T.	73.5 } N.W.T. } Nun. }	79.9 } 76.3 }	76.3 }	3.1	0.0	3.8
N.W.T.				4.2	4.2	5.1
Nun.				11.4	10.0	8.4
Canada	78.0	82.7	80.4	6.3	5.4	6.0

Cancer Incidence,¹ 2004

	All Cancers		Bronchus and Lung		Colon Excluding Rectum	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
N.L.	355.3	(340.2–370.3)	42.1	(36.9–47.2)	47.6	(42.1–53.0)
PE.I.	443.1	(410.7–475.4)	67.3	(54.8–79.8)	40.4	(30.9–49.9)
N.S.	441.8	(429.6–454.1)	66.8	(62.1–71.5)	40.9	(37.3–44.5)
N.B.	400.5	(387.5–413.6)	66.3	(61.0–71.6)	28.7	(25.2–32.1)
Que.	402.4	(398.3–406.5)	69.4	(67.7–71.1)	34.0	(32.8–35.2)
Ont.	394.9	(391.6–398.2)	48.7	(47.5–49.8)	34.4	(33.4–35.3)
Man.	395.0	(384.3–405.7)	57.3	(53.3–61.4)	33.1	(30.1–36.2)
Sask.	400.3	(388.7–411.9)	50.5	(46.4–54.6)	33.9	(30.6–37.2)
Alta.	402.4	(395.4–409.5)	50.1	(47.6–52.6)	29.9	(28.0–31.8)
B.C.	354.9	(349.6–360.1)	50.4	(48.4–52.3)	28.5	(27.0–29.9)
Y.T.	318.4	(244.4–392.4)	*	**	*	**
N.W.T.	339.0	(258.6–419.4)	*	**	*	**
Nun.	352.7	(227.8–477.7)	*	**	*	**
Canada	393.2	(391.2–395.3)	55.6	(54.8–56.4)	33.3	(32.8–33.9)

	Breast		Cervix Uteri		Prostate	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
N.L.	87.0	(76.9–97.1)	11.8	(7.5–16.1)	93.3	(82.0–104.5)
PE.I.	105.6	(83.9–127.2)	7.3	(1.1–13.5)	162.8	(134.2–191.3)
N.S.	94.5	(86.7–102.2)	11.4	(8.4–14.3)	137.7	(127.7–147.7)
N.B.	85.1	(76.9–93.3)	9.4	(6.4–12.5)	130.7	(119.7–141.7)
Que.	96.4	(93.7–99.2)	6.2	(5.5–7.0)	100.2	(97.0–103.3)
Ont.	97.6	(95.3–99.8)	7.7	(7.1–8.4)	131.7	(128.8–134.5)
Man.	98.7	(91.3–106.2)	8.4	(6.0–10.9)	112.4	(104.0–120.9)
Sask.	93.1	(85.2–101.0)	8.3	(5.8–10.9)	172.3	(161.3–183.3)
Alta.	101.4	(96.6–106.3)	8.9	(7.4–10.4)	137.9	(131.8–144.1)
B.C.	90.0	(86.3–93.6)	6.0	(5.0–7.0)	105.8	(101.7–110.0)
Y.T.	*	**	*	**	*	**
N.W.T.	86.4	(35.7–137.1)	0.0	(0.0–0.0)	89.0	(28.7–149.3)
Nun.	*	**	*	**	*	**
Canada	95.9	(94.5–97.3)	7.5	(7.1–7.9)	120.9	(119.3–122.6)

¹ Age-standardized rate per 100,000 population.

The data presented here represent a sample of a wider range of health status indicators that are available in the *Health Indicators* e-publication.

 www.cihi.ca/indicators or www.statcan.ca

Life expectancy at birth

Life expectancy is the number of years a person would be expected to live starting from birth and is calculated on the basis of the mortality statistics for a given observation period. A widely used indicator of the health of a population, life expectancy measures quantity rather than quality of life.

Sources: Vital Statistics, Death Database and Demography Division (population estimates), Statistics Canada.

Perinatal mortality

Rate of stillbirths and early neonatal deaths (deaths in the first week of life) per 1,000 total births (including stillbirths). Stillbirths are defined as death at gestational age of 28 weeks or more. This indicator reflects standards of obstetric and pediatric care, as well as the effectiveness of public health initiatives.

Sources: Vital Statistics, Birth, Death and Stillbirth Databases, Statistics Canada.

Infant mortality

Infants who die in the first year of life, expressed as a rate per 1,000 live births. A long-established measure, not only of child health, but also of the well-being of a society. This indicator reflects the level of mortality, health status and health care of a population as well as the effectiveness of preventive care and the attention paid to maternal and child health.

Sources: Vital Statistics, Birth and Death Databases, Statistics Canada.

Low birth weight

Live births less than 2,500 grams, expressed as a percentage of all live births with known birth weight. Low birth weight is a key determinant of infant survival, health and development.

Sources: Vital Statistics and Birth Database, Statistics Canada.

Cancer incidence

Age-standardized rate of new primary sites of cancer (malignant neoplasms) per 100,000 population, for all cancers and selected specific sites.

Sources: Vital Statistics, Cancer Database, Canadian Cancer Registry and Demography Division (population estimates), Statistics Canada.

Self-Reported Conditions						
Asthma, 2005						
	Male		Female		Both Sexes	
	%	95% CI	%	95% CI	%	95% CI
N.L.	8.0	(6.3–9.6)	10.3	(8.7–12.0)	9.2	(8.0–10.3)
PE.I.	6.9	(4.8–9.1)	10.8	(8.5–13.1)	8.9	(7.3–10.5)
N.S.	8.3	(6.9–9.7)	10.3	(8.8–11.9)	9.3	(8.3–10.4)
N.B.	8.0	(6.6–9.5)	9.2	(7.9–10.5)	8.6	(7.6–9.7)
Que.	6.7	(6.1–7.3)	10.4	(9.7–11.1)	8.6	(8.1–9.0)
Ont.	6.6	(6.1–7.1)	9.3	(8.7–9.8)	8.0	(7.6–8.3)
Man.	7.8	(6.6–9.0)	7.9	(6.7–9.2)	7.9	(7.0–8.7)
Sask.	7.9	(6.7–9.1)	9.1	(7.9–10.4)	8.5	(7.6–9.4)
Alta.	7.3	(6.4–8.2)	9.9	(8.7–11.0)	8.6	(7.8–9.3)
B.C.	6.7	(5.9–7.5)	9.5	(8.6–10.4)	8.1	(7.6–8.7)
Y.T.	6.3 [▼]	(3.8 [▼] –8.8 [▼])	11.2	(7.8–14.7)	8.7	(6.6–10.8)
N.W.T.	5.3 [▼]	(2.9 [▼] –7.7 [▼])	12.4	(8.6–16.2)	8.7	(6.5–10.8)
Nun.	*	**	*	**	4.3 [▼]	(2.6 [▼] –6.0 [▼])
Canada	6.9	(6.6–7.2)	9.6	(9.3–10.0)	8.3	(8.1–8.5)

Diabetes, 2005						
	Male		Female		Both Sexes	
	%	95% CI	%	95% CI	%	95% CI
N.L.	7.1	(5.6–8.6)	6.6	(5.4–7.7)	6.8	(5.9–7.8)
PE.I.	7.2	(5.6–8.9)	5.5	(3.9–7.1)	6.3	(5.2–7.5)
N.S.	6.5	(5.4–7.5)	6.8	(5.7–7.9)	6.6	(5.8–7.5)
N.B.	5.7	(4.6–6.8)	6.2	(5.2–7.2)	6.0	(5.2–6.7)
Que.	5.5	(5.0–5.9)	4.8	(4.4–5.3)	5.1	(4.8–5.5)
Ont.	5.6	(5.1–6.0)	4.1	(3.8–4.4)	4.8	(4.5–5.1)
Man.	5.1	(4.1–6.1)	3.7	(3.0–4.4)	4.4	(3.8–5.0)
Sask.	5.9	(4.9–7.0)	4.3	(3.6–5.0)	5.1	(4.5–5.7)
Alta.	4.2	(3.5–4.9)	3.7	(3.0–4.3)	3.9	(3.4–4.4)
B.C.	4.8	(4.2–5.5)	4.3	(3.7–4.8)	4.6	(4.1–5.0)
Y.T.	3.0 [▼]	(1.5 [▼] –4.4 [▼])	5.6 [▼]	(3.0 [▼] –8.2 [▼])	4.3 [▼]	(2.8 [▼] –5.7 [▼])
N.W.T.	3.8 [▼]	(1.6 [▼] –6.0 [▼])	3.0 [▼]	(1.8 [▼] –4.2 [▼])	3.4 [▼]	(2.0 [▼] –4.8 [▼])
Nun.	*	**	*	**	*	**
Canada	5.3	(5.1–5.6)	4.4	(4.2–4.6)	4.9	(4.7–5.0)

High Blood Pressure, 2005						
	Male		Female		Both Sexes	
	%	95% CI	%	95% CI	%	95% CI
N.L.	17.9	(15.5–20.2)	20.5	(18.7–22.3)	19.2	(17.7–20.7)
PE.I.	15.3	(12.8–17.8)	16.9	(14.6–19.2)	16.1	(14.5–17.7)
N.S.	16.3	(14.7–17.9)	19.9	(18.2–21.6)	18.1	(17.0–19.3)
N.B.	18.9	(16.9–20.9)	19.8	(18.2–21.5)	19.4	(18.1–20.7)
Que.	13.6	(12.9–14.3)	16.5	(15.8–17.3)	15.1	(14.6–15.6)
Ont.	14.7	(14.1–15.4)	15.7	(15.1–16.4)	15.2	(14.8–15.7)
Man.	14.4	(12.8–16.0)	16.0	(14.5–17.5)	15.2	(14.1–16.3)
Sask.	14.5	(13.1–15.8)	17.3	(16.1–18.5)	15.9	(15.0–16.8)
Alta.	12.9	(11.7–14.1)	12.7	(11.7–13.6)	12.8	(12.0–13.6)
B.C.	12.5	(11.6–13.3)	13.8	(13.0–14.7)	13.2	(12.6–13.8)
Y.T.	10.5 [▼]	(7.1 [▼] –13.9 [▼])	12.1	(9.1–15.1)	11.3	(9.2–13.4)
N.W.T.	9.5	(6.5–12.6)	8.1	(6.0–10.2)	8.8	(6.7–11.0)
Nun.	8.9 [▼]	(5.5 [▼] –12.4 [▼])	4.9 [▼]	(2.0 [▼] –7.8 [▼])	7.0	(5.0–8.9)
Canada	14.1	(13.8–14.5)	15.7	(15.4–16.1)	14.9	(14.7–15.2)

The data presented here represent a sample of a wider range of health status indicators that are available in the *Health Indicators* e-publication.



www.cihi.ca/indicators or www.statcan.ca

Asthma

Proportion of household population aged 12 and older who reported being diagnosed by a health professional as having asthma.

Source: Canadian Community Health Survey, 2005, Statistics Canada.

Diabetes

Proportion of household population aged 12 and older who reported being diagnosed by a health professional as having diabetes.

Source: Canadian Community Health Survey, 2005, Statistics Canada.

High blood pressure

Proportion of household population aged 12 and older who reported being diagnosed by a health professional as having high blood pressure.

Source: Canadian Community Health Survey, 2005, Statistics Canada.

Map Code	Health Region	Injury Hospitalization			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador					
		532	(512–552)	515	(495–535)
1011	Eastern, N.L.	*451	(427–475)	423	(399–446)
1012	Central, N.L.	*419	(378–460)	455	(411–499)
1013	Western, N.L.	594	(541–648)	589	(534–645)
Prince Edward Island					
		581	(542–620)	588	(549–628)
Nova Scotia					
		*494	(480–508)	481	(467–495)
1211	South Shore, N.S.	*451	(399–502)	446	(393–498)
1212	South West Nova, N.S.	510	(455–565)	479	(427–532)
1213	Annapolis Valley, N.S.	*426	(383–468)	414	(371–457)
1214	Colchester East Hants, N.S.	*444	(396–492)	509	(456–562)
1218	Cape Breton, N.S.	*657	(612–701)	583	(541–624)
1219	Capital, N.S.	*409	(389–429)	408	(388–428)
New Brunswick					
		*648	(630–666)	643	(626–661)
1301	Region 1, N.B. (Moncton area)	550	(518–582)	535	(503–567)
1302	Region 2, N.B. (Saint John area)	526	(493–558)	545	(511–578)
1303	Region 3, N.B. (Fredericton area)	*675	(637–713)	672	(634–709)
1304	Region 4, N.B. (Edmundston area)	*809	(733–886)	940	(854–1,026)
1306	Region 6, N.B. (Bathurst area)	*677	(618–737)	642	(585–700)
Ontario					
		*450	(446–454)	434	(430–437)
3501	Erie St. Clair	*466	(450–482)	453	(437–469)
3502	South West	550	(536–565)	531	(517–546)
3503	Waterloo Wellington	*448	(433–464)	417	(402–431)
3504	Hamilton Niagara Haldimand Brant	*506	(495–518)	502	(491–513)
3505	Central West	*361	(347–375)	333	(319–346)
3506	Mississauga Halton	*339	(328–351)	335	(324–346)
3507	Toronto Central	*363	(353–374)	360	(349–370)
3508	Central	*316	(307–324)	305	(297–313)
3509	Central East	*401	(391–411)	386	(376–395)
3510	South East	*482	(464–501)	450	(432–468)
3511	Champlain	*453	(441–465)	433	(422–445)
3512	North Simcoe Muskoka	551	(530–573)	525	(504–546)
3513	North East	*692	(670–713)	652	(631–673)
3514	North West	*756	(722–790)	832	(796–869)
Manitoba					
		*672	(658–687)	670	(655–684)
4610	Winnipeg	*510	(493–526)	498	(482–515)
4625	South Eastman	*631	(568–693)	598	(536–659)
4630	Interlake	*784	(720–848)	845	(780–910)
4640	Central	*703	(654–752)	746	(693–798)
4645	Assiniboine	*843	(777–910)	793	(728–858)

Injury hospitalization

Age-standardized rate of acute care hospitalization due to injury resulting from the transfer of energy (excludes poisoning and other non-traumatic injuries) per 100,000 population. This indicator contributes to an understanding of the adequacy and effectiveness of injury prevention efforts, including public education, product development and use, community and road design, and prevention and treatment resources.

Source: National Trauma Registry, Canadian Institute for Health Information.

Map Code	Health Region	Injury Hospitalization			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan		*839	(821–857)	834	(816–852)
4701	Sun Country	*1,036	(949–1,122)	1,111	(1,021–1,201)
4702	Five Hills	*924	(842–1,006)	884	(804–964)
4704	Regina	*779	(745–814)	778	(744–813)
4705	Sunrise	*1,040	(951–1,128)	1,069	(980–1,159)
4706	Saskatoon	*597	(570–625)	604	(576–631)
4709	Prince Albert	*849	(784–915)	834	(768–901)
4710	Prairie North	*879	(808–951)	898	(825–972)
Alberta		*756	(747–766)	726	(717–735)
4821	Chinook	*817	(774–860)	799	(756–842)
4822	Palliser	*	**	943	(885–1,001)
4823	Calgary	*575	(561–589)	574	(560–587)
4824	David Thompson	*1,199	(1,160–1,238)	1,083	(1,047–1,120)
4825	East Central	*866	(814–918)	835	(783–886)
4826	Capital	*626	(611–641)	635	(620–650)
4827	Aspen	*1,112	(1,063–1,162)	1,000	(954–1,047)
4828	Peace Country	*1,269	(1,207–1,331)	*	**
4829	Northern Lights	*856	(770–942)	894	(805–983)
British Columbia		*598	(591–605)	610	(603–618)
5911	East Kootenay	*920	(854–985)	956	(886–1,025)
5912	Kootenay Boundary	*784	(721–847)	865	(796–935)
5913	Okanagan	*638	(611–665)	702	(673–731)
5914	Thompson/Cariboo/Shuswap	*786	(749–822)	845	(806–884)
5921	Fraser East	*593	(565–622)	596	(567–625)
5922	Fraser North	*517	(499–536)	506	(488–524)
5923	Fraser South	548	(530–566)	545	(528–563)
5931	Richmond	*352	(324–379)	346	(321–372)
5932	Vancouver	*455	(438–472)	444	(428–460)
5933	North Shore	*597	(569–626)	633	(605–661)
5941	South Vancouver Island	*587	(562–612)	609	(584–634)
5942	Central Vancouver Island	*654	(623–686)	703	(669–736)
5943	North Vancouver Island	*786	(735–836)	727	(677–777)
5951	Northwest	*1,026	(954–1,098)	1,170	(1,090–1,249)
5952	Northern Interior	*815	(768–862)	826	(777–874)
5953	Northeast	*826	(753–899)	789	(715–862)
Yukon Territory		*1,164	(1,031–1,297)	1,117	(984–1,250)
Northwest Territories		*1,348	(1,222–1,475)	1,560	(1,417–1,703)
Nunavut		*1,201	(1,017–1,385)	1,019	(849–1,189)
Canada		543	(540–545)	..	.. ..
		2004–2005		2005–2006	
Quebec†		*511	(506–516)	*504	(499–509)
2401	Bas-Saint-Laurent	*621	(587–655)	*617	(583–650)
2402	Saguenay-Lac-Saint-Jean	*657	(627–688)	*629	(599–658)
2403	Capitale nationale	*527	(510–544)	*508	(491–525)
2404	Mauricie et Centre-du-Québec	*585	(563–606)	*566	(545–587)
2405	Estrie	*652	(623–680)	*630	(602–658)
2406	Montréal	*386	(377–394)	*388	(379–396)
2407	Outaouais	*517	(492–541)	*453	(430–476)
2408	Abitibi-Témiscamingue	*714	(670–759)	*697	(653–740)
2409	Côte-Nord	*753	(696–810)	*732	(677–787)
2411	Gaspésie-Îles-de-la-Madeleine	*743	(688–798)	*755	(700–811)
2412	Chaudière-Appalaches	*514	(492–536)	543	(520–566)
2413	Laval	*414	(394–435)	*410	(390–430)
2414	Lanaudière	546	(523–569)	556	(533–579)
2415	Laurentides	*595	(573–616)	*582	(561–603)
2416	Montréal	*500	(488–512)	*494	(482–506)

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Unemployment Rate 2007 %	Youth Unemployment Rate 2007 %
Newfoundland and Labrador		13.6	20.2
1011	Eastern, N.L.	11.7	18.1
1012	Central, N.L.	17.2	27.4
1013	Western, N.L.	19.0	25.8
Prince Edward Island		10.3	13.8
Nova Scotia		8.0	13.0
1211	South Shore, N.S.	8.3	16.1
1212	South West Nova, N.S.	10.6	18.8
1213	Annapolis Valley, N.S.	8.3	12.2
1214	Colchester East Hants, N.S.	6.8	11.7
1218	Cape Breton, N.S.	13.9	21.2
1219	Capital, N.S.	5.4	9.6
New Brunswick		7.5	11.7
1301	Region 1, N.B. (Moncton area)	6.7	9.6
1302	Region 2, N.B. (Saint John area)	5.5	12.9
1303	Region 3, N.B. (Fredericton area)	6.0	10.3
1304	Region 4, N.B. (Edmundston area)	9.8	*
1306	Region 6, N.B. (Bathurst area)	13.4	20.1
Quebec		7.2	12.5
2401	Bas-Saint-Laurent	8.9	10.0
2402	Saguenay-Lac-Saint-Jean	9.1	15.0
2403	Capitale nationale	4.9	9.9
2404	Mauricie et Centre-du-Québec	8.0	13.4
2405	Estrie	7.0	11.1
2406	Montréal	8.5	13.2
2407	Outaouais	6.4	14.7
2408	Abitibi-Témiscamingue	9.2	12.9
2409	Côte-Nord	9.2	*
2411	Gaspésie-Îles-de-la-Madeleine	17.2	*
2412	Chaudière-Appalaches	6.0	10.7
2413	Laval	5.2	9.8
2414	Lanaudière	7.0	16.6
2415	Laurentides	6.9	13.6
2416	Montréal	6.1	11.6
Ontario		6.4	13.0
3501	Erie St. Clair	8.3	14.2
3502	South West	5.5	10.8
3503	Waterloo Wellington	5.4	11.1
3504	Hamilton Niagara Haldimand Brant	6.2	11.8
3505	Central West	7.0	14.7
3506	Mississauga Halton	5.7	11.6
3507	Toronto Central	6.7	16.8
3508	Central	6.3	12.3
3509	Central East	7.8	14.9
3510	South East	5.3	12.2
3511	Champlain	5.5	12.5
3512	North Simcoe Muskoka	5.7	12.9
3513	North East	6.7	13.8
3514	North West	7.4	12.8
Manitoba		4.4	9.0
4610	Winnipeg	4.7	9.4
4625	South Eastman	3.8	8.2
4630	Interlake	4.2	9.2
4640	Central	3.3	6.7
4645	Assiniboine	3.1	*

Map Code	Health Region	Unemployment Rate 2007 %	Youth Unemployment Rate 2007 %
Saskatchewan		4.2	7.8
4701	Sun Country	2.4	*
4702	Five Hills	5.6	12.5
4704	Regina	4.8	8.9
4705	Sunrise	4.4	*
4706	Saskatoon	3.8	7.1
4709	Prince Albert	5.5	11.7
4710	Prairie North	4.1	8.6
Alberta		3.5	7.2
4821	Chinook	4.2	*
4822	Palliser	3.9	*
4823	Calgary	3.1	6.8
4824	David Thompson	3.1	6.7
4825	East Central	3.1	0.0
4826	Capital	3.8	7.6
4827	Aspen	4.1	*
4828	Peace Country	3.8	*
4829	Northern Lights	*	*
British Columbia		4.2	7.6
5911	East Kootenay	5.4	*
5912	Kootenay Boundary	5.6	*
5913	Okanagan	4.3	7.4
5914	Thompson/Cariboo/Shuswap	4.8	9.6
5921	Fraser East	4.2	7.4
5922	Fraser North	3.9	6.3
5923	Fraser South	3.9	8.9
5931	Richmond	4.6	*
5932	Vancouver	4.4	7.0
5933	North Shore	3.2	*
5941	South Vancouver Island	3.3	5.2
5942	Central Vancouver Island	5.0	7.5
5943	North Vancouver Island	5.5	*
5951	Northwest	8.3	*
5952	Northern Interior	5.0	*
5953	Northeast	*	*
Yukon Territory		..	..
Northwest Territories		..	..
Nunavut		..	..
Canada		6.0	11.2

The data presented here represent a sample of a wider range of non-medical determinants of health that are available in the *Health Indicators* e-publication.

 www.cihi.ca/indicators or www.statcan.ca

Unemployment rate

Proportion of the labour force aged 15 and older who did not have a job during the reference period. The labour force consists of people who are currently employed and people who are unemployed but were available to work in the reference period and had looked for work in the past four weeks. The reference period refers to a one-week period (from Sunday to Saturday) that usually includes the 15th day of the month. The unemployment rate is a traditional measure of the economy. Unemployed people tend to experience more health problems.

Source: Labour Force Survey (special tabulations), Statistics Canada.

Youth unemployment rate

Number of unemployed persons aged 14 to 24 expressed as a percentage of the labour force in this age group.

Source: Labour Force Survey (special tabulations), Statistics Canada.

Map Code	Health Region	Wait Time for Hip Fracture Surgery (Proportion With Surgery Same or Next Day)			
		2005–2006		2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador		61.8	(57.2–66.5)	59.2	(54.2–64.2)
1011	Eastern, N.L.	+56.6	(50.5–62.7)	+47.5	(40.7–54.3)
1012	Central, N.L.	+83.6	(71.9–95.4)	+80.7	(69.2–92.2)
1013	Western, N.L.	63.9	(51.3–76.6)	+83.3	(69.5–97.0)
Prince Edward Island		+78.3	(70.2–86.4)	+79.3	(70.9–87.6)
Nova Scotia		+69.2	(65.9–72.6)	61.7	(58.3–65.2)
1211	South Shore, N.S.	77.3	(64.8–89.8)	70.4	(56.5–84.3)
1212	South West Nova, N.S.	74.9	(62.7–87.1)	+81.2	(68.3–94.0)
1213	Annapolis Valley, N.S.	+82.9	(72.5–93.4)	+82.9	(71.8–94.0)
1214	Colchester East Hants, N.S.	70.5	(57.5–83.6)	+44.7	(32.0–57.4)
1218	Cape Breton, N.S.	+74.4	(66.7–82.1)	70.3	(62.2–78.5)
1219	Capital, N.S.	+53.5	(47.5–59.6)	+46.3	(40.3–52.3)
New Brunswick		67.1	(63.4–70.8)	+73.3	(69.4–77.2)
1301	Region 1, N.B. (Moncton area)	67.9	(60.7–75.2)	+73.3	(65.7–80.9)
1302	Region 2, N.B. (Saint John area)	+54.1	(46.7–61.6)	62.7	(54.7–70.6)
1303	Region 3, N.B. (Fredericton area)	+75.5	(67.0–83.9)	+79.6	(71.0–88.1)
1304	Region 4, N.B. (Edmundston area)	+49.5	(34.4–64.6)	68.6	(52.5–84.6)
1306	Region 6, N.B. (Bathurst area)	+84.3	(69.2–99.4)	+88.7	(75.9–100.0)
Quebec		..	.. ..	..	.. ..
2401	Bas-Saint-Laurent	..	.. ..	..	.. ..
2402	Saguenay-Lac-Saint-Jean	..	.. ..	..	.. ..
2403	Capitale nationale	..	.. ..	..	.. ..
2404	Mauricie et Centre-du-Québec	..	.. ..	..	.. ..
2405	Estrie	..	.. ..	..	.. ..
2406	Montréal	..	.. ..	..	.. ..
2407	Outaouais	..	.. ..	..	.. ..
2408	Abitibi-Témiscamingue	..	.. ..	..	.. ..
2409	Côte-Nord	..	.. ..	..	.. ..
2411	Gaspésie-Îles-de-la-Madeleine	..	.. ..	..	.. ..
2412	Chaudière-Appalaches	..	.. ..	..	.. ..
2413	Laval	..	.. ..	..	.. ..
2414	Lanaudière	..	.. ..	..	.. ..
2415	Laurentides	..	.. ..	..	.. ..
2416	Montérégie	..	.. ..	..	.. ..
Ontario		64.5	(63.5–65.5)	64.2	(63.2–65.2)
3501	Erie St. Clair	+54.4	(50.0–58.7)	65.6	(61.1–70.0)
3502	South West	+49.4	(46.1–52.6)	+46.9	(43.5–50.3)
3503	Waterloo Wellington	+83.2	(78.6–87.8)	+82.6	(78.1–87.1)
3504	Hamilton Niagara Haldimand Brant	66.1	(63.3–69.0)	65.2	(62.4–68.0)
3505	Central West	63.4	(58.0–68.9)	+79.0	(73.1–84.9)
3506	Mississauga Halton	+80.5	(76.3–84.8)	+72.5	(68.2–76.8)
3507	Toronto Central	+58.9	(55.5–62.4)	+51.6	(48.0–55.2)
3508	Central	+70.8	(67.5–74.0)	66.1	(62.9–69.3)
3509	Central East	66.4	(63.3–69.6)	+69.5	(66.5–72.6)
3510	South East	+72.1	(67.9–76.3)	+69.2	(65.0–73.4)
3511	Champlain	+59.7	(56.3–63.2)	60.4	(57.1–63.6)
3512	North Simcoe Muskoka	+52.1	(46.7–57.6)	59.2	(53.8–64.5)
3513	North East	66.5	(61.9–71.1)	64.2	(59.8–68.6)
3514	North West	67.3	(60.3–74.3)	63.5	(56.7–70.3)
Manitoba		+53.3	(50.3–56.3)	+53.4	(50.4–56.5)
4610	Winnipeg	+49.3	(45.3–53.3)	+50.7	(46.7–54.7)
4625	South Eastman	+46.7	(28.3–65.1)	+41.3	(21.9–60.7)
4630	Interlake	+49.3	(36.8–61.9)	52.4	(41.0–63.8)
4640	Central	+50.3	(40.6–60.1)	+47.0	(35.5–58.6)
4645	Assiniboine	+72.0	(62.8–81.3)	+76.6	(66.4–86.9)

Map Code	Health Region	Wait Time for Hip Fracture Surgery (Proportion With Surgery Same or Next Day)			
		2005–2006		2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan		*55.6	(52.6–58.6)	*50.9	(47.8–54.1)
4701	Sun Country	*47.9	(35.8–60.0)	59.7	(46.2–73.2)
4702	Five Hills	*35.0	(25.3–44.7)	*38.7	(28.1–49.3)
4704	Regina	66.9	(60.7–73.1)	68.4	(61.8–75.0)
4705	Sunrise	*53.6	(42.5–64.6)	68.9	(57.1–80.7)
4706	Saskatoon	*52.2	(46.0–58.4)	*43.5	(37.5–49.5)
4709	Prince Albert	68.8	(56.3–81.3)	54.3	(40.0–68.6)
4710	Prairie North	*40.1	(26.7–53.4)	*27.4	(13.4–41.4)
Alberta		66.8	(64.6–69.0)	61.5	(59.3–63.7)
4821	Chinook	*82.2	(74.1–90.3)	*82.5	(74.8–90.2)
4822	Palliser	*79.8	(68.7–90.8)	68.8	(58.7–78.9)
4823	Calgary	*69.9	(66.0–73.8)	60.1	(56.1–64.0)
4824	David Thompson	*54.8	(48.7–60.9)	*49.9	(43.2–56.5)
4825	East Central	67.3	(58.5–76.1)	68.7	(58.5–78.9)
4826	Capital	66.2	(62.3–70.2)	61.7	(57.8–65.5)
4827	Aspen	*37.2	(25.4–49.1)	*49.2	(38.6–59.8)
4828	Peace Country	64.4	(50.9–77.8)	*	**
4829	Northern Lights	*	**	*	**
British Columbia		*70.7	(69.1–72.3)	*66.5	(64.9–68.1)
5911	East Kootenay	*84.3	(72.6–96.0)	72.7	(61.2–84.1)
5912	Kootenay Boundary	*81.8	(71.5–92.2)	*80.3	(68.1–92.5)
5913	Okanagan	69.1	(64.4–73.8)	65.9	(61.2–70.7)
5914	Thompson/Cariboo/Shuswap	66.7	(59.6–73.8)	56.8	(49.8–63.8)
5921	Fraser East	*79.7	(73.3–86.2)	*75.3	(68.5–82.0)
5922	Fraser North	*53.1	(48.2–57.9)	*58.0	(53.2–62.8)
5923	Fraser South	*73.7	(69.2–78.2)	*68.0	(63.4–72.7)
5931	Richmond	*77.1	(68.2–85.9)	*79.0	(69.7–88.4)
5932	Vancouver	69.2	(64.8–73.5)	*54.5	(49.9–59.2)
5933	North Shore	66.3	(60.1–72.6)	59.8	(53.2–66.3)
5941	South Vancouver Island	67.8	(63.1–72.5)	*68.4	(63.9–72.9)
5942	Central Vancouver Island	*81.7	(75.9–87.4)	*82.9	(77.2–88.7)
5943	North Vancouver Island	*93.6	(82.5–100.0)	*88.1	(77.8–98.4)
5951	Northwest	68.7	(49.6–87.7)	58.4	(39.7–77.0)
5952	Northern Interior	71.5	(61.0–82.1)	64.2	(53.8–74.6)
5953	Northeast	*94.0	(74.0–100.0)	73.6	(54.5–92.8)
Yukon Territory		*	**	59.4	(38.0–80.9)
Northwest Territories		82.2	(55.8–100.0)	*	**
Nunavut		*	**	*	**
Canada		65.2		63.3	

Wait time for hip fracture surgery

Proportion with surgery same or next day: risk-adjusted proportion of hip fracture patients aged 65 and older who underwent hip fracture surgery on the day of admission or the next day. While some hip fracture patients need medical treatment to stabilize their condition before surgery, research suggests patients typically benefit from timely surgery in terms of reduced morbidity, mortality, pain and length of stay in hospital as well as improved rehabilitation. This indicator is intended to provide a comparable measure of access to care across the country and to be used as a tool to identify opportunities for improvement, using a national data source where wait times can be measured only in days. However, this indicator is not designed to directly report on the 48-hour benchmark, for which some jurisdictions and hospitals may have more precise information available than the national database. The hip fracture wait time indicator in this report will be different from those measuring the benchmark and should not be directly compared.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Wait Time for Hip Fracture Surgery (Proportion With Surgery Same, Next or the Day After)			
		2005–2006		2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador		85.3	(81.8–88.8)	83.7	(79.9–87.5)
1011	Eastern, N.L.	85.0	(80.3–89.6)	79.3	(74.2–84.5)
1012	Central, N.L.	92.2	(83.5–100.0)	*93.8	(85.1–100.0)
1013	Western, N.L.	86.3	(76.9–95.8)	87.9	(77.5–98.2)
Prince Edward Island		89.6	(83.5–95.7)	89.5	(83.3–95.8)
Nova Scotia		84.0	(81.5–86.5)	*78.0	(75.4–80.6)
1211	South Shore, N.S.	85.2	(75.6–94.7)	82.5	(72.0–93.0)
1212	South West Nova, N.S.	84.4	(75.2–93.5)	93.2	(83.5–100.0)
1213	Annapolis Valley, N.S.	*95.1	(87.3–100.0)	91.7	(83.3–100.0)
1214	Colchester East Hants, N.S.	87.1	(77.3–96.9)	*61.8	(52.1–71.4)
1218	Cape Breton, N.S.	*91.1	(85.4–96.9)	*91.2	(85.0–97.4)
1219	Capital, N.S.	*73.0	(68.4–77.6)	*64.8	(60.3–69.4)
New Brunswick		83.4	(80.6–86.2)	85.3	(82.4–88.3)
1301	Region 1, N.B. (Moncton area)	82.5	(77.0–87.9)	86.7	(81.0–92.5)
1302	Region 2, N.B. (Saint John area)	78.8	(73.2–84.5)	82.0	(75.9–88.2)
1303	Region 3, N.B. (Fredericton area)	85.8	(79.4–92.1)	84.4	(77.8–90.9)
1304	Region 4, N.B. (Edmundston area)	*70.1	(58.5–81.6)	77.8	(65.7–89.9)
1306	Region 6, N.B. (Bathurst area)	95.0	(83.5–100.0)	*94.2	(84.5–100.0)
Quebec		..	.. ..	..	.. ..
2401	Bas-Saint-Laurent	..	.. ..	..	.. ..
2402	Saguenay-Lac-Saint-Jean	..	.. ..	..	.. ..
2403	Capitale nationale	..	.. ..	..	.. ..
2404	Mauricie et Centre-du-Québec	..	.. ..	..	.. ..
2405	Estrie	..	.. ..	..	.. ..
2406	Montréal	..	.. ..	..	.. ..
2407	Outaouais	..	.. ..	..	.. ..
2408	Abitibi-Témiscamingue	..	.. ..	..	.. ..
2409	Côte-Nord	..	.. ..	..	.. ..
2411	Gaspésie-Îles-de-la-Madeleine	..	.. ..	..	.. ..
2412	Chaudière-Appalaches	..	.. ..	..	.. ..
2413	Laval	..	.. ..	..	.. ..
2414	Lanaudière	..	.. ..	..	.. ..
2415	Laurentides	..	.. ..	..	.. ..
2416	Montérégie	..	.. ..	..	.. ..
Ontario		*83.5	(82.7–84.3)	83.8	(83.0–84.5)
3501	Erie St. Clair	81.8	(78.5–85.0)	85.5	(82.1–88.8)
3502	South West	*71.1	(68.7–73.6)	*71.4	(68.9–74.0)
3503	Waterloo Wellington	*93.3	(89.8–96.7)	*92.6	(89.2–96.1)
3504	Hamilton Niagara Haldimand Brant	83.8	(81.7–86.0)	84.7	(82.5–86.9)
3505	Central West	82.7	(78.6–86.8)	*89.0	(84.5–93.5)
3506	Mississauga Halton	*91.8	(88.6–95.0)	*88.8	(85.5–92.1)
3507	Toronto Central	82.6	(80.0–85.2)	*75.5	(72.7–78.3)
3508	Central	*88.1	(85.6–90.5)	86.1	(83.7–88.6)
3509	Central East	85.4	(83.1–87.8)	*87.3	(85.0–89.6)
3510	South East	86.9	(83.7–90.1)	84.7	(81.5–87.9)
3511	Champlain	81.9	(79.3–84.5)	82.1	(79.6–84.6)
3512	North Simcoe Muskoka	*72.9	(68.8–77.0)	81.3	(77.2–85.3)
3513	North East	84.6	(81.1–88.0)	86.1	(82.7–89.4)
3514	North West	85.0	(79.6–90.3)	87.4	(82.3–92.6)
Manitoba		*75.4	(73.2–77.7)	*76.3	(74.0–78.6)
4610	Winnipeg	*72.0	(69.0–75.0)	*75.9	(72.9–79.0)
4625	South Eastman	77.3	(63.4–91.3)	*61.3	(46.3–76.4)
4630	Interlake	*64.0	(54.4–73.5)	*73.4	(64.7–82.1)
4640	Central	79.6	(72.2–86.9)	80.2	(71.4–89.0)
4645	Assiniboine	90.3	(83.4–97.2)	89.0	(81.3–96.7)

Map Code	Health Region	Wait Time for Hip Fracture Surgery (Proportion With Surgery Same, Next or the Day After)			
		2005–2006		2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan		*80.0	(77.8–82.3)	*76.4	(74.0–78.8)
4701	Sun Country	84.3	(75.2–93.5)	77.3	(67.1–87.6)
4702	Five Hills	*61.4	(54.1–68.8)	*54.3	(46.2–62.3)
4704	Regina	87.8	(83.2–92.4)	88.0	(83.1–93.0)
4705	Sunrise	*72.9	(64.4–81.3)	89.3	(80.4–98.3)
4706	Saskatoon	80.1	(75.5–84.8)	*73.9	(69.3–78.4)
4709	Prince Albert	80.4	(70.8–90.0)	80.5	(69.7–91.3)
4710	Prairie North	78.2	(68.1–88.2)	*66.6	(56.0–77.2)
Alberta		*86.6	(84.9–88.2)	84.4	(82.7–86.1)
4821	Chinook	*91.1	(85.0–97.3)	*94.7	(88.8–100.0)
4822	Palliser	89.7	(81.4–98.1)	85.8	(78.1–93.4)
4823	Calgary	*89.0	(86.1–92.0)	85.1	(82.1–88.1)
4824	David Thompson	*79.2	(74.7–83.8)	80.2	(75.2–85.3)
4825	East Central	83.0	(76.3–89.7)	82.8	(74.9–90.6)
4826	Capital	*87.9	(84.9–90.9)	84.1	(81.2–87.1)
4827	Aspen	*69.6	(60.6–78.6)	76.5	(68.4–84.6)
4828	Peace Country	89.0	(78.6–99.3)	*	**
4829	Northern Lights	*	**	*	**
British Columbia		*89.8	(88.6–91.1)	*88.0	(86.7–89.2)
5911	East Kootenay	*96.3	(87.4–100.0)	82.6	(73.9–91.4)
5912	Kootenay Boundary	*92.9	(85.0–100.0)	*95.7	(86.4–100.0)
5913	Okanagan	*89.2	(85.7–92.8)	*88.6	(85.1–92.2)
5914	Thompson/Cariboo/Shuswap	87.2	(81.8–92.6)	81.1	(75.8–86.4)
5921	Fraser East	*93.4	(88.6–98.3)	*90.4	(85.1–95.6)
5922	Fraser North	81.2	(77.6–84.9)	85.0	(81.4–88.7)
5923	Fraser South	*90.2	(86.8–93.6)	*89.5	(85.9–93.1)
5931	Richmond	*92.6	(85.9–99.2)	*96.6	(89.5–100.0)
5932	Vancouver	*89.3	(86.0–92.6)	82.9	(79.3–86.5)
5933	North Shore	86.6	(81.9–91.4)	84.1	(79.1–89.1)
5941	South Vancouver Island	*91.8	(88.3–95.4)	*89.2	(85.8–92.6)
5942	Central Vancouver Island	*96.5	(92.1–100.0)	*95.7	(91.3–100.0)
5943	North Vancouver Island	*97.6	(89.2–100.0)	*96.9	(89.1–100.0)
5951	Northwest	87.5	(72.8–100.0)	89.1	(74.7–100.0)
5952	Northern Interior	88.3	(80.3–96.3)	87.6	(79.6–95.5)
5953	Northeast	99.5	(84.4–100.0)	85.0	(70.3–99.7)
Yukon Territory		*	**	76.2	(60.2–92.2)
Northwest Territories		99.5	(79.4–100.0)	72.7	(51.0–94.4)
Nunavut		*	**	*	**
Canada		84.5		83.7	

Wait time for hip fracture surgery

Proportion with surgery same, next day or day after: risk-adjusted proportion of hip fracture patients aged 65 and older who underwent hip fracture surgery on the day of admission, the next day or the day after that. While some hip fracture patients need medical treatment to stabilize their condition before surgery, research suggests patients typically benefit from timely surgery in terms of reduced morbidity, mortality, pain and length of stay in hospital as well as improved rehabilitation. This indicator is intended to provide a comparable measure of access to care across the country and to be used as a tool to identify opportunities for improvement, using a national data source where wait times can be measured only in days. However, this indicator is not designed to directly report on the 48-hour benchmark, for which some jurisdictions and hospitals may have more precise information available than the national database. The hip fracture wait time indicator in this report will be different from those measuring the benchmark and should not be directly compared.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Hip Fracture Hospitalization				In-Hospital Hip Fracture	
		2005–2006		2006–2007		2004–2005 to 2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	Risk-Adjusted Rate per 1,000	95% CI
Newfoundland and Labrador		*608	(552–664)	509	(459–560)	0.8	(0.6–1.0)
1011	Eastern, N.L.	573	(501–646)	459	(395–523)	0.7	(0.4–1.0)
1012	Central, N.L.	483	(375–592)	468	(363–572)	*	**
1013	Western, N.L.	609	(473–745)	395	(288–502)	*	**
Prince Edward Island		597	(497–697)	552	(456–648)	0.6	(0.2–1.0)
Nova Scotia		*456	(423–489)	429	(397–461)	0.8	(0.6–1.0)
1211	South Shore, N.S.	*379	(276–483)	334	(233–434)	*	**
1212	South West Nova, N.S.	456	(344–569)	396	(290–501)	*	**
1213	Annapolis Valley, N.S.	510	(401–619)	467	(361–574)	*	**
1214	Colchester East Hants, N.S.	406	(292–519)	396	(287–505)	*	**
1218	Cape Breton, N.S.	571	(476–666)	537	(445–629)	0.7	(0.3–1.1)
1219	Capital, N.S.	*341	(291–391)	373	(321–424)	0.8	(0.5–1.1)
New Brunswick		*548	(506–589)	506	(467–545)	0.6	(0.4–0.8)
1301	Region 1, N.B. (Moncton area)	516	(437–594)	480	(407–553)	0.7	(0.4–1.0)
1302	Region 2, N.B. (Saint John area)	587	(499–675)	491	(413–570)	1.0	(0.7–1.4)
1303	Region 3, N.B. (Fredericton area)	541	(452–631)	543	(453–633)	0.6	(0.2–1.0)
1304	Region 4, N.B. (Edmundston area)	521	(367–675)	481	(336–625)	*	**
1306	Region 6, N.B. (Bathurst area)	*321	(224–418)	443	(334–552)	*	**
Ontario		*521	(511–532)	508	(498–518)	0.6	(0.6–0.8)
3501	Erie St. Clair	538	(493–583)	496	(453–539)	0.7	(0.5–0.9)
3502	South West	*670	(630–710)	624	(586–662)	0.7	(0.5–0.8)
3503	Waterloo Wellington	507	(461–552)	498	(453–542)	0.7	(0.5–1.0)
3504	Hamilton Niagara Haldimand Brant	514	(485–543)	507	(479–536)	*0.6	(0.4–0.7)
3505	Central West	465	(417–514)	378	(335–421)	0.5	(0.2–0.8)
3506	Mississauga Halton	495	(454–536)	447	(409–485)	0.6	(0.4–0.9)
3507	Toronto Central	*444	(413–475)	401	(372–430)	*0.6	(0.4–0.7)
3508	Central	*454	(425–483)	436	(408–464)	*0.6	(0.4–0.7)
3509	Central East	*472	(444–501)	509	(480–538)	0.7	(0.5–0.9)
3510	South East	*612	(561–664)	605	(554–655)	1.0	(0.7–1.2)
3511	Champlain	471	(439–504)	495	(463–528)	0.8	(0.6–0.9)
3512	North Simcoe Muskoka	*703	(639–767)	700	(636–764)	0.6	(0.3–0.8)
3513	North East	530	(483–576)	592	(544–641)	0.7	(0.5–0.9)
3514	North West	*615	(534–695)	599	(520–679)	0.7	(0.4–1.0)
Manitoba		*470	(439–500)	499	(467–530)	*1.2	(1.0–1.2)
4610	Winnipeg	*365	(329–401)	414	(376–451)	*1.4	(1.2–1.6)
4625	South Eastman	572	(403–742)	510	(346–673)	*	**
4630	Interlake	589	(458–721)	808	(650–965)	*	**
4640	Central	440	(340–540)	479	(372–587)	0.9	(0.4–1.3)
4645	Assiniboine	*676	(553–799)	579	(465–692)	0.6	(0.1–1.0)

Hip fracture hospitalization

Age-standardized acute care hospitalization rate for fracture of the hip per 100,000 population aged 65 and older. Hip fractures occur for various reasons, including environmental hazards, the prescription of potentially inappropriate psychotropic medications to the ambulatory elderly and safety issues in long-term care facilities. As well as causing disability or death, hip fracture may have a major effect on independence and quality of life.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

In-hospital hip fracture

The risk-adjusted rate of in-hospital hip fracture among acute care inpatients aged 65 years and older per 1,000 discharges. Rates are based on three years of pooled data. This indicator represents a potentially preventable complication resulting from an inpatient stay in an acute care facility.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec. Beginning with *Health Indicators 2008* (2004–2005 to 2006–2007 data) in-hospital hip fracture rate is reported by the jurisdiction where hospitalization occurred rather than by the jurisdiction of patient residence. With this change the indicator will better reflect the concept of patient safety in hospitals. Comparison with rates reported for previous years should be made with caution.

Source: Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Hip Fracture Hospitalization				In-Hospital Hip Fracture	
		2005–2006		2006–2007		2004–2005 to 2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	Risk-Adjusted Rate per 1,000	95% CI
Saskatchewan		*600	(564–635)	583	(548–618)	0.8	(0.6–0.8)
4701	Sun Country	*696	(548–844)	692	(542–841)	*	**
4702	Five Hills	*841	(686–996)	776	(621–932)	*	**
4704	Regina	557	(485–629)	521	(451–590)	0.6	(0.3–0.9)
4705	Sunrise	*690	(558–821)	577	(459–695)	0.6	(0.2–1.1)
4706	Saskatoon	496	(433–559)	540	(474–606)	0.9	(0.6–1.1)
4709	Prince Albert	520	(399–640)	362	(261–464)	*	**
4710	Prairie North	626	(469–784)	570	(420–721)	*	**
Alberta		*535	(512–558)	516	(495–538)	*1.0	(1.0–1.2)
4821	Chinook	540	(447–632)	628	(531–726)	1.0	(0.6–1.4)
4822	Palliser	*	**	537	(427–646)	*	**
4823	Calgary	470	(432–507)	449	(413–484)	*1.1	(0.9–1.3)
4824	David Thompson	*843	(751–935)	644	(565–724)	*1.4	(1.1–1.6)
4825	East Central	*678	(567–788)	531	(435–627)	1.2	(0.8–1.6)
4826	Capital	491	(452–530)	496	(458–534)	0.9	(0.7–1.1)
4827	Aspen	529	(432–626)	578	(476–679)	0.9	(0.4–1.3)
4828	Peace Country	605	(464–746)	*	**	*	**
4829	Northern Lights	*274	(71–477)	709	(362–1,056)	*	**
British Columbia		509	(492–525)	504	(487–520)	*1.0	(1.0–1.0)
5911	East Kootenay	*685	(542–828)	697	(555–839)	*	**
5912	Kootenay Boundary	566	(447–685)	394	(296–492)	*	**
5913	Okanagan	524	(474–575)	535	(485–586)	0.7	(0.5–1.0)
5914	Thompson/Cariboo/Shuswap	*665	(578–752)	672	(585–759)	1.1	(0.7–1.4)
5921	Fraser East	495	(429–561)	415	(355–475)	0.9	(0.6–1.3)
5922	Fraser North	551	(499–604)	534	(485–583)	1.1	(0.8–1.3)
5923	Fraser South	*619	(565–673)	527	(481–573)	*1.2	(1.0–1.5)
5931	Richmond	*386	(313–459)	427	(348–506)	*	**
5932	Vancouver	*394	(354–434)	404	(363–445)	1.0	(0.7–1.2)
5933	North Shore	504	(440–568)	549	(479–618)	1.0	(0.6–1.3)
5941	South Vancouver Island	*352	(311–394)	390	(347–434)	*1.1	(0.9–1.4)
5942	Central Vancouver Island	*571	(507–636)	521	(462–581)	1.1	(0.8–1.4)
5943	North Vancouver Island	566	(455–677)	586	(479–694)	*	**
5951	Northwest	600	(418–782)	552	(388–716)	*	**
5952	Northern Interior	*653	(517–789)	759	(615–903)	*	**
5953	Northeast	692	(464–921)	815	(547–1,083)	*	**
Yukon Territory		494	(169–820)	1,070	(627–1,512)	*	**
Northwest Territories		820	(405–1,234)	1,119	(629–1,608)	*	**
Nunavut		1,042	(231–1,853)	*	**	*	**
Canada		502	(495–508)	..	.. ..	0.8	
		2004–2005		2005–2006		2004–2005 to 2006–2007	
Quebec†		*469	(457–482)	*438	(426–450)	..	.. ..
2401	Bas-Saint-Laurent	460	(393–527)	*386	(325–446)	..	.. ..
2402	Saguenay-Lac-Saint-Jean	460	(391–529)	503	(432–573)	..	.. ..
2403	Capitale nationale	*470	(430–511)	*432	(394–470)	..	.. ..
2404	Mauricie et Centre-du-Québec	*445	(401–490)	*408	(366–450)	..	.. ..
2405	Estrie	*451	(392–509)	471	(412–531)	..	.. ..
2406	Montréal	*480	(457–504)	*462	(439–485)	..	.. ..
2407	Outaouais	542	(467–617)	475	(406–544)	..	.. ..
2408	Abitibi-Témiscamingue	527	(423–632)	*647	(533–762)	..	.. ..
2409	Côte-Nord	477	(344–610)	455	(328–583)	..	.. ..
2411	Gaspésie-Îles-de-la-Madeleine	*383	(293–472)	463	(367–559)	..	.. ..
2412	Chaudière-Appalaches	478	(423–532)	*414	(364–465)	..	.. ..
2413	Laval	*428	(371–485)	*381	(328–433)	..	.. ..
2414	Lanaudière	474	(410–538)	*401	(344–458)	..	.. ..
2415	Laurentides	*453	(397–508)	451	(397–505)	..	.. ..
2416	Montréal	*479	(446–511)	*423	(393–453)	..	.. ..

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Caesarean Section			
		2005–2006		2006–2007	
		%	95% CI	%	95% CI
Newfoundland and Labrador					
		30.1	(28.8–31.5)	30.6	(29.2–31.9)
1011	Eastern, N.L.	30.2	(28.5–32.0)	32.5	(30.8–34.3)
1012	Central, N.L.	34.0	(30.6–37.5)	27.8	(24.5–31.0)
1013	Western, N.L.	27.4	(23.7–31.0)	27.7	(24.1–31.3)
Prince Edward Island					
		29.8	(27.3–32.3)	31.4	(29.0–33.8)
Nova Scotia					
		28.0	(27.0–29.0)	26.8	(25.8–27.7)
1211	South Shore, N.S.	27.5	(22.9–32.0)	30.2	(25.4–34.9)
1212	South West Nova, N.S.	27.3	(23.4–31.3)	24.9	(21.1–28.7)
1213	Annapolis Valley, N.S.	26.1	(22.9–29.4)	21.9	(18.8–24.9)
1214	Colchester East Hants, N.S.	30.9	(27.5–34.4)	29.6	(26.2–33.1)
1218	Cape Breton, N.S.	29.0	(26.3–31.7)	25.6	(22.9–28.2)
1219	Capital, N.S.	28.0	(26.6–29.4)	27.0	(25.7–28.4)
New Brunswick					
		28.7	(27.6–29.7)	28.0	(26.9–29.0)
1301	Region 1, N.B. (Moncton area)	25.9	(23.8–27.9)	30.4	(28.3–32.5)
1302	Region 2, N.B. (Saint John area)	25.3	(23.2–27.4)	22.2	(20.2–24.1)
1303	Region 3, N.B. (Fredericton area)	32.3	(30.1–34.4)	29.4	(27.2–31.6)
1304	Region 4, N.B. (Edmundston area)	30.2	(25.8–34.6)	32.2	(27.7–36.6)
1306	Region 6, N.B. (Bathurst area)	26.0	(22.2–29.8)	23.0	(19.4–26.6)
Ontario					
		27.7	(27.5–28.0)	27.8	(27.6–28.1)
3501	Erie St. Clair	25.5	(24.5–26.5)	26.5	(25.4–27.5)
3502	South West	23.2	(22.4–24.1)	23.3	(22.4–24.1)
3503	Waterloo Wellington	27.7	(26.7–28.7)	26.6	(25.6–27.5)
3504	Hamilton Niagara Haldimand Brant	27.5	(26.8–28.3)	27.8	(27.0–28.6)
3505	Central West	27.9	(27.1–28.7)	29.0	(28.1–29.8)
3506	Mississauga Halton	25.2	(24.4–25.9)	26.2	(25.4–26.9)
3507	Toronto Central	30.0	(29.2–30.8)	29.1	(28.4–29.9)
3508	Central	28.4	(27.8–29.1)	28.3	(27.6–28.9)
3509	Central East	30.3	(29.5–31.0)	30.0	(29.3–30.7)
3510	South East	28.8	(27.4–30.1)	27.4	(26.0–28.7)
3511	Champlain	27.8	(27.0–28.6)	29.0	(28.2–29.9)
3512	North Simcoe Muskoka	30.0	(28.6–31.4)	31.9	(30.5–33.3)
3513	North East	29.0	(27.8–30.3)	27.9	(26.7–29.1)
3514	North West	22.8	(21.2–24.4)	22.4	(20.8–24.0)
Manitoba					
		21.3	(20.6–22.0)	19.8	(19.2–20.5)
4610	Winnipeg	21.2	(20.3–22.2)	19.7	(18.8–20.6)
4625	South Eastman	20.4	(17.6–23.3)	18.3	(15.7–20.9)
4630	Interlake	17.8	(15.2–20.4)	17.0	(14.4–19.6)
4640	Central	22.6	(20.4–24.8)	21.4	(19.3–23.5)
4645	Assiniboine	28.7	(25.3–32.0)	27.0	(23.6–30.3)

Caesarean section

Proportion of women delivering babies in acute care hospitals by Caesarean section. Caesarean section rates provide information on the frequency of surgical birth delivery relative to all modes of birth delivery. Since unnecessary Caesarean section delivery increases maternal morbidity/mortality and is associated with higher costs, Caesarean section rates are often used to monitor clinical practices with an implicit assumption that lower rates indicate more appropriate, as well as more efficient, care.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Caesarean Section			
		2005–2006		2006–2007	
		%	95% CI	%	95% CI
Saskatchewan		21.1	(20.4–21.9)	20.8	(20.1–21.5)
4701	Sun Country	18.3	(15.2–21.4)	20.0	(16.9–23.2)
4702	Five Hills	21.5	(17.9–25.0)	25.3	(21.4–29.3)
4704	Regina	20.0	(18.5–21.5)	18.8	(17.4–20.3)
4705	Sunrise	26.9	(23.2–30.6)	27.9	(24.1–31.7)
4706	Saskatoon	23.2	(21.7–24.6)	23.2	(21.8–24.6)
4709	Prince Albert	18.5	(16.1–20.9)	16.4	(14.1–18.6)
4710	Prairie North	20.3	(18.0–22.6)	18.1	(15.8–20.3)
Alberta		26.3	(25.8–26.7)	27.0	(26.6–27.4)
4821	Chinook	22.2	(20.4–24.0)	25.8	(24.0–27.6)
4822	Palliser	23.0	(20.6–25.4)	24.7	(22.4–26.9)
4823	Calgary	28.3	(27.5–29.0)	27.9	(27.2–28.5)
4824	David Thompson	26.9	(25.5–28.3)	28.1	(26.8–29.5)
4825	East Central	27.4	(24.9–29.8)	26.6	(24.3–29.0)
4826	Capital	25.5	(24.7–26.3)	26.3	(25.5–27.1)
4827	Aspen	25.0	(23.2–26.7)	28.2	(26.5–30.0)
4828	Peace Country	22.8	(21.0–24.6)	*	**
4829	Northern Lights	23.2	(20.9–25.6)	27.7	(25.4–30.0)
British Columbia		30.4	(29.9–30.8)	30.5	(30.0–30.9)
5911	East Kootenay	31.4	(27.8–34.9)	32.2	(28.8–35.7)
5912	Kootenay Boundary	23.3	(19.9–26.8)	23.7	(20.2–27.1)
5913	Okanagan	30.3	(28.5–32.1)	32.0	(30.2–33.7)
5914	Thompson/Cariboo/Shuswap	32.8	(30.7–35.0)	32.5	(30.4–34.6)
5921	Fraser East	28.0	(26.4–29.6)	26.1	(24.5–27.6)
5922	Fraser North	29.5	(28.3–30.7)	31.6	(30.3–32.8)
5923	Fraser South	31.3	(30.2–32.4)	31.4	(30.3–32.5)
5931	Richmond	32.7	(30.4–35.1)	30.6	(28.4–32.9)
5932	Vancouver	29.3	(28.1–30.4)	29.6	(28.4–30.7)
5933	North Shore	32.2	(30.3–34.2)	32.4	(30.5–34.3)
5941	South Vancouver Island	36.8	(34.9–38.6)	36.9	(35.1–38.7)
5942	Central Vancouver Island	29.1	(27.1–31.1)	27.5	(25.6–29.5)
5943	North Vancouver Island	26.5	(23.6–29.3)	28.2	(25.3–31.1)
5951	Northwest	26.8	(23.9–29.7)	26.0	(23.0–28.9)
5952	Northern Interior	28.3	(26.1–30.5)	27.3	(25.0–29.5)
5953	Northeast	27.1	(24.2–30.0)	29.4	(26.5–32.2)
Yukon Territory		27.2	(22.4–32.0)	22.9	(18.4–27.4)
Northwest Territories		24.8	(21.7–28.0)	19.6	(16.7–22.4)
Nunavut		8.2	(6.2–10.3)	6.8	(5.0–8.7)
Canada		26.3	(26.2–26.5)	..	.. ..
		2004–2005		2005–2006	
Quebec†		22.3	(22.0–22.6)	22.9	(22.6–23.2)
2401	Bas-Saint-Laurent	24.6	(22.4–26.7)	24.7	(22.7–26.8)
2402	Saguenay-Lac-Saint-Jean	22.2	(20.6–23.9)	21.3	(19.7–22.9)
2403	Capitale nationale	21.7	(20.6–22.8)	23.6	(22.5–24.6)
2404	Mauricie et Centre-du-Québec	21.9	(20.6–23.1)	22.6	(21.3–23.8)
2405	Estrie	16.1	(14.7–17.4)	19.5	(18.0–20.9)
2406	Montréal	23.2	(22.6–23.8)	23.1	(22.5–23.7)
2407	Outaouais	23.7	(22.2–25.1)	24.4	(23.0–25.9)
2408	Abitibi-Témiscamingue	22.7	(20.5–24.9)	23.9	(21.7–26.0)
2409	Côte-Nord	24.3	(21.6–27.0)	23.4	(20.8–26.1)
2411	Gaspésie-Îles-de-la-Madeleine	25.7	(22.5–29.0)	26.9	(23.6–30.3)
2412	Chaudière-Appalaches	23.7	(22.4–25.1)	25.8	(24.5–27.2)
2413	Laval	22.7	(21.3–24.1)	22.8	(21.5–24.1)
2414	Lanaudière	22.1	(20.8–23.4)	21.3	(20.0–22.6)
2415	Laurentides	20.6	(19.5–21.7)	21.3	(20.2–22.5)
2416	Montréal	22.0	(21.3–22.7)	22.9	(22.2–23.6)

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Ambulatory Care Sensitive Conditions 2006–2007	
		Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador		522	(502–542)
1011	Eastern, N.L.	487	(461–512)
1012	Central, N.L.	578	(530–625)
1013	Western, N.L.	495	(448–542)
Prince Edward Island		548	(510–587)
Nova Scotia		402	(389–415)
1211	South Shore, N.S.	293	(251–336)
1212	South West Nova, N.S.	453	(401–504)
1213	Annapolis Valley, N.S.	353	(313–393)
1214	Colchester East Hants, N.S.	410	(364–456)
1218	Cape Breton, N.S.	537	(497–577)
1219	Capital, N.S.	315	(297–334)
New Brunswick		640	(622–658)
1301	Region 1, N.B. (Moncton area)	496	(465–527)
1302	Region 2, N.B. (Saint John area)	509	(475–542)
1303	Region 3, N.B. (Fredericton area)	741	(700–782)
1304	Region 4, N.B. (Edmundston area)	694	(625–763)
1306	Region 6, N.B. (Bathurst area)	714	(655–773)
Quebec		..	.. ..
2401	Bas-Saint-Laurent	..	.. ..
2402	Saguenay-Lac-Saint-Jean	..	.. ..
2403	Capitale nationale	..	.. ..
2404	Mauricie et Centre-du-Québec	..	.. ..
2405	Estrie	..	.. ..
2406	Montréal	..	.. ..
2407	Outaouais	..	.. ..
2408	Abitibi-Témiscamingue	..	.. ..
2409	Côte-Nord	..	.. ..
2411	Gaspésie-Îles-de-la-Madeleine	..	.. ..
2412	Chaudière-Appalaches	..	.. ..
2413	Laval	..	.. ..
2414	Lanaudière	..	.. ..
2415	Laurentides	..	.. ..
2416	Montérégie	..	.. ..
Ontario		317	(314–320)
3501	Erie St. Clair	391	(376–407)
3502	South West	322	(310–334)
3503	Waterloo Wellington	292	(279–305)
3504	Hamilton Niagara Haldimand Brant	373	(363–383)
3505	Central West	291	(279–304)
3506	Mississauga Halton	237	(227–246)
3507	Toronto Central	231	(222–240)
3508	Central	200	(193–207)
3509	Central East	290	(281–299)
3510	South East	383	(365–400)
3511	Champlain	274	(265–284)
3512	North Simcoe Muskoka	411	(392–430)
3513	North East	568	(549–587)
3514	North West	646	(613–679)
Manitoba		392	(380–404)
4610	Winnipeg	262	(249–275)
4625	South Eastman	299	(254–345)
4630	Interlake	549	(498–601)
4640	Central	433	(391–474)
4645	Assiniboine	593	(536–650)

Map Code	Health Region	Ambulatory Care Sensitive Conditions 2006–2007	
		Age-Standardized Rate per 100,000	95% CI
Saskatchewan		559	(544–574)
4701	Sun Country	653	(584–722)
4702	Five Hills	568	(500–635)
4704	Regina	578	(546–609)
4705	Sunrise	960	(877–1,042)
4706	Saskatoon	354	(332–377)
4709	Prince Albert	484	(434–534)
4710	Prairie North	627	(565–688)
Alberta		360	(353–366)
4821	Chinook	463	(429–497)
4822	Palliser	512	(468–556)
4823	Calgary	280	(270–290)
4824	David Thompson	517	(490–543)
4825	East Central	529	(487–570)
4826	Capital	271	(261–281)
4827	Aspen	581	(546–617)
4828	Peace Country	*	**
4829	Northern Lights	826	(729–923)
British Columbia		294	(289–300)
5911	East Kootenay	511	(460–561)
5912	Kootenay Boundary	387	(344–431)
5913	Okanagan	341	(321–362)
5914	Thompson/Cariboo/Shuswap	416	(389–443)
5921	Fraser East	317	(295–338)
5922	Fraser North	221	(208–233)
5923	Fraser South	270	(256–283)
5931	Richmond	202	(181–224)
5932	Vancouver	198	(187–210)
5933	North Shore	239	(221–258)
5941	South Vancouver Island	250	(232–268)
5942	Central Vancouver Island	319	(297–341)
5943	North Vancouver Island	381	(346–416)
5951	Northwest	560	(506–614)
5952	Northern Interior	532	(494–571)
5953	Northeast	528	(469–588)
Yukon Territory		518	(432–604)
Northwest Territories		710	(612–808)
Nunavut		1,204	(1,003–1,404)
Canada		..	.. ..

Ambulatory care sensitive conditions (ACSC)

Age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for hospitalization per 100,000 population younger than age 75 years. Hospitalizations for ambulatory care sensitive conditions are considered to be an indirect measure of access to appropriate primary health care. While not all admissions for these conditions are avoidable, appropriate ambulatory care could potentially prevent the onset of this type of illness or condition, control an acute episodic illness or condition or manage a chronic disease or condition.

Note: Beginning with 2006–2007 rates the definition of this indicator was revised. Rates for the previous years, calculated using the new definition, are presented on pages 58 and 59.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Ambulatory Care Sensitive Conditions Age-Standardized Rate per 100,000				
		2001–2002	2002–2003	2003–2004	2004–2005	2005–2006
Newfoundland and Labrador		*668	*652	*653	*593	*586
1011	Eastern, N.L.	*533	*530	*561	*496	*485
1012	Central, N.L.	*768	*758	*715	*666	*683
1013	Western, N.L.	*753	*740	*629	*628	*619
Prince Edward Island		*704	*681	*701	*718	*638
Nova Scotia		*560	*519	*512	*491	*455
1211	South Shore, N.S.	413	404	408	417	386
1212	South West Nova, N.S.	*611	*521	*602	*520	*494
1213	Annapolis Valley, N.S.	*593	*598	*508	*567	*449
1214	Colchester East Hants, N.S.	*527	472	*522	*494	*444
1218	Cape Breton, N.S.	*660	*707	*686	*586	*566
1219	Capital, N.S.	*426	*375	*373	391	*346
New Brunswick		*809	*719	*733	*694	*683
1301	Region 1, N.B. (Moncton area)	*598	*558	*556	*563	*543
1302	Region 2, N.B. (Saint John area)	*548	*513	*514	*579	*572
1303	Region 3, N.B. (Fredericton area)	*955	*806	*846	*829	*773
1304	Region 4, N.B. (Edmundston area)	*885	*717	*760	*761	*649
1306	Region 6, N.B. (Bathurst area)	*974	*871	*854	*	*704
Quebec		*484	*439	*430	403	*380
2401	Bas-Saint-Laurent	*518	*459	*459	*455	382
2402	Saguenay-Lac-Saint-Jean	*728	*654	*629	*581	*503
2403	Capitale nationale	*405	*364	*346	*345	*314
2404	Mauricie et Centre-du-Québec	*504	*465	*464	409	398
2405	Estrie	*546	*493	*464	*439	*438
2406	Montréal	*352	*324	*333	*324	*317
2407	Outaouais	*509	*399	419	392	386
2408	Abitibi-Témiscamingue	*706	*753	*770	*624	*539
2409	Côte-Nord	*894	*775	*761	*769	*631
2411	Gaspésie-Îles-de-la-Madeleine	*939	*912	*883	*784	*756
2412	Chaudière-Appalaches	466	420	409	*378	*353
2413	Laval	*382	*343	*360	*351	*301
2414	Lanaudière	*593	*511	*451	418	*427
2415	Laurentides	*585	*561	*531	*468	*435
2416	Montérégie	*490	439	426	397	381
Ontario		*426	*402	*375	*364	*346
3501	Erie St. Clair	*480	*458	*457	*449	*419
3502	South West	*411	*408	*387	*370	*370
3503	Waterloo Wellington	*401	*406	*358	*330	*332
3504	Hamilton Niagara Haldimand Brant	*474	*458	*446	*445	*401
3505	Central West	*390	*366	*319	*321	*321
3506	Mississauga Halton	*340	*311	*288	*271	*265
3507	Toronto Central	*290	*263	*256	*244	*237
3508	Central	*274	*253	*213	*221	*210
3509	Central East	*395	*390	*339	*323	*302
3510	South East	*552	*480	*464	*430	*427
3511	Champlain	*370	*329	*331	*331	*311
3512	North Simcoe Muskoka	*599	*579	*520	*505	*490
3513	North East	*732	*702	*654	*652	*612
3514	North West	*763	*750	*722	*673	*642
Manitoba		*476	*474	*439	*442	*438
4610	Winnipeg	*334	*351	*322	*315	*319
4625	South Eastman	457	*323	366	*303	*303
4630	Interlake	*663	*644	*554	*594	*523
4640	Central	*584	*562	*539	*550	*538
4645	Assiniboine	*691	*627	*551	*625	*639

Map Code	Health Region	Ambulatory Care Sensitive Conditions				
		2001–2002	2002–2003	2003–2004	2004–2005	2005–2006
		Age-Standardized Rate per 100,000				
Saskatchewan		*614	*620	*629	*600	*618
4701	Sun Country	*701	*695	*814	*706	*686
4702	Five Hills	*719	*790	*708	*617	*616
4704	Regina	*614	*666	*657	*576	*625
4705	Sunrise	*773	*721	*792	*843	*878
4706	Saskatoon	*391	*400	397	380	391
4709	Prince Albert	*623	*547	*594	*590	*581
4710	Prairie North	*811	*847	*763	*708	*747
Alberta		*445	426	*440	*423	*417
4821	Chinook	*620	*640	*590	*530	*529
4822	Palliser	*605	*624	*615	*637	*
4823	Calgary	*306	*299	*319	*303	*313
4824	David Thompson	*734	*696	*681	*641	*616
4825	East Central	*727	*667	*677	*623	*568
4826	Capital	*277	*258	*301	*296	*301
4827	Aspen	*805	*770	*787	*750	*716
4828	Peace Country	*942	*865	*881	*897	*881
4829	Northern Lights	*903	*995	*716	*729	*743
British Columbia		*353	*320	*324	*323	*313
5911	East Kootenay	*524	*525	*576	*510	*500
5912	Kootenay Boundary	457	420	453	*499	406
5913	Okanagan	*415	*388	408	408	372
5914	Thompson/Cariboo/Shuswap	486	439	*446	*429	*414
5921	Fraser East	*376	*383	*358	*342	*354
5922	Fraser North	*296	*273	*269	*252	*217
5923	Fraser South	*287	*249	*258	*286	*280
5931	Richmond	*213	*183	*182	*195	*187
5932	Vancouver	*281	*231	*203	*222	*232
5933	North Shore	*283	*246	*248	*250	*260
5941	South Vancouver Island	*270	*240	*249	*263	*273
5942	Central Vancouver Island	*426	*394	415	389	373
5943	North Vancouver Island	*505	*488	*468	*466	*442
5951	Northwest	*587	*576	*608	*558	*611
5952	Northern Interior	*558	*501	*559	*561	*521
5953	Northeast	*638	*545	*576	*506	*453
Yukon Territory		*606	*586	*596	*634	*639
Northwest Territories		*869	*830	*824	*862	*682
Nunavut		*1,036	*	*809	*996	*1,096
Canada		459	428	417	401	385

Note: Beginning with 2006–2007 rates the definition of **ambulatory care sensitive conditions (ACSC)** was revised. Rates for the previous years, calculated using the new definition, are presented to enable comparisons over time.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Acute Myocardial Infarction Readmission 2004–2005 to 2006–2007		Asthma Readmission 2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador					
		*7.1	(6.3–7.9)	3.9	(2.0–5.8)
1011	Eastern, N.L.	*7.0	(5.8–8.1)	2.9	(0.3–5.5)
1012	Central, N.L.	*7.3	(5.7–9.0)	*	**
1013	Western, N.L.	*8.1	(6.1–10.2)	*	**
Prince Edward Island					
		*8.5	(6.7–10.4)	4.2	(1.6–6.9)
Nova Scotia					
		*7.2	(6.5–7.9)	5.5	(3.9–7.1)
1211	South Shore, N.S.	7.8	(5.0–10.6)	*	**
1212	South West Nova, N.S.	7.1	(4.7–9.5)	*	**
1213	Annapolis Valley, N.S.	7.8	(5.4–10.2)	*	**
1214	Colchester East Hants, N.S.	6.6	(4.2–9.0)	*	**
1218	Cape Breton, N.S.	6.7	(5.1–8.3)	*	**
1219	Capital, N.S.	*7.0	(5.7–8.2)	*8.0	(5.9–10.2)
New Brunswick					
		*7.0	(6.2–7.8)	*2.5	(0.9–4.1)
1301	Region 1, N.B. (Moncton area)	5.9	(4.3–7.5)	*	**
1302	Region 2, N.B. (Saint John area)	5.6	(3.9–7.2)	*	**
1303	Region 3, N.B. (Fredericton area)	*8.5	(6.8–10.2)	*	**
1304	Region 4, N.B. (Edmundston area)	*9.6	(6.5–12.7)	*	**
1306	Region 6, N.B. (Bathurst area)	*8.6	(6.2–11.0)	*	**
Quebec					
	
2401	Bas-Saint-Laurent	..	.. ..	..	.. ..
2402	Saguenay-Lac-Saint-Jean	..	.. ..	..	.. ..
2403	Capitale nationale	..	.. ..	..	.. ..
2404	Mauricie et Centre-du-Québec	..	.. ..	..	.. ..
2405	Estrie	..	.. ..	..	.. ..
2406	Montréal	..	.. ..	..	.. ..
2407	Outaouais	..	.. ..	..	.. ..
2408	Abitibi-Témiscamingue	..	.. ..	..	.. ..
2409	Côte-Nord	..	.. ..	..	.. ..
2411	Gaspésie-Îles-de-la-Madeleine	..	.. ..	..	.. ..
2412	Chaudière-Appalaches	..	.. ..	..	.. ..
2413	Laval	..	.. ..	..	.. ..
2414	Lanaudière	..	.. ..	..	.. ..
2415	Laurentides	..	.. ..	..	.. ..
2416	Montérégie	..	.. ..	..	.. ..
Ontario					
		5.4	(5.2–5.6)	5.0	(4.5–5.4)
3501	Erie St. Clair	*6.8	(6.0–7.6)	3.6	(1.5–5.8)
3502	South West	6.0	(5.3–6.7)	4.1	(2.1–6.1)
3503	Waterloo Wellington	*4.4	(3.4–5.3)	4.0	(2.0–6.0)
3504	Hamilton Niagara Haldimand Brant	*4.7	(4.1–5.3)	*3.0	(1.4–4.6)
3505	Central West	*4.3	(3.3–5.2)	5.8	(4.2–7.4)
3506	Mississauga Halton	*3.6	(2.8–4.4)	3.4	(1.4–5.4)
3507	Toronto Central	4.8	(4.0–5.7)	6.4	(4.7–8.2)
3508	Central	*4.8	(4.1–5.6)	4.5	(2.9–6.1)
3509	Central East	5.3	(4.7–5.9)	5.7	(4.5–6.9)
3510	South East	5.3	(4.4–6.2)	*8.4	(6.4–10.4)
3511	Champlain	5.1	(4.4–5.7)	5.3	(3.6–7.0)
3512	North Simcoe Muskoka	6.6	(5.5–7.6)	5.0	(2.9–7.1)
3513	North East	*8.0	(7.3–8.8)	4.0	(2.3–5.8)
3514	North West	6.7	(5.5–8.0)	6.7	(3.8–9.6)
Manitoba					
		5.8	(5.1–6.5)	6.1	(4.6–7.5)
4610	Winnipeg	*4.6	(3.7–5.6)	3.2	(0.9–5.5)
4625	South Eastman	*	**	*	**
4630	Interlake	7.0	(4.6–9.3)	*	**
4640	Central	6.6	(4.3–8.8)	*	**
4645	Assiniboine	5.5	(3.0–8.1)	*	**

Map Code	Health Region	Acute Myocardial Infarction Readmission 2004–2005 to 2006–2007		Asthma Readmission 2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan		*6.6	(5.9–7.3)	4.4	(2.8–5.9)
4701	Sun Country	5.8	(2.5–9.0)	*	**
4702	Five Hills	5.5	(2.4–8.5)	*	**
4704	Regina	*3.7	(2.1–5.3)	6.8	(4.1–9.4)
4705	Sunrise	6.5	(3.9–9.1)	*	**
4706	Saskatoon	6.8	(5.4–8.2)	*	**
4709	Prince Albert	*8.9	(6.5–11.3)	*	**
4710	Prairie North	*8.8	(6.2–11.4)	*	**
Alberta		*4.2	(3.7–4.7)	4.0	(3.1–4.8)
4821	Chinook	5.1	(3.1–7.1)	*	**
4822	Palliser	6.4	(4.0–8.8)	*	**
4823	Calgary	*4.0	(3.2–4.7)	5.1	(3.5–6.7)
4824	David Thompson	5.9	(4.4–7.3)	2.6	(0.3–5.0)
4825	East Central	5.2	(2.9–7.4)	*	**
4826	Capital	*3.0	(2.2–3.8)	4.1	(2.4–5.8)
4827	Aspen	5.5	(3.7–7.4)	5.0	(2.6–7.4)
4828	Peace Country	*	**	*	**
4829	Northern Lights	*	**	*	**
British Columbia		5.6	(5.1–6.0)	5.5	(4.7–6.3)
5911	East Kootenay	4.3	(1.9–6.8)	*	**
5912	Kootenay Boundary	*10.5	(8.0–13.1)	*	**
5913	Okanagan	6.0	(4.7–7.3)	5.4	(2.8–8.1)
5914	Thompson/Cariboo/Shuswap	*7.2	(5.6–8.7)	*	**
5921	Fraser East	4.9	(3.2–6.7)	6.1	(3.5–8.8)
5922	Fraser North	5.8	(4.4–7.1)	4.2	(1.2–7.1)
5923	Fraser South	5.6	(4.4–6.7)	4.9	(2.7–7.1)
5931	Richmond	3.1	(0.5–5.8)	*	**
5932	Vancouver	*3.4	(2.0–4.7)	5.6	(3.1–8.1)
5933	North Shore	4.2	(2.5–5.9)	*	**
5941	South Vancouver Island	*3.0	(1.5–4.5)	*	**
5942	Central Vancouver Island	*7.2	(5.8–8.6)	*	**
5943	North Vancouver Island	*8.4	(6.1–10.6)	*	**
5951	Northwest	7.5	(4.8–10.3)	*	**
5952	Northern Interior	7.0	(4.8–9.1)	*	**
5953	Northeast	4.6	(1.2–8.0)	*	**
Yukon Territory		*	**	*	**
Northwest Territories		*	**	*	**
Nunavut		*	**	*	**
Canada		5.6		4.8	

Acute myocardial infarction (AMI) readmission

The risk-adjusted rate of unplanned readmission following discharge for acute myocardial infarction (heart attack). Rates are based on three years of pooled data.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Asthma readmission

The risk-adjusted rate of unplanned readmission following discharge for asthma. Rates are based on three years of pooled data.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	Prostatectomy Readmission 2004–2005 to 2006–2007		Hysterectomy Readmission 2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador		1.8	(0.6–3.1)	1.2	(0.8–1.6)
1011	Eastern, N.L.	*	**	1.4	(0.8–2.0)
1012	Central, N.L.	*	**	*	**
1013	Western, N.L.	*	**	*	**
Prince Edward Island		*	**	*	**
Nova Scotia		2.7	(2.0–3.5)	1.0	(0.7–1.3)
1211	South Shore, N.S.	*	**	*	**
1212	South West Nova, N.S.	*	**	*	**
1213	Annapolis Valley, N.S.	*	**	*	**
1214	Colchester East Hants, N.S.	*	**	*	**
1218	Cape Breton, N.S.	*	**	*	**
1219	Capital, N.S.	2.7	(1.6–3.9)	1.5	(0.9–2.1)
New Brunswick		*3.6	(2.7–4.4)	0.9	(0.6–1.3)
1301	Region 1, N.B. (Moncton area)	*	**	0.8	(0.2–1.4)
1302	Region 2, N.B. (Saint John area)	*	**	*	**
1303	Region 3, N.B. (Fredericton area)	*	**	*	**
1304	Region 4, N.B. (Edmundston area)	*	**	*	**
1306	Region 6, N.B. (Bathurst area)	*	**	*	**
Quebec		**	**..	**	**..
2401	Bas-Saint-Laurent	..	..	..	..
2402	Saguenay-Lac-Saint-Jean	..	..	..	..
2403	Capitale nationale	..	..	..	..
2404	Mauricie et Centre-du-Québec	..	..	..	..
2405	Etrie	..	..	..	..
2406	Montréal	..	..	..	..
2407	Outaouais	..	..	..	..
2408	Abitibi-Témiscamingue	..	..	..	..
2409	Côte-Nord	..	..	..	..
2411	Gaspésie-Îles-de-la-Madeleine	..	..	..	..
2412	Chaudière-Appalaches	..	..	..	..
2413	Laval	..	..	..	..
2414	Lanaudière	..	..	..	..
2415	Laurentides	..	..	..	..
2416	Montérégie	..	..	..	..
Ontario		2.7	(2.4–2.9)	1.1	(1.0–1.2)
3501	Erie St. Clair	2.3	(1.5–3.2)	*0.6	(0.3–1.0)
3502	South West	2.9	(2.0–3.8)	1.4	(1.1–1.8)
3503	Waterloo Wellington	1.8	(0.8–2.9)	1.2	(0.8–1.6)
3504	Hamilton Niagara Haldimand Brant	2.0	(1.4–2.7)	1.0	(0.7–1.3)
3505	Central West	3.5	(2.4–4.6)	1.0	(0.5–1.5)
3506	Mississauga Halton	2.4	(1.5–3.4)	1.0	(0.6–1.5)
3507	Toronto Central	*3.8	(2.9–4.7)	1.3	(0.7–1.8)
3508	Central	2.6	(1.9–3.3)	*0.7	(0.3–1.0)
3509	Central East	2.5	(1.9–3.2)	*0.8	(0.5–1.1)
3510	South East	*3.7	(2.6–4.8)	1.3	(0.8–1.8)
3511	Champlain	1.9	(1.1–2.7)	*1.6	(1.3–2.0)
3512	North Simcoe Muskoka	2.6	(1.6–3.7)	1.4	(0.8–1.9)
3513	North East	2.2	(1.2–3.3)	*0.8	(0.4–1.1)
3514	North West	*5.0	(3.7–6.3)	1.4	(0.7–2.1)
Manitoba		2.0	(1.1–2.9)	*2.2	(1.8–2.6)
4610	Winnipeg	2.2	(1.1–3.4)	*2.4	(1.9–2.9)
4625	South Eastman	*	**	*	**
4630	Interlake	*	**	*	**
4640	Central	*	**	*	**
4645	Assiniboine	*	**	*	**

Map Code	Health Region	Prostatectomy Readmission 2004–2005 to 2006–2007		Hysterectomy Readmission 2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan		3.3	(2.3–4.2)	*1.7	(1.4–2.1)
4701	Sun Country	*	**	*	**
4702	Five Hills	*	**	*	**
4704	Regina	*	**	1.2	(0.4–1.9)
4705	Sunrise	*	**	*	**
4706	Saskatoon	3.5	(2.0–5.1)	*2.2	(1.5–2.8)
4709	Prince Albert	*	**	*	**
4710	Prairie North	*	**	*	**
Alberta		2.1	(1.5–2.6)	1.3	(1.1–1.5)
4821	Chinook	*	**	*	**
4822	Palliser	*	**	*	**
4823	Calgary	2.1	(1.3–3.0)	1.5	(1.1–1.8)
4824	David Thompson	1.2	(0.5–2.8)	1.6	(1.0–2.2)
4825	East Central	*	**	*	**
4826	Capital	1.9	(0.8–2.9)	*0.7	(0.4–1.1)
4827	Aspen	*	**	*	**
4828	Peace Country	*	**	*	**
4829	Northern Lights	*	**	*	**
British Columbia		2.3	(2.0–2.6)	1.1	(0.9–1.2)
5911	East Kootenay	*	**	*	**
5912	Kootenay Boundary	*	**	*	**
5913	Okanagan	2.0	(0.8–3.2)	1.0	(0.5–1.6)
5914	Thompson/Cariboo/Shuswap	2.7	(1.2–4.3)	1.0	(0.4–1.5)
5921	Fraser East	2.7	(1.5–4.0)	1.1	(0.5–1.7)
5922	Fraser North	1.9	(1.2–2.7)	0.9	(0.3–1.5)
5923	Fraser South	2.9	(1.9–3.8)	0.8	(0.3–1.3)
5931	Richmond	*	**	*	**
5932	Vancouver	2.4	(1.6–3.3)	1.6	(1.0–2.3)
5933	North Shore	*	**	*	**
5941	South Vancouver Island	1.7	(0.6–2.8)	1.1	(0.4–1.7)
5942	Central Vancouver Island	2.5	(1.4–3.6)	0.7	(0.1–1.3)
5943	North Vancouver Island	*	**	*	**
5951	Northwest	*	**	*	**
5952	Northern Interior	*	**	*	**
5953	Northeast	*	**	*	**
Yukon Territory		*	**	*	**
Northwest Territories		*	**	*	**
Nunavut		*	**	*	**
Canada		2.5		1.2	

Prostatectomy readmission

The risk-adjusted rate of unplanned readmission following discharge for prostatectomy. Rates are based on three years of pooled data.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Hysterectomy readmission

The risk-adjusted rate of unplanned readmission following discharge for hysterectomy. Rates are based on three years of pooled data.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	30-Day Acute Myocardial Infarction In-Hospital Mortality			
		2003–2004 to 2005–2006		2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador		*13.5	(12.4–14.6)	*12.1	(11.0–13.1)
1011	Eastern, N.L.	*12.9	(11.4–14.4)	11.5	(10.0–13.0)
1012	Central, N.L.	*13.8	(11.8–15.9)	11.5	(9.5–13.5)
1013	Western, N.L.	*13.7	(10.9–16.5)	*14.0	(11.4–16.6)
Prince Edward Island		*14.2	(11.9–16.5)	*12.8	(10.7–14.9)
Nova Scotia		*12.5	(11.7–13.3)	*12.0	(11.1–12.8)
1211	South Shore, N.S.	11.9	(8.6–15.2)	9.8	(6.4–13.2)
1212	South West Nova, N.S.	*15.1	(12.0–18.1)	*14.0	(11.0–17.0)
1213	Annapolis Valley, N.S.	12.8	(9.9–15.8)	9.8	(6.8–12.8)
1214	Colchester East Hants, N.S.	10.1	(7.4–12.8)	10.6	(7.7–13.4)
1218	Cape Breton, N.S.	12.2	(10.3–14.1)	*12.0	(10.2–13.9)
1219	Capital, N.S.	*12.3	(10.9–13.8)	*11.6	(10.2–13.1)
New Brunswick		*11.4	(10.5–12.3)	10.7	(9.8–11.6)
1301	Region 1, N.B. (Moncton area)	8.9	(7.0–10.8)	9.0	(7.1–11.0)
1302	Region 2, N.B. (Saint John area)	12.0	(10.2–13.9)	10.7	(8.8–12.5)
1303	Region 3, N.B. (Fredericton area)	11.7	(9.6–13.7)	11.5	(9.5–13.5)
1304	Region 4, N.B. (Edmundston area)	13.0	(9.6–16.4)	*13.9	(10.2–17.6)
1306	Region 6, N.B. (Bathurst area)	*14.2	(11.5–16.8)	12.3	(9.6–15.0)
Quebec		..	..	..	..
2401	Bas-Saint-Laurent	..	..	..	..
2402	Saguenay-Lac-Saint-Jean	..	..	..	..
2403	Capitale nationale	..	..	..	..
2404	Mauricie et Centre-du-Québec	..	..	..	..
2405	Estrie	..	..	..	..
2406	Montréal	..	..	..	..
2407	Outaouais	..	..	..	..
2408	Abitibi-Témiscamingue	..	..	..	..
2409	Côte-Nord	..	..	..	..
2411	Gaspésie-Îles-de-la-Madeleine	..	..	..	..
2412	Chaudière-Appalaches	..	..	..	..
2413	Laval	..	..	..	..
2414	Lanaudière	..	..	..	..
2415	Laurentides	..	..	..	..
2416	Montérégie	..	..	..	..
Ontario		10.2	(9.9–10.4)	9.9	(9.7–10.1)
3501	Erie St. Clair	9.6	(8.7–10.5)	10.0	(9.1–10.9)
3502	South West	9.8	(8.9–10.6)	9.8	(9.0–10.6)
3503	Waterloo Wellington	9.9	(8.8–11.0)	9.3	(8.3–10.4)
3504	Hamilton Niagara Haldimand Brant	10.2	(9.6–10.8)	9.7	(9.1–10.4)
3505	Central West	*8.8	(7.6–9.9)	*8.6	(7.5–9.7)
3506	Mississauga Halton	9.7	(8.8–10.6)	9.4	(8.5–10.4)
3507	Toronto Central	10.7	(9.9–11.5)	10.2	(9.4–11.0)
3508	Central	*11.3	(10.5–12.1)	*11.3	(10.5–12.1)
3509	Central East	10.2	(9.6–10.9)	10.2	(9.6–10.9)
3510	South East	9.8	(8.8–10.9)	10.1	(9.1–11.2)
3511	Champlain	*8.9	(8.2–9.7)	*8.4	(7.7–9.2)
3512	North Simcoe Muskoka	10.7	(9.6–11.9)	10.1	(8.9–11.3)
3513	North East	11.1	(10.2–12.0)	10.8	(9.9–11.7)
3514	North West	10.9	(9.4–12.3)	9.4	(7.9–10.8)
Manitoba		9.6	(8.9–10.4)	9.2	(8.5–10.0)
4610	Winnipeg	*9.0	(8.1–10.0)	*8.6	(7.6–9.5)
4625	South Eastman	12.0	(8.2–15.8)	11.4	(7.4–15.3)
4630	Interlake	*7.1	(3.9–10.2)	7.8	(4.9–10.6)
4640	Central	10.7	(8.1–13.4)	9.7	(7.1–12.3)
4645	Assiniboine	9.8	(6.7–12.9)	9.1	(6.3–11.9)

Map Code	Health Region	30-Day Acute Myocardial Infarction In-Hospital Mortality			
		2003–2004 to 2005–2006		2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan		10.1	(9.2–10.9)	9.6	(8.8–10.4)
4701	Sun Country	10.7	(6.9–14.6)	11.6	(7.5–15.8)
4702	Five Hills	10.4	(7.3–13.5)	9.2	(6.1–12.3)
4704	Regina	10.3	(8.6–12.0)	9.6	(8.0–11.2)
4705	Sunrise	11.2	(8.5–13.9)	12.3	(9.4–15.2)
4706	Saskatoon	9.5	(7.8–11.1)	8.8	(7.2–10.4)
4709	Prince Albert	9.7	(6.4–13.0)	10.0	(6.9–13.1)
4710	Prairie North	8.5	(4.9–12.0)	8.7	(5.5–11.9)
Alberta		*8.2	(7.6–8.7)	*8.4	(7.8–8.9)
4821	Chinook	9.4	(7.1–11.8)	9.3	(7.0–11.7)
4822	Palliser	10.3	(7.8–12.9)	8.0	(5.5–10.5)
4823	Calgary	*6.4	(5.5–7.4)	*7.3	(6.4–8.3)
4824	David Thompson	10.6	(8.9–12.3)	10.1	(8.4–11.8)
4825	East Central	*13.7	(11.2–16.1)	10.9	(8.4–13.3)
4826	Capital	*7.2	(6.3–8.2)	*7.5	(6.6–8.5)
4827	Aspen	9.5	(7.1–12.0)	11.4	(8.9–13.8)
4828	Peace Country	9.7	(6.9–12.4)	*	**
4829	Northern Lights	17.4	(9.6–25.3)	14.1	(6.3–21.9)
British Columbia		10.6	(10.1–11.1)	10.4	(10.0–10.9)
5911	East Kootenay	7.6	(4.8–10.5)	8.3	(5.3–11.2)
5912	Kootenay Boundary	11.0	(8.0–14.0)	11.4	(8.3–14.5)
5913	Okanagan	10.8	(9.4–12.3)	10.5	(9.1–11.9)
5914	Thompson/Cariboo/Shuswap	11.3	(9.4–13.2)	*12.4	(10.6–14.2)
5921	Fraser East	*12.6	(10.7–14.6)	*12.2	(10.2–14.2)
5922	Fraser North	*13.0	(11.6–14.4)	*12.5	(11.1–14.0)
5923	Fraser South	10.5	(9.3–11.7)	10.0	(8.8–11.2)
5931	Richmond	12.7	(9.9–15.5)	11.8	(8.9–14.6)
5932	Vancouver	11.7	(10.3–13.0)	9.8	(8.5–11.1)
5933	North Shore	10.3	(8.6–12.0)	10.4	(8.6–12.1)
5941	South Vancouver Island	8.9	(7.4–10.4)	9.4	(7.9–10.9)
5942	Central Vancouver Island	*8.2	(6.6–9.8)	8.8	(7.2–10.5)
5943	North Vancouver Island	*6.6	(3.7–9.6)	7.8	(4.8–10.8)
5951	Northwest	11.6	(7.7–15.5)	7.7	(3.9–11.5)
5952	Northern Interior	7.7	(4.5–11.0)	8.2	(5.1–11.4)
5953	Northeast	8.5	(3.8–13.1)	*15.2	(10.4–19.9)
Yukon Territory		*	**	7.8	(0.5–15.0)
Northwest Territories		*18.6	(10.5–26.7)	*	**
Nunavut		*	**	*	**
Canada		10.3		10.0	

30-day acute myocardial infarction (AMI) in-hospital mortality

The risk-adjusted rate of all-cause in-hospital death occurring within 30 days of first admission to an acute care hospital with a diagnosis of acute myocardial infarction (heart attack). Rates are based on three years of pooled data.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	30-Day Stroke In-Hospital Mortality			
		2003–2004 to 2005–2006		2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador		*23.6	(21.8–25.4)	*24.8	(23.0–26.7)
1011	Eastern, N.L.	*23.3	(20.8–25.8)	*25.0	(22.5–27.5)
1012	Central, N.L.	*26.7	(22.8–30.5)	*29.1	(25.2–32.9)
1013	Western, N.L.	*23.7	(19.3–28.1)	21.0	(16.5–25.4)
Prince Edward Island		17.1	(13.7–20.6)	16.2	(12.7–19.7)
Nova Scotia		*25.6	(24.3–27.0)	*25.1	(23.7–26.5)
1211	South Shore, N.S.	22.2	(17.3–27.0)	*26.4	(21.6–31.1)
1212	South West Nova, N.S.	21.9	(17.0–26.9)	*24.4	(19.5–29.2)
1213	Annapolis Valley, N.S.	*22.9	(18.5–27.3)	*25.1	(20.4–29.7)
1214	Colchester East Hants, N.S.	*33.3	(28.3–38.2)	*28.1	(23.4–32.9)
1218	Cape Breton, N.S.	*25.7	(22.4–29.0)	*24.6	(21.3–27.9)
1219	Capital, N.S.	*25.2	(22.6–27.8)	*24.9	(22.4–27.4)
New Brunswick		16.9	(15.5–18.4)	*16.2	(14.8–17.7)
1301	Region 1, N.B. (Moncton area)	16.1	(13.2–19.0)	15.4	(12.5–18.3)
1302	Region 2, N.B. (Saint John area)	17.4	(14.3–20.5)	15.2	(12.1–18.4)
1303	Region 3, N.B. (Fredericton area)	18.0	(14.9–21.0)	19.6	(16.6–22.6)
1304	Region 4, N.B. (Edmundston area)	19.0	(13.4–24.6)	17.7	(12.3–23.1)
1306	Region 6, N.B. (Bathurst area)	*12.6	(8.0–17.1)	*11.7	(7.1–16.3)
Quebec		..	..	..	..
2401	Bas-Saint-Laurent	..	..	..	..
2402	Saguenay-Lac-Saint-Jean	..	..	..	..
2403	Capitale nationale	..	..	..	..
2404	Mauricie et Centre-du-Québec	..	..	..	..
2405	Estrie	..	..	..	..
2406	Montréal	..	..	..	..
2407	Outaouais	..	..	..	..
2408	Abitibi-Témiscamingue	..	..	..	..
2409	Côte-Nord	..	..	..	..
2411	Gaspésie-Îles-de-la-Madeleine	..	..	..	..
2412	Chaudière-Appalaches	..	..	..	..
2413	Laval	..	..	..	..
2414	Lanaudière	..	..	..	..
2415	Laurentides	..	..	..	..
2416	Montérégie	..	..	..	..
Ontario		17.9	(17.5–18.3)	17.8	(17.4–18.2)
3501	Erie St. Clair	17.5	(16.0–19.0)	17.0	(15.5–18.5)
3502	South West	18.6	(17.2–20.0)	19.2	(17.8–20.6)
3503	Waterloo Wellington	19.7	(18.1–21.4)	*20.0	(18.3–21.7)
3504	Hamilton Niagara Haldimand Brant	17.2	(16.2–18.3)	17.3	(16.3–18.4)
3505	Central West	*15.1	(13.3–16.9)	*14.8	(13.0–16.6)
3506	Mississauga Halton	17.3	(15.8–18.8)	18.8	(17.4–20.3)
3507	Toronto Central	*16.4	(15.2–17.6)	*16.8	(15.6–18.0)
3508	Central	18.5	(17.4–19.7)	17.9	(16.7–19.0)
3509	Central East	17.4	(16.3–18.5)	17.1	(15.9–18.2)
3510	South East	*21.3	(19.6–23.1)	*20.5	(18.7–22.3)
3511	Champlain	18.0	(16.7–19.3)	18.0	(16.7–19.3)
3512	North Simcoe Muskoka	16.9	(14.9–18.9)	17.1	(15.1–19.0)
3513	North East	18.5	(16.9–20.2)	19.0	(17.3–20.6)
3514	North West	18.5	(16.0–20.9)	*14.8	(12.3–17.2)
Manitoba		19.0	(17.8–20.2)	18.3	(17.1–19.5)
4610	Winnipeg	17.5	(16.0–19.0)	17.4	(15.8–19.0)
4625	South Eastman	16.6	(10.5–22.7)	21.0	(14.7–27.3)
4630	Interlake	17.1	(12.5–21.7)	17.2	(12.7–21.7)
4640	Central	*23.8	(19.5–28.1)	20.2	(15.9–24.5)
4645	Assiniboine	*25.3	(20.7–29.9)	20.8	(15.8–25.7)

Map Code	Health Region	30-Day Stroke In-Hospital Mortality			
		2003–2004 to 2005–2006		2004–2005 to 2006–2007	
		Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan		17.9	(16.7–19.2)	*16.8	(15.5–18.0)
4701	Sun Country	19.8	(14.3–25.2)	17.0	(11.4–22.6)
4702	Five Hills	19.3	(14.6–24.0)	18.1	(13.3–22.8)
4704	Regina	*13.8	(11.1–16.5)	*12.8	(10.2–15.4)
4705	Sunrise	19.9	(15.3–24.4)	19.8	(15.0–24.5)
4706	Saskatoon	19.4	(17.0–21.8)	18.2	(15.8–20.6)
4709	Prince Albert	20.4	(15.2–25.6)	18.7	(13.3–24.0)
4710	Prairie North	15.9	(10.7–21.1)	15.0	(10.1–19.9)
Alberta		*16.6	(15.8–17.5)	*17.0	(16.1–17.8)
4821	Chinook	17.0	(13.5–20.5)	17.7	(14.2–21.3)
4822	Palliser	19.2	(14.8–23.6)	18.5	(14.1–22.8)
4823	Calgary	*14.9	(13.3–16.4)	*15.3	(13.7–16.8)
4824	David Thompson	20.5	(17.8–23.2)	*21.2	(18.7–23.8)
4825	East Central	18.6	(14.6–22.6)	20.3	(16.3–24.3)
4826	Capital	*15.8	(14.3–17.2)	*15.9	(14.5–17.4)
4827	Aspen	18.1	(14.3–22.0)	17.8	(13.8–21.7)
4828	Peace Country	19.6	(15.3–24.0)	*	**
4829	Northern Lights	19.4	(8.3–30.5)	22.8	(12.0–33.6)
British Columbia		18.3	(17.7–19.0)	18.2	(17.6–18.9)
5911	East Kootenay	20.2	(15.6–24.8)	19.9	(14.9–24.9)
5912	Kootenay Boundary	22.0	(17.6–26.4)	*22.9	(18.6–27.2)
5913	Okanagan	19.4	(17.5–21.3)	18.4	(16.5–20.3)
5914	Thompson/Cariboo/Shuswap	17.8	(14.9–20.8)	18.8	(15.9–21.7)
5921	Fraser East	20.5	(17.8–23.3)	20.5	(17.8–23.2)
5922	Fraser North	*15.8	(13.8–17.8)	*15.5	(13.6–17.4)
5923	Fraser South	18.4	(16.6–20.2)	16.7	(15.0–18.5)
5931	Richmond	19.0	(15.5–22.5)	20.2	(16.7–23.6)
5932	Vancouver	17.4	(15.6–19.2)	17.5	(15.7–19.3)
5933	North Shore	16.4	(14.0–18.8)	17.2	(14.8–19.5)
5941	South Vancouver Island	18.5	(16.5–20.6)	20.0	(17.9–22.1)
5942	Central Vancouver Island	20.2	(17.8–22.5)	19.7	(17.4–22.1)
5943	North Vancouver Island	21.2	(17.0–25.5)	21.6	(17.5–25.8)
5951	Northwest	14.2	(8.3–20.2)	15.4	(9.2–21.5)
5952	Northern Interior	17.4	(13.1–21.6)	15.6	(11.5–19.7)
5953	Northeast	23.8	(17.5–30.1)	20.0	(13.8–26.2)
Yukon Territory		25.4	(16.0–34.8)	20.9	(12.2–29.6)
Northwest Territories		18.5	(7.7–29.3)	18.7	(8.6–28.7)
Nunavut		*	**	*	**
Canada		18.3		18.2	

30-day stroke in-hospital mortality

The risk-adjusted rate of all-cause in-hospital death occurring within 30 days of first admission to an acute care hospital with a diagnosis of stroke. Rates are based on three years of pooled data.

Note: Rates for Quebec are not available due to the differences in data collection. The Canada rate does not include Quebec.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Hip Replacement			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador					
1011	Eastern, N.L.	*80.6	(72.3–89.0)	69.2	(61.7–76.8)
1012	Central, N.L.	*76.5	(65.5–87.5)	68.9	(58.8–79.0)
1013	Western, N.L.	*80.9	(63.2–98.6)	76.5	(59.1–93.9)
		88.6	(67.1–110.1)	68.8	(49.7–87.9)
Prince Edward Island					
		111.5	(92.2–130.7)	115.2	(96.2–134.1)
Nova Scotia					
		* 108.6	(101.6–115.7)	92.0	(85.6–98.4)
1211	South Shore, N.S.	111.6	(85.9–137.4)	94.2	(70.8–117.5)
1212	South West Nova, N.S.	*77.8	(55.9–99.7)	57.0	(38.7–75.2)
1213	Annapolis Valley, N.S.	100.4	(78.5–122.2)	88.5	(67.9–109.1)
1214	Colchester East Hants, N.S.	110.3	(84.5–136.1)	86.1	(63.8–108.5)
1218	Cape Breton, N.S.	94.3	(77.7–110.9)	95.7	(79.1–112.4)
1219	Capital, N.S.	*116.0	(103.8–128.2)	99.8	(88.8–110.7)
New Brunswick					
		95.4	(87.9–102.8)	92.1	(84.9–99.4)
1301	Region 1, N.B. (Moncton area)	113.3	(97.6–129.1)	86.0	(72.5–99.5)
1302	Region 2, N.B. (Saint John area)	108.0	(91.3–124.7)	107.2	(90.5–123.8)
1303	Region 3, N.B. (Fredericton area)	89.1	(73.4–104.8)	100.4	(84.2–116.6)
1304	Region 4, N.B. (Edmundston area)	*77.0	(52.5–101.4)	75.4	(50.0–100.8)
1306	Region 6, N.B. (Bathurst area)	*62.0	(44.6–79.4)	65.2	(46.2–84.1)
Ontario					
		* 114.1	(112.0–116.1)	114.2	(112.2–116.2)
3501	Erie St. Clair	*112.5	(103.8–121.3)	120.5	(111.5–129.5)
3502	South West	*139.5	(131.5–147.6)	141.6	(133.5–149.6)
3503	Waterloo Wellington	*127.8	(118.1–137.4)	118.0	(108.9–127.2)
3504	Hamilton Niagara Haldimand Brant	*130.1	(123.8–136.5)	129.5	(123.3–135.8)
3505	Central West	*81.1	(73.1–89.1)	72.0	(64.7–79.3)
3506	Mississauga Halton	*110.9	(103.2–118.6)	103.8	(96.5–111.1)
3507	Toronto Central	*94.8	(88.6–101.0)	101.8	(95.4–108.2)
3508	Central	*93.3	(87.8–98.8)	99.1	(93.6–104.7)
3509	Central East	102.8	(97.1–108.5)	109.4	(103.6–115.1)
3510	South East	*134.2	(123.8–144.6)	119.2	(109.5–129.0)
3511	Champlain	*119.4	(112.5–126.3)	118.1	(111.3–124.8)
3512	North Simcoe Muskoka	*140.8	(128.9–152.7)	126.7	(115.5–137.8)
3513	North East	106.7	(98.0–115.4)	124.5	(115.2–133.7)
3514	North West	*137.1	(120.6–153.6)	122.6	(107.4–137.9)
Manitoba					
		* 123.4	(116.4–130.4)	127.0	(120.0–134.1)
4610	Winnipeg	*119.5	(110.3–128.7)	124.1	(114.8–133.4)
4625	South Eastman	118.9	(85.6–152.2)	131.2	(96.4–166.0)
4630	Interlake	126.3	(100.7–152.0)	144.3	(117.0–171.6)
4640	Central	*131.9	(106.6–157.1)	97.7	(76.0–119.4)
4645	Assiniboine	*137.9	(110.1–165.7)	136.2	(108.5–164.0)

Hip replacement

Age-standardized rate of unilateral or bilateral hip replacement surgery performed on inpatients in acute care hospitals per 100,000 population aged 20 years and older. Hip replacement surgery has the potential to improve functional status, reduce pain as well as contribute to other gains in health-related quality of life. Wide inter-regional variation in hip replacement rates may be attributable to numerous factors including the availability of services, provider practice patterns and patient preferences.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information; Alberta Acute Care Database, Alberta Health and Wellness.

Map Code	Health Region	Hip Replacement			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan		*119.0	(111.7–126.4)	126.8	(119.2–134.4)
4701	Sun Country	121.1	(89.8–152.4)	115.8	(86.5–145.1)
4702	Five Hills	107.5	(79.7–135.2)	139.3	(106.4–172.3)
4704	Regina	114.4	(99.2–129.5)	110.7	(96.2–125.2)
4705	Sunrise	*133.6	(104.4–162.8)	140.6	(110.4–170.9)
4706	Saskatoon	*132.4	(117.4–147.3)	142.3	(126.8–157.8)
4709	Prince Albert	110.6	(85.0–136.2)	98.3	(74.1–122.6)
4710	Prairie North	107.4	(78.9–136.0)	121.4	(90.8–152.0)
Alberta		*130.5	(125.9–135.2)	115.2	(110.9–119.5)
4821	Chinook	*137.5	(116.8–158.1)	145.3	(124.3–166.2)
4822	Palliser	*	**	94.4	(73.3–115.4)
4823	Calgary	*136.6	(128.5–144.8)	107.5	(100.3–114.6)
4824	David Thompson	*151.9	(135.5–168.3)	142.1	(126.4–157.7)
4825	East Central	119.3	(98.4–140.2)	100.9	(81.9–119.9)
4826	Capital	*122.5	(114.5–130.4)	117.2	(109.6–124.8)
4827	Aspen	*133.5	(113.8–153.3)	121.5	(102.8–140.1)
4828	Peace Country	116.3	(92.3–140.2)	*	**
4829	Northern Lights	*59.9	(28.4–91.3)	50.1	(19.6–80.6)
British Columbia		*110.1	(106.7–113.4)	117.6	(114.2–121.0)
5911	East Kootenay	*131.2	(105.3–157.2)	136.5	(110.2–162.9)
5912	Kootenay Boundary	*135.6	(110.2–160.9)	117.4	(93.6–141.2)
5913	Okanagan	*142.0	(129.5–154.6)	155.4	(142.9–168.0)
5914	Thompson/Cariboo/Shuswap	103.1	(89.2–117.0)	137.8	(121.9–153.6)
5921	Fraser East	110.1	(96.4–123.9)	113.5	(99.8–127.2)
5922	Fraser North	*80.2	(71.8–88.6)	97.6	(88.7–106.5)
5923	Fraser South	99.4	(90.7–108.1)	114.9	(105.7–124.2)
5931	Richmond	*78.5	(64.5–92.6)	67.5	(54.1–81.0)
5932	Vancouver	*67.0	(59.8–74.3)	74.4	(66.8–81.9)
5933	North Shore	*139.2	(124.7–153.7)	154.9	(139.2–170.7)
5941	South Vancouver Island	*128.4	(116.5–140.4)	121.4	(109.8–133.0)
5942	Central Vancouver Island	*136.7	(122.6–150.7)	140.1	(126.0–154.2)
5943	North Vancouver Island	*134.0	(111.6–156.3)	175.6	(150.9–200.4)
5951	Northwest	*177.9	(141.5–214.4)	114.1	(85.9–142.3)
5952	Northern Interior	121.7	(100.1–143.4)	100.7	(81.2–120.3)
5953	Northeast	131.5	(95.1–167.9)	114.5	(79.8–149.2)
Yukon Territory		*57.1	(22.3–91.9)	103.8	(61.7–145.9)
Northwest Territories		133.3	(78.3–188.2)	73.2	(37.0–109.3)
Nunavut		*	**	122.2	(36.0–208.5)
Canada		101.5	(100.3–102.7)	..	.. ..
		2004–2005		2005–2006	
Quebec†		*60.9	(59.0–62.8)	*63.7	(61.8–65.6)
2401	Bas-Saint-Laurent	*73.4	(61.4–85.5)	*63.9	(53.2–74.6)
2402	Saguenay-Lac-Saint-Jean	*59.9	(50.4–69.4)	*64.5	(54.7–74.4)
2403	Capitale nationale	*59.8	(53.7–65.9)	*59.9	(53.9–65.9)
2404	Mauricie et Centre-du-Québec	*55.5	(48.6–62.3)	*65.1	(57.7–72.4)
2405	Estrie	*59.9	(50.8–69.0)	*63.7	(54.3–73.1)
2406	Montréal	*61.7	(57.9–65.4)	*66.4	(62.6–70.3)
2407	Outaouais	*48.1	(39.6–56.6)	*60.7	(51.2–70.3)
2408	Abitibi-Témiscamingue	*69.3	(54.3–84.3)	*57.2	(43.6–70.8)
2409	Côte-Nord	*59.8	(42.0–77.5)	*58.0	(41.3–74.8)
2411	Gaspésie-Îles-de-la-Madeleine	*66.5	(49.8–83.1)	*54.7	(39.9–69.4)
2412	Chaudière-Appalaches	*73.5	(64.4–82.6)	*68.6	(60.0–77.3)
2413	Laval	*66.0	(57.0–74.9)	*56.2	(48.0–64.3)
2414	Lanaudière	*57.7	(49.5–65.9)	*55.4	(47.5–63.3)
2415	Laurentides	*54.8	(47.5–62.1)	*64.3	(56.5–72.1)
2416	Montréal	*63.0	(58.3–67.7)	*67.5	(62.7–72.3)

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Knee Replacement			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador		*106.1	(96.6–115.6)	107.6	(98.2–117.0)
1011	Eastern, N.L.	*89.3	(77.5–101.0)	108.8	(96.1–121.6)
1012	Central, N.L.	*105.9	(85.8–125.9)	95.5	(76.5–114.5)
1013	Western, N.L.	143.7	(117.1–170.2)	99.5	(78.1–121.0)
Prince Edward Island		165.3	(142.5–188.0)	179.9	(156.5–203.2)
Nova Scotia		151.5	(143.2–159.7)	128.7	(121.2–136.3)
1211	South Shore, N.S.	*183.8	(151.4–216.2)	158.2	(128.7–187.6)
1212	South West Nova, N.S.	*80.7	(58.9–102.5)	69.8	(49.5–90.2)
1213	Annapolis Valley, N.S.	129.5	(104.8–154.2)	109.2	(86.9–131.6)
1214	Colchester East Hants, N.S.	134.5	(106.7–162.4)	148.5	(119.4–177.6)
1218	Cape Breton, N.S.	*180.0	(156.8–203.2)	155.2	(133.9–176.5)
1219	Capital, N.S.	149.0	(135.2–162.8)	126.1	(113.6–138.5)
New Brunswick		151.1	(141.9–160.4)	137.9	(129.1–146.7)
1301	Region 1, N.B. (Moncton area)	*180.1	(160.2–200.0)	120.9	(104.7–137.1)
1302	Region 2, N.B. (Saint John area)	*192.4	(170.5–214.4)	195.9	(173.8–217.9)
1303	Region 3, N.B. (Fredericton area)	157.8	(137.0–178.6)	157.7	(137.4–178.1)
1304	Region 4, N.B. (Edmundston area)	*73.2	(49.6–96.8)	105.8	(75.9–135.6)
1306	Region 6, N.B. (Bathurst area)	*73.7	(54.7–92.7)	46.9	(31.8–62.0)
Ontario		*181.9	(179.3–184.5)	193.9	(191.3–196.6)
3501	Erie St. Clair	*207.0	(195.0–219.0)	209.4	(197.4–221.3)
3502	South West	*226.6	(216.5–236.8)	235.6	(225.3–245.9)
3503	Waterloo Wellington	*181.6	(170.0–193.2)	187.2	(175.6–198.8)
3504	Hamilton Niagara Haldimand Brant	*192.3	(184.5–200.0)	230.9	(222.5–239.3)
3505	Central West	*181.6	(169.6–193.7)	200.7	(188.3–213.2)
3506	Mississauga Halton	*166.8	(157.3–176.3)	170.5	(161.1–179.9)
3507	Toronto Central	*122.3	(115.2–129.4)	131.6	(124.3–139.0)
3508	Central	155.2	(148.0–162.4)	162.3	(155.0–169.5)
3509	Central East	*189.7	(181.9–197.5)	205.1	(197.1–213.1)
3510	South East	*209.7	(196.8–222.7)	195.9	(183.6–208.2)
3511	Champlain	*168.8	(160.6–177.1)	187.6	(179.0–196.1)
3512	North Simcoe Muskoka	*200.2	(186.1–214.3)	198.6	(184.7–212.4)
3513	North East	*172.3	(161.5–183.1)	193.6	(182.2–204.9)
3514	North West	*279.3	(256.4–302.2)	270.4	(247.8–292.9)
Manitoba		*190.8	(182.1–199.6)	217.4	(208.2–226.6)
4610	Winnipeg	*199.9	(188.0–211.9)	219.4	(207.0–231.8)
4625	South Eastman	170.0	(130.5–209.6)	227.8	(182.9–272.7)
4630	Interlake	*199.4	(167.5–231.4)	263.7	(227.6–299.7)
4640	Central	172.4	(143.5–201.3)	179.4	(150.6–208.3)
4645	Assiniboine	154.4	(125.0–183.9)	173.1	(142.5–203.8)

Knee replacement

Age-standardized rate of unilateral or bilateral knee replacement surgery performed on patients in acute care hospitals or same-day surgery facilities per 100,000 population aged 20 years and older. Knee replacement surgery has the potential to improve functional status, reduce pain as well as contribute to other gains in health-related quality of life. Wide inter-regional variation in knee replacement rates may be attributable to numerous factors including the availability of services, provider practice patterns and patient preferences.

Sources: Hospital Morbidity Database, Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Acute Care Database and Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	Knee Replacement			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan		*171.6	(162.8–180.5)	185.1	(176.0–194.3)
4701	Sun Country	133.3	(102.0–164.7)	156.7	(122.3–191.1)
4702	Five Hills	148.8	(114.8–182.7)	220.4	(178.0–262.9)
4704	Regina	143.0	(126.5–159.6)	146.8	(129.9–163.6)
4705	Sunrise	*228.0	(190.9–265.1)	238.8	(200.7–276.8)
4706	Saskatoon	*199.2	(180.8–217.7)	219.3	(199.9–238.6)
4709	Prince Albert	151.4	(121.7–181.1)	153.6	(124.1–183.2)
4710	Prairie North	146.0	(112.5–179.6)	149.6	(115.9–183.2)
Alberta		*188.1	(182.4–193.7)	184.7	(179.2–190.2)
4821	Chinook	*230.2	(203.4–257.0)	299.5	(269.3–329.7)
4822	Palliser	*	**	160.4	(133.0–187.8)
4823	Calgary	*185.9	(176.2–195.7)	176.8	(167.5–186.0)
4824	David Thompson	*220.9	(201.0–240.8)	223.7	(203.9–243.5)
4825	East Central	*188.1	(161.7–214.6)	181.7	(156.1–207.3)
4826	Capital	*180.5	(170.8–190.3)	169.5	(160.2–178.7)
4827	Aspen	*227.4	(201.6–253.3)	197.9	(173.9–221.9)
4828	Peace Country	146.9	(119.9–174.0)	*	**
4829	Northern Lights	114.3	(67.1–161.5)	124.9	(76.3–173.4)
British Columbia		*141.5	(137.7–145.3)	165.8	(161.7–169.8)
5911	East Kootenay	*194.3	(162.6–226.0)	210.5	(177.9–243.0)
5912	Kootenay Boundary	*202.7	(171.5–233.9)	205.9	(176.0–235.9)
5913	Okanagan	*173.6	(160.1–187.2)	195.0	(181.2–208.8)
5914	Thompson/Cariboo/Shuswap	148.4	(132.0–164.9)	210.3	(190.8–229.8)
5921	Fraser East	152.9	(136.5–169.3)	200.6	(182.2–218.9)
5922	Fraser North	*102.1	(92.5–111.8)	126.4	(116.0–136.7)
5923	Fraser South	151.6	(140.9–162.3)	154.3	(143.5–165.1)
5931	Richmond	147.5	(128.1–166.9)	137.8	(118.5–157.0)
5932	Vancouver	*64.7	(57.4–71.9)	89.5	(81.1–97.9)
5933	North Shore	151.0	(135.7–166.3)	183.5	(166.2–200.7)
5941	South Vancouver Island	152.3	(139.2–165.3)	161.0	(147.6–174.4)
5942	Central Vancouver Island	*172.8	(157.3–188.3)	199.8	(183.7–215.9)
5943	North Vancouver Island	*184.0	(158.4–209.6)	264.5	(235.0–294.1)
5951	Northwest	159.3	(124.9–193.7)	199.9	(163.5–236.3)
5952	Northern Interior	169.6	(144.2–195.0)	193.4	(166.5–220.4)
5953	Northeast	160.3	(118.9–201.8)	160.2	(119.7–200.7)
Yukon Territory		103.0	(51.5–154.5)	150.8	(89.4–212.3)
Northwest Territories		156.2	(94.3–218.2)	139.9	(82.3–197.4)
Nunavut		238.8	(137.0–340.7)	434.2	(272.2–596.3)
Canada		149.4	(147.9–150.8)	..	.. ..
		2004–2005		2005–2006	
Quebec†		*76.9	(74.8–79.0)	*85.5	(83.3–87.7)
2401	Bas-Saint-Laurent	*102.6	(88.6–116.6)	*94.5	(81.3–107.7)
2402	Saguenay-Lac-Saint-Jean	120.4	(106.9–133.9)	143.2	(128.6–157.8)
2403	Capitale nationale	*81.5	(74.4–88.6)	*94.4	(86.8–101.9)
2404	Mauricie et Centre-du-Québec	*70.7	(63.2–78.2)	*91.6	(83.1–100.1)
2405	Estrie	*64.9	(55.4–74.5)	*66.7	(57.1–76.2)
2406	Montréal	*69.1	(65.1–73.1)	*75.3	(71.1–79.4)
2407	Outaouais	*91.5	(79.5–103.5)	*86.9	(75.4–98.4)
2408	Abitibi-Témiscamingue	*92.6	(75.0–110.3)	*80.5	(64.5–96.5)
2409	Côte-Nord	*77.8	(57.7–97.9)	*80.8	(60.6–101.0)
2411	Gaspésie-Îles-de-la-Madeleine	*105.1	(85.4–124.7)	*116.8	(96.2–137.3)
2412	Chaudière-Appalaches	*99.2	(88.7–109.7)	*97.9	(87.6–108.2)
2413	Laval	*65.9	(57.0–74.8)	*79.6	(69.9–89.2)
2414	Lanaudière	*64.5	(55.8–73.1)	*81.1	(71.5–90.7)
2415	Laurentides	*60.5	(52.9–68.1)	*81.1	(72.3–89.8)
2416	Montréal	*76.7	(71.6–81.9)	*82.4	(77.1–87.7)

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Hysterectomy 2006–2007	
		Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador		469	(439–499)
1011	Eastern, N.L.	400	(364–436)
1012	Central, N.L.	558	(481–635)
1013	Western, N.L.	557	(472–642)
Prince Edward Island		558	(491–625)
Nova Scotia		449	(427–472)
1211	South Shore, N.S.	410	(323–497)
1212	South West Nova, N.S.	439	(353–525)
1213	Annapolis Valley, N.S.	610	(515–705)
1214	Colchester East Hants, N.S.	538	(450–625)
1218	Cape Breton, N.S.	516	(450–582)
1219	Capital, N.S.	325	(297–353)
New Brunswick		450	(425–475)
1301	Region 1, N.B. (Moncton area)	523	(470–576)
1302	Region 2, N.B. (Saint John area)	391	(344–437)
1303	Region 3, N.B. (Fredericton area)	362	(316–409)
1304	Region 4, N.B. (Edmundston area)	278	(208–349)
1306	Region 6, N.B. (Bathurst area)	453	(376–531)
Ontario		343	(338–348)
3501	Erie St. Clair	429	(403–455)
3502	South West	438	(416–460)
3503	Waterloo Wellington	393	(369–417)
3504	Hamilton Niagara Haldimand Brant	401	(384–417)
3505	Central West	278	(260–297)
3506	Mississauga Halton	246	(232–261)
3507	Toronto Central	187	(175–199)
3508	Central	243	(231–254)
3509	Central East	370	(354–385)
3510	South East	379	(350–408)
3511	Champlain	367	(350–384)
3512	North Simcoe Muskoka	433	(401–465)
3513	North East	574	(541–608)
3514	North West	499	(451–547)
Manitoba		364	(346–382)
4610	Winnipeg	330	(308–352)
4625	South Eastman	511	(415–606)
4630	Interlake	471	(392–550)
4640	Central	387	(322–453)
4645	Assiniboine	412	(331–492)

Hysterectomy

Age-standardized rate of hysterectomy provided to patients in acute care hospitals or same-day surgery facilities per 100,000 women aged 20 and older. As with other types of surgical procedures, variations in hysterectomy rates can be attributed to numerous factors, including differences in population demographics and health status, physician practice patterns and availability of services.

Note: Beginning with 2006–2007 data, hysterectomy rates include both total and sub-total hysterectomies, similar to the reporting prior to 2001–2002 data. Comparison with rates reported for previous years should be made with caution.

Sources: Hospital Morbidity Database, Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	Hysterectomy 2006–2007	
		Age-Standardized Rate per 100,000	95% CI
Saskatchewan		429	(407–451)
4701	Sun Country	514	(412–616)
4702	Five Hills	375	(284–467)
4704	Regina	396	(355–436)
4705	Sunrise	442	(347–537)
4706	Saskatoon	387	(350–425)
4709	Prince Albert	265	(202–328)
4710	Prairie North	689	(575–802)
Alberta		384	(373–395)
4821	Chinook	643	(573–713)
4822	Palliser	503	(429–577)
4823	Calgary	325	(309–341)
4824	David Thompson	424	(385–463)
4825	East Central	532	(461–603)
4826	Capital	374	(355–393)
4827	Aspen	472	(418–525)
4828	Peace Country	*	**
4829	Northern Lights	590	(492–687)
British Columbia		328	(319–336)
5911	East Kootenay	318	(255–382)
5912	Kootenay Boundary	344	(273–415)
5913	Okanagan	397	(362–433)
5914	Thompson/Cariboo/Shuswap	679	(620–738)
5921	Fraser East	526	(480–572)
5922	Fraser North	244	(224–263)
5923	Fraser South	269	(249–288)
5931	Richmond	222	(189–255)
5932	Vancouver	165	(150–181)
5933	North Shore	230	(203–257)
5941	South Vancouver Island	343	(313–373)
5942	Central Vancouver Island	510	(462–558)
5943	North Vancouver Island	500	(431–568)
5951	Northwest	420	(344–496)
5952	Northern Interior	526	(463–588)
5953	Northeast	424	(340–508)
Yukon Territory		321	(221–420)
Northwest Territories		508	(393–624)
Nunavut		179	(91–267)
Canada		..	.. ..
2005–2006			
Quebec[‡]		355	(349–362)
2401	Bas-Saint-Laurent	587	(530–644)
2402	Saguenay-Lac-Saint-Jean	662	(610–713)
2403	Capitale nationale	315	(294–336)
2404	Mauricie et Centre-du-Québec	395	(365–425)
2405	Estrie	505	(462–548)
2406	Montréal	248	(237–259)
2407	Outaouais	262	(236–289)
2408	Abitibi-Témiscamingue	502	(441–563)
2409	Côte-Nord	424	(358–489)
2411	Gaspésie-Îles-de-la-Madeleine	578	(499–657)
2412	Chaudière-Appalaches	450	(415–485)
2413	Laval	359	(329–389)
2414	Lanaudière	364	(335–392)
2415	Laurentides	338	(313–363)
2416	Montréal	360	(344–376)

‡ Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions. Rates include subtotal hysterectomy and are different from those published previously.

Map Code	Health Region	Percutaneous Coronary Intervention			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador		*135.6	(125.1–146.2)	158.4	(147.0–169.7)
1011	Eastern, N.L.	*154.4	(139.2–169.6)	172.0	(156.1–187.9)
1012	Central, N.L.	*117.8	(96.7–138.9)	151.7	(127.3–176.0)
1013	Western, N.L.	*96.0	(73.8–118.2)	123.4	(99.0–147.8)
Prince Edward Island		*137.4	(116.6–158.2)	143.1	(122.1–164.1)
Nova Scotia		179.4	(170.5–188.4)	171.8	(163.1–180.5)
1211	South Shore, N.S.	166.1	(133.9–198.2)	178.6	(146.2–211.1)
1212	South West Nova, N.S.	171.3	(138.4–204.1)	178.3	(144.9–211.7)
1213	Annapolis Valley, N.S.	*135.1	(110.3–160.0)	150.4	(123.5–177.4)
1214	Colchester East Hants, N.S.	198.2	(164.7–231.7)	175.5	(144.3–206.8)
1218	Cape Breton, N.S.	163.4	(141.5–185.2)	178.0	(154.5–201.6)
1219	Capital, N.S.	189.6	(174.3–204.8)	168.2	(154.1–182.3)
New Brunswick		*236.3	(224.7–247.9)	219.3	(208.3–230.4)
1301	Region 1, N.B. (Moncton area)	*210.8	(189.2–232.4)	202.7	(181.9–223.5)
1302	Region 2, N.B. (Saint John area)	*277.5	(251.2–303.8)	257.2	(232.1–282.4)
1303	Region 3, N.B. (Fredericton area)	*237.7	(212.8–262.7)	242.6	(217.4–267.7)
1304	Region 4, N.B. (Edmundston area)	*	**	*	**
1306	Region 6, N.B. (Bathurst area)	170.8	(141.4–200.2)	208.8	(177.6–240.0)
Ontario		*174.5	(171.9–177.0)	174.9	(172.4–177.3)
3501	Erie St. Clair	*121.5	(112.3–130.6)	124.8	(115.6–134.0)
3502	South West	*112.9	(105.6–120.2)	114.2	(106.9–121.4)
3503	Waterloo Wellington	*127.4	(117.9–136.9)	114.9	(106.0–123.8)
3504	Hamilton Niagara Haldimand Brant	*200.9	(192.9–208.8)	180.1	(172.7–187.5)
3505	Central West	183.9	(172.1–195.6)	172.3	(161.2–183.5)
3506	Mississauga Halton	*167.6	(158.4–176.9)	161.4	(152.6–170.3)
3507	Toronto Central	*138.4	(130.9–146.0)	154.8	(146.9–162.8)
3508	Central	*155.8	(148.7–162.8)	165.9	(158.8–173.1)
3509	Central East	175.2	(167.8–182.6)	174.6	(167.3–181.9)
3510	South East	*267.6	(252.8–282.3)	271.9	(257.2–286.6)
3511	Champlain	*195.6	(186.8–204.3)	206.3	(197.4–215.1)
3512	North Simcoe Muskoka	*160.2	(147.6–172.9)	190.4	(176.8–204.0)
3513	North East	*261.6	(248.1–275.0)	247.6	(234.6–260.7)
3514	North West	191.2	(172.3–210.2)	194.6	(175.5–213.6)
Manitoba		*135.6	(128.3–143.0)	125.1	(118.1–132.2)
4610	Winnipeg	*141.5	(131.6–151.5)	128.8	(119.3–138.3)
4625	South Eastman	*132.7	(97.7–167.7)	98.8	(69.8–127.9)
4630	Interlake	*123.0	(97.9–148.1)	125.8	(100.6–151.0)
4640	Central	*114.8	(91.1–138.5)	111.6	(88.3–134.8)
4645	Assiniboine	*110.0	(84.6–135.4)	94.6	(71.7–117.5)

Percutaneous coronary intervention

Age-standardized rate of percutaneous coronary intervention (PCI) performed on patients in acute care hospitals, same-day surgery facilities or catheterization laboratories per 100,000 population aged 20 years and older. In many cases, PCI serves as a non-surgical alternative to coronary artery bypass graft (CABG) surgery and is undertaken for the purpose of opening obstructed coronary arteries. The choice of revascularization mode (that is, PCI or CABG) depends on numerous factors including severity of coronary artery disease, physician preferences, availability of services, referral patterns as well as differences in population health and socio-economic status.

Note: The Canada rate for 2005–2006 does not include Quebec.

Sources: Hospital Morbidity Database, Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	Percutaneous Coronary Intervention			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan		*202.5	(192.9–212.2)	208.3	(198.6–217.9)
4701	Sun Country	153.1	(118.5–187.8)	163.3	(128.3–198.3)
4702	Five Hills	*138.9	(105.9–172.0)	156.9	(122.7–191.1)
4704	Regina	193.6	(174.5–212.8)	174.7	(156.6–192.8)
4705	Sunrise	169.8	(136.4–203.2)	149.5	(118.4–180.5)
4706	Saskatoon	*221.7	(202.1–241.3)	250.4	(230.0–270.9)
4709	Prince Albert	*245.8	(207.0–284.5)	263.8	(224.2–303.4)
4710	Prairie North	*233.5	(191.2–275.8)	242.8	(200.4–285.2)
Alberta		*183.2	(177.7–188.6)	175.3	(170.1–180.6)
4821	Chinook	159.7	(137.1–182.3)	142.8	(121.7–163.9)
4822	Palliser	156.6	(129.5–183.7)	174.1	(145.9–202.2)
4823	Calgary	*168.1	(159.2–177.1)	164.5	(155.8–173.2)
4824	David Thompson	195.3	(176.7–213.9)	164.1	(147.5–180.8)
4825	East Central	173.9	(148.5–199.4)	170.8	(145.8–195.8)
4826	Capital	182.0	(172.4–191.5)	181.2	(171.9–190.5)
4827	Aspen	*215.1	(190.4–239.9)	222.1	(197.2–247.0)
4828	Peace Country	*275.5	(239.5–311.5)	213.3	(182.6–244.1)
4829	Northern Lights	200.9	(147.5–254.3)	213.0	(157.2–268.8)
British Columbia		*185.6	(181.3–190.0)	175.4	(171.3–179.6)
5911	East Kootenay	179.2	(149.4–209.0)	166.4	(137.6–195.2)
5912	Kootenay Boundary	*139.7	(114.2–165.3)	146.2	(120.4–172.1)
5913	Okanagan	*145.8	(132.9–158.7)	131.2	(119.3–143.1)
5914	Thompson/Cariboo/Shuswap	*149.0	(132.3–165.7)	144.6	(128.6–160.5)
5921	Fraser East	*229.8	(209.9–249.8)	235.8	(216.1–255.6)
5922	Fraser North	*205.2	(191.9–218.5)	194.7	(182.1–207.4)
5923	Fraser South	*226.8	(213.9–239.8)	215.4	(202.8–228.0)
5931	Richmond	*121.8	(104.4–139.3)	124.0	(106.1–141.9)
5932	Vancouver	*134.6	(124.2–145.0)	116.6	(107.2–126.0)
5933	North Shore	*152.8	(137.6–168.0)	162.7	(146.6–178.8)
5941	South Vancouver Island	*216.5	(200.9–232.2)	172.0	(158.3–185.8)
5942	Central Vancouver Island	*226.7	(208.5–244.8)	216.8	(199.6–233.9)
5943	North Vancouver Island	*245.9	(216.4–275.4)	190.6	(165.3–215.8)
5951	Northwest	191.4	(154.3–228.5)	231.1	(191.7–270.5)
5952	Northern Interior	163.4	(139.2–187.5)	175.8	(151.1–200.4)
5953	Northeast	177.7	(137.5–217.9)	160.5	(123.1–197.9)
Yukon Territory		203.4	(134.5–272.3)	210.9	(144.5–277.4)
Northwest Territories		156.8	(100.5–213.2)	121.5	(74.4–168.7)
Nunavut		*85.8	(37.9–133.7)	68.1	(24.7–111.5)
Canada		177.9	(176.1–179.8)	..	..
		2004–2005		2005–2006	
Quebec†		*194.5	(191.2–197.9)	..	..
2401	Bas-Saint-Laurent	*197.5	(178.2–216.8)	..	..
2402	Saguenay-Lac-Saint-Jean	168.6	(152.8–184.3)	..	..
2403	Capitale nationale	*230.2	(218.3–242.1)	..	..
2404	Mauricie et Centre-du-Québec	*217.4	(204.1–230.7)	..	..
2405	Estrie	*247.0	(228.5–265.6)	..	..
2406	Montréal	171.7	(165.4–178.0)	..	..
2407	Outaouais	*106.3	(93.8–118.8)	..	..
2408	Abitibi-Témiscamingue	174.6	(151.6–197.6)	..	..
2409	Côte-Nord	*226.0	(193.5–258.4)	..	..
2411	Gaspésie-Îles-de-la-Madeleine	*307.5	(272.9–342.1)	..	..
2412	Chaudière-Appalaches	*191.9	(177.6–206.3)	..	..
2413	Laval	180.0	(165.5–194.5)	..	..
2414	Lanaudière	*231.0	(215.0–246.9)	..	..
2415	Laurentides	185.0	(172.1–197.9)	..	..
2416	Montréal	*197.5	(189.5–205.6)	..	..

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Coronary Artery Bypass Graft Surgery			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador		*125.9	(115.7–136.1)	115.4	(105.7–125.0)
1011	Eastern, N.L.	*112.9	(99.9–125.9)	104.0	(91.6–116.4)
1012	Central, N.L.	*148.8	(124.8–172.8)	152.2	(128.3–176.1)
1013	Western, N.L.	*117.3	(93.7–140.9)	97.4	(76.3–118.4)
Prince Edward Island		81.5	(65.6–97.5)	76.2	(60.7–91.6)
Nova Scotia		83.5	(77.4–89.7)	78.6	(72.7–84.6)
1211	South Shore, N.S.	84.7	(62.5–106.8)	67.0	(47.5–86.5)
1212	South West Nova, N.S.	97.9	(73.2–122.5)	93.9	(70.0–117.9)
1213	Annapolis Valley, N.S.	66.4	(48.2–84.6)	50.9	(35.5–66.3)
1214	Colchester East Hants, N.S.	*56.4	(38.8–74.1)	78.7	(57.4–100.1)
1218	Cape Breton, N.S.	101.1	(83.4–118.9)	97.7	(80.7–114.7)
1219	Capital, N.S.	85.1	(74.7–95.4)	71.3	(61.9–80.8)
New Brunswick		*92.0	(84.8–99.3)	77.1	(70.6–83.7)
1301	Region 1, N.B. (Moncton area)	78.6	(65.3–91.9)	80.7	(67.4–94.0)
1302	Region 2, N.B. (Saint John area)	*101.5	(85.4–117.6)	77.5	(63.8–91.2)
1303	Region 3, N.B. (Fredericton area)	93.6	(77.7–109.5)	89.7	(74.4–105.0)
1304	Region 4, N.B. (Edmundston area)	*	**	*	**
1306	Region 6, N.B. (Bathurst area)	79.4	(59.7–99.2)	71.8	(53.4–90.2)
Ontario		*88.0	(86.2–89.8)	79.9	(78.2–81.6)
3501	Erie St. Clair	*101.5	(93.1–110.0)	94.6	(86.5–102.6)
3502	South West	*90.4	(83.9–96.9)	81.0	(74.9–87.2)
3503	Waterloo Wellington	*98.1	(89.6–106.6)	73.5	(66.2–80.8)
3504	Hamilton Niagara Haldimand Brant	*99.9	(94.3–105.5)	102.0	(96.3–107.6)
3505	Central West	*92.7	(84.2–101.2)	80.0	(72.3–87.8)
3506	Mississauga Halton	*93.6	(86.6–100.6)	80.3	(73.9–86.7)
3507	Toronto Central	*61.6	(56.5–66.7)	56.7	(51.8–61.6)
3508	Central	80.0	(74.9–85.1)	66.5	(61.9–71.1)
3509	Central East	86.4	(81.1–91.6)	79.8	(74.8–84.7)
3510	South East	*115.0	(105.3–124.7)	101.0	(92.0–110.0)
3511	Champlain	*65.8	(60.7–71.0)	63.3	(58.4–68.3)
3512	North Simcoe Muskoka	93.0	(83.3–102.7)	86.6	(77.4–95.8)
3513	North East	*68.4	(61.6–75.2)	72.1	(65.2–79.1)
3514	North West	*141.4	(125.0–157.8)	116.0	(101.3–130.7)
Manitoba		87.7	(81.7–93.6)	92.9	(86.8–99.0)
4610	Winnipeg	82.3	(74.5–90.1)	90.7	(82.6–98.7)
4625	South Eastman	106.6	(74.5–138.7)	93.5	(64.5–122.5)
4630	Interlake	69.7	(50.5–88.9)	90.8	(69.3–112.3)
4640	Central	99.3	(77.0–121.6)	86.3	(65.8–106.9)
4645	Assiniboine	65.5	(46.0–85.0)	72.8	(52.7–92.8)

Coronary artery bypass graft surgery

Age-standardized rate of coronary artery bypass graft (CABG) surgery performed on inpatients in acute care hospitals per 100,000 population aged 20 and older. As with other types of surgical procedures, variations in CABG surgery rates can be attributed to numerous factors, including differences in population demographics and health status, physician practice patterns and availability of services. In cases amenable to treatment with less invasive procedures, percutaneous coronary intervention (PCI), an alternative treatment to improve blood flow to the heart muscle, may be used. Variations in the extent to which PCI is utilized may result in variations in bypass surgery.

Sources: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Map Code	Health Region	Coronary Artery Bypass Graft Surgery			
		2005–2006		2006–2007	
		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan		*110.9	(103.7–118.1)	103.2	(96.3–110.1)
4701	Sun Country	*118.6	(87.9–149.2)	106.0	(78.0–133.9)
4702	Five Hills	87.7	(62.6–112.7)	102.2	(74.5–129.9)
4704	Regina	*115.3	(100.4–130.3)	112.1	(97.5–126.7)
4705	Sunrise	*120.0	(92.6–147.3)	102.6	(77.6–127.7)
4706	Saskatoon	92.2	(79.5–105.0)	87.6	(75.2–99.9)
4709	Prince Albert	*120.3	(93.4–147.2)	133.7	(104.8–162.5)
4710	Prairie North	100.4	(72.3–128.4)	93.2	(66.6–119.9)
Alberta		*71.7	(68.3–75.2)	64.5	(61.3–67.8)
4821	Chinook	*65.9	(51.3–80.6)	50.9	(38.3–63.6)
4822	Palliser	78.9	(59.6–98.1)	51.6	(36.2–67.0)
4823	Calgary	*59.2	(53.7–64.6)	56.4	(51.1–61.6)
4824	David Thompson	78.2	(66.3–90.1)	62.4	(51.9–72.8)
4825	East Central	75.2	(58.4–92.1)	70.0	(54.1–85.9)
4826	Capital	81.6	(75.1–88.2)	72.5	(66.5–78.6)
4827	Aspen	81.4	(65.9–96.8)	77.3	(62.4–92.3)
4828	Peace Country	75.6	(56.0–95.2)	61.4	(44.7–78.1)
4829	Northern Lights	57.2	(28.1–86.3)	94.0	(50.8–137.2)
British Columbia		*69.6	(66.9–72.3)	66.0	(63.4–68.6)
5911	East Kootenay	*58.5	(41.3–75.7)	64.9	(46.7–83.1)
5912	Kootenay Boundary	*65.8	(48.3–83.4)	64.1	(47.2–80.9)
5913	Okanagan	*72.2	(63.4–81.0)	59.6	(51.7–67.5)
5914	Thompson/Cariboo/Shuswap	*70.6	(59.2–82.1)	71.2	(59.9–82.5)
5921	Fraser East	*68.0	(56.9–79.0)	71.3	(60.3–82.3)
5922	Fraser North	*74.7	(66.5–82.9)	69.0	(61.3–76.6)
5923	Fraser South	87.1	(79.0–95.2)	78.7	(71.0–86.4)
5931	Richmond	*56.4	(44.4–68.5)	53.0	(41.2–64.9)
5932	Vancouver	*50.9	(44.4–57.5)	52.0	(45.6–58.5)
5933	North Shore	74.5	(63.8–85.1)	65.0	(54.7–75.3)
5941	South Vancouver Island	*61.9	(53.6–70.3)	64.0	(55.4–72.7)
5942	Central Vancouver Island	*70.7	(60.5–80.9)	64.2	(54.9–73.5)
5943	North Vancouver Island	*62.2	(47.1–77.3)	71.7	(56.2–87.1)
5951	Northwest	101.6	(73.7–129.4)	76.4	(54.0–98.9)
5952	Northern Interior	*62.2	(46.9–77.5)	79.1	(62.0–96.1)
5953	Northeast	74.8	(47.0–102.7)	74.1	(46.4–101.8)
Yukon Territory		55.1	(22.7–87.5)	63.0	(26.7–99.3)
Northwest Territories		*49.8	(17.9–81.8)	31.3	(5.7–56.8)
Nunavut		*	**	49.1	(0.3–97.9)
Canada		83.8	(82.7–84.8)	..	.. ..
		2004–2005		2005–2006	
Quebec†		*91.5	(89.2–93.7)	*81.9	(79.8–84.0)
2401	Bas-Saint-Laurent	96.4	(82.9–110.0)	81.8	(69.7–94.0)
2402	Saguenay-Lac-Saint-Jean	*70.7	(60.4–81.0)	75.5	(65.0–85.9)
2403	Capitale nationale	*99.3	(91.5–107.1)	87.0	(79.8–94.2)
2404	Mauricie et Centre-du-Québec	*97.9	(89.0–106.8)	*72.0	(64.5–79.5)
2405	Estrie	*73.6	(63.4–83.8)	*67.6	(58.0–77.2)
2406	Montréal	*80.6	(76.3–84.9)	*75.5	(71.3–79.7)
2407	Outaouais	*68.3	(58.2–78.4)	*58.9	(49.7–68.2)
2408	Abitibi-Témiscamingue	102.8	(84.7–120.8)	92.6	(75.6–109.5)
2409	Côte-Nord	94.7	(73.3–116.1)	80.6	(61.3–99.8)
2411	Gaspésie-Îles-de-la-Madeleine	*109.2	(89.0–129.4)	*117.2	(96.6–137.8)
2412	Chaudière-Appalaches	91.1	(81.1–101.1)	74.9	(66.0–83.9)
2413	Laval	85.9	(75.9–95.9)	75.9	(66.6–85.3)
2414	Lanaudière	*101.7	(91.0–112.4)	88.6	(78.9–98.4)
2415	Laurentides	91.7	(82.5–100.8)	89.9	(80.9–98.8)
2416	Montréal	*109.4	(103.3–115.5)	*99.3	(93.5–105.0)

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	Cardiac Revascularization 2006–2007	
		Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador		272.4	(257.5–287.2)
1011	Eastern, N.L.	274.3	(254.3–294.4)
1012	Central, N.L.	303.9	(269.8–338.0)
1013	Western, N.L.	218.3	(186.3–250.3)
Prince Edward Island		219.3	(193.2–245.3)
Nova Scotia		249.7	(239.1–260.2)
1211	South Shore, N.S.	245.6	(207.8–283.4)
1212	South West Nova, N.S.	270.4	(229.5–311.3)
1213	Annapolis Valley, N.S.	201.3	(170.3–232.3)
1214	Colchester East Hants, N.S.	254.3	(216.5–292.1)
1218	Cape Breton, N.S.	274.1	(245.1–303.0)
1219	Capital, N.S.	238.9	(222.0–255.9)
New Brunswick		295.6	(282.8–308.4)
1301	Region 1, N.B. (Moncton area)	282.1	(257.5–306.7)
1302	Region 2, N.B. (Saint John area)	333.1	(304.5–361.6)
1303	Region 3, N.B. (Fredericton area)	332.3	(302.9–361.7)
1304	Region 4, N.B. (Edmundston area)	*	**
1306	Region 6, N.B. (Bathurst area)	280.6	(244.5–316.8)
Quebec		..	.. ..
2401	Bas-Saint-Laurent	..	.. ..
2402	Saguenay-Lac-Saint-Jean	..	.. ..
2403	Capitale nationale	..	.. ..
2404	Mauricie et Centre-du-Québec	..	.. ..
2405	Estrie	..	.. ..
2406	Montréal	..	.. ..
2407	Outaouais	..	.. ..
2408	Abitibi-Témiscamingue	..	.. ..
2409	Côte-Nord	..	.. ..
2411	Gaspésie-Îles-de-la-Madeleine	..	.. ..
2412	Chaudière-Appalaches	..	.. ..
2413	Laval	..	.. ..
2414	Lanaudière	..	.. ..
2415	Laurentides	..	.. ..
2416	Montérégie	..	.. ..
Ontario		253.5	(250.4–256.5)
3501	Erie St. Clair	216.8	(204.6–228.9)
3502	South West	193.3	(183.9–202.8)
3503	Waterloo Wellington	188.0	(176.5–199.5)
3504	Hamilton Niagara Haldimand Brant	281.0	(271.7–290.3)
3505	Central West	251.7	(238.1–265.2)
3506	Mississauga Halton	240.4	(229.6–251.2)
3507	Toronto Central	210.3	(201.0–219.6)
3508	Central	231.7	(223.2–240.2)
3509	Central East	253.6	(244.8–262.4)
3510	South East	371.1	(353.9–388.2)
3511	Champlain	267.7	(257.6–277.8)
3512	North Simcoe Muskoka	275.9	(259.6–292.3)
3513	North East	317.4	(302.8–332.1)
3514	North West	310.2	(286.2–334.2)
Manitoba		217.3	(208.0–226.6)
4610	Winnipeg	218.7	(206.3–231.2)
4625	South Eastman	192.3	(151.3–233.3)
4630	Interlake	216.5	(183.5–249.6)
4640	Central	196.8	(165.8–227.8)
4645	Assiniboine	167.4	(137.0–197.8)

Map Code	Health Region	Cardiac Revascularization 2006–2007	
		Age-Standardized Rate per 100,000	95% CI
Saskatchewan		308.7	(296.9–320.5)
4701	Sun Country	263.7	(219.4–307.9)
4702	Five Hills	251.8	(208.7–295.0)
4704	Regina	284.0	(260.9–307.1)
4705	Sunrise	248.3	(208.9–287.8)
4706	Saskatoon	336.8	(312.9–360.6)
4709	Prince Albert	394.3	(345.7–443.0)
4710	Prairie North	334.1	(284.3–384.0)
Alberta		238.9	(232.8–245.0)
4821	Chinook	193.0	(168.5–217.5)
4822	Palliser	225.7	(193.6–257.7)
4823	Calgary	219.4	(209.3–229.5)
4824	David Thompson	225.1	(205.5–244.6)
4825	East Central	239.9	(210.4–269.4)
4826	Capital	253.1	(242.1–264.2)
4827	Aspen	298.6	(269.7–327.5)
4828	Peace Country	274.7	(239.8–309.7)
4829	Northern Lights	307.0	(236.6–377.5)
British Columbia		239.7	(234.8–244.5)
5911	East Kootenay	229.8	(195.9–263.7)
5912	Kootenay Boundary	210.3	(179.5–241.1)
5913	Okanagan	189.4	(175.1–203.6)
5914	Thompson/Cariboo/Shuswap	213.4	(193.9–232.8)
5921	Fraser East	305.7	(283.2–328.2)
5922	Fraser North	262.4	(247.7–277.2)
5923	Fraser South	291.9	(277.2–306.6)
5931	Richmond	177.1	(155.6–198.5)
5932	Vancouver	166.4	(155.0–177.7)
5933	North Shore	227.2	(208.2–246.3)
5941	South Vancouver Island	232.8	(216.7–248.8)
5942	Central Vancouver Island	277.9	(258.6–297.3)
5943	North Vancouver Island	259.8	(230.4–289.3)
5951	Northwest	307.5	(262.3–352.8)
5952	Northern Interior	254.8	(224.9–284.8)
5953	Northeast	234.6	(188.1–281.1)
Yukon Territory		273.9	(198.3–349.6)
Northwest Territories		152.8	(99.2–206.4)
Nunavut		117.2	(52.0–182.4)
Canada		..	.. ..

Cardiac revascularization

Age-standardized rate of coronary artery bypass graft (CABG) surgery performed on inpatients in acute care hospitals or percutaneous coronary interventions (PCI) performed on patients in acute care hospitals, same-day surgery facilities or catheterization laboratories per 100,000 population age 20 years and older. The choice of revascularization mode (that is, PCI or CABG) depends on numerous factors including severity of coronary artery disease, physician preferences, availability of services, referral patterns as well as differences in population health and socio-economic status. The combined cardiac revascularization rate represents total activity of cardiac revascularization in a jurisdiction.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	Inflow/Outflow Ratio, 2006–2007					
		Overall	Hip Replacement	Knee Replacement	Hysterectomy	Percutaneous Coronary Intervention	Bypass Surgery
Newfoundland and Labrador		..	..	..	..	..	..
1011	Eastern, N.L.	1.13	1.13	1.09	1.09	1.65	2.00
1012	Central, N.L.	0.87	0.88	0.93	0.93	0.00	0.00
1013	Western, N.L.	0.92	0.98	1.07	1.02	0.00	0.00
Prince Edward Island		0.95	0.93	0.98	0.96	0.00	0.00
Nova Scotia		..	..	..	..	..	..
1211	South Shore, N.S.	0.71	0.00	0.00	0.83	0.00	0.00
1212	South West Nova, N.S.	0.73	0.00	0.00	0.70	0.00	0.00
1213	Annapolis Valley, N.S.	1.03	2.53	2.62	1.28	0.00	0.00
1214	Colchester East Hants, N.S.	0.65	0.00	0.00	1.04	0.00	0.00
1218	Cape Breton, N.S.	0.93	0.98	1.09	0.71	0.00	0.00
1219	Capital, N.S.	1.44	1.32	1.33	1.24	3.01	3.48
New Brunswick		..	..	..	..	..	..
1301	Region 1, N.B. (Moncton area)	1.10	1.31	1.23	1.17	0.00	0.00
1302	Region 2, N.B. (Saint John area)	1.17	1.03	0.97	0.98	3.81	4.25
1303	Region 3, N.B. (Fredericton area)	0.93	1.06	1.12	0.92	0.00	0.00
1304	Region 4, N.B. (Edmundston area)	0.95	0.89	0.88	0.97	0.00	0.00
1306	Region 6, N.B. (Bathurst area)	0.96	1.02	0.84	1.03	0.00	0.00
Ontario		..	..	..	..	..	..
3501	Erie St. Clair	0.88	0.89	0.91	0.88	0.00	0.00
3502	South West	1.09	0.92	0.91	1.08	1.41	1.51
3503	Waterloo Wellington	0.93	1.13	1.09	0.92	1.53	1.58
3504	Hamilton Niagara Haldimand Brant	1.00	0.97	0.97	1.03	0.95	0.97
3505	Central West	0.73	0.76	0.76	0.66	0.00	0.00
3506	Mississauga Halton	0.95	0.86	0.96	0.81	1.33	1.43
3507	Toronto Central	1.84	2.28	2.26	2.45	3.39	4.59
3508	Central	0.94	0.88	1.00	0.94	0.86	0.85
3509	Central East	0.84	0.79	0.89	0.81	0.35	0.00
3510	South East	0.93	1.06	1.03	0.93	0.97	0.93
3511	Champlain	1.11	1.00	1.00	1.15	1.21	1.44
3512	North Simcoe Muskoka	0.89	0.75	0.75	0.92	0.00	0.00
3513	North East	0.95	0.58	0.69	0.93	0.97	0.88
3514	North West	0.91	0.92	0.95	0.85	0.00	0.00
Manitoba		..	..	..	..	..	..
4610	Winnipeg	1.39	1.66	1.59	1.57	1.80	1.88
4625	South Eastman	0.61	0.00	0.00	0.35	0.00	0.00
4630	Interlake	0.53	0.00	0.00	0.20	0.00	0.00
4640	Central	0.79	1.34	0.62	0.19	0.00	0.00
4645	Assiniboine	0.60	0.00	0.00	0.12	0.00	0.00

Inflow/outflow ratio

A ratio of the number of discharges from relevant facilities (acute care/same-day surgery) within a given region divided by the number of discharges generated by residents of that region. An overall ratio is calculated for discharges associated with any diagnosis or procedure for acute care discharges only and separately for hip replacement, knee replacement, hysterectomy, percutaneous coronary intervention and coronary artery bypass surgery procedures from all relevant facilities. A ratio of less than one indicates that health care utilization by residents of a region exceeded care provided within that region, suggesting an outflow effect. A ratio greater than one indicates that care provided by a region exceeded the utilization by its residents, suggesting an inflow effect. A ratio of one indicates that care provided by a region is equivalent to the utilization by its residents, suggesting that inflow and outflow activity, if it exists at all, is balanced. A ratio of zero is an indication that none of the institutions in the region provided the service and residents received care outside of their region.

Sources: Hospital Morbidity Database, Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Acute Care Database and Alberta Ambulatory Care Database, Alberta Health and Wellness.

Map Code	Health Region	Inflow/Outflow Ratio, 2006–2007					
		Overall	Hip Replacement	Knee Replacement	Hysterectomy	Percutaneous Coronary Intervention	Bypass Surgery
Saskatchewan		..	..	..	..	..	..
4701	Sun Country	0.65	0.00	0.00	0.16	0.00	0.00
4702	Five Hills	0.83	0.39	0.23	0.77	0.00	0.00
4704	Regina	1.21	1.54	1.47	1.28	1.99	2.22
4705	Sunrise	0.84	0.00	0.00	1.06	0.00	0.00
4706	Saskatoon	1.41	1.97	2.02	1.54	1.81	1.77
4709	Prince Albert	0.89	0.61	0.61	0.60	0.00	0.00
4710	Prairie North	1.01	0.00	0.00	1.39	0.00	0.00
Alberta		..	..	..	..	..	..
4821	Chinook	0.95	1.04	1.14	1.08	0.00	0.00
4822	Palliser	0.92	0.91	1.07	0.71	0.00	0.00
4823	Calgary	1.09	1.10	1.08	1.06	1.55	1.58
4824	David Thompson	0.87	0.77	0.69	0.71	0.00	0.00
4825	East Central	0.65	0.71	0.64	0.56	0.00	0.00
4826	Capital	1.26	1.25	1.30	1.27	1.73	1.71
4827	Aspen	0.72	0.47	0.49	0.36	0.00	0.00
4828	Peace Country	*	*	*	*	0.00	0.00
4829	Northern Lights	0.88	0.13	0.28	0.84	0.00	0.00
British Columbia		..	..	..	..	..	..
5911	East Kootenay	0.84	0.68	0.63	0.77	0.00	0.00
5912	Kootenay Boundary	0.85	0.71	0.88	0.72	0.00	0.00
5913	Okanagan	1.03	0.92	1.01	1.08	0.00	0.00
5914	Thompson/Cariboo/Shuswap	0.89	0.56	0.55	0.96	0.00	0.00
5921	Fraser East	0.87	0.80	0.82	0.93	0.00	0.00
5922	Fraser North	1.02	0.78	0.95	0.91	2.40	1.87
5923	Fraser South	0.80	0.51	0.71	0.73	0.00	0.00
5931	Richmond	0.92	2.14	2.17	0.91	0.00	0.00
5932	Vancouver	1.69	3.48	2.55	2.08	4.92	5.09
5933	North Shore	0.87	0.74	0.93	0.90	0.00	0.00
5941	South Vancouver Island	1.17	0.88	0.92	1.08	2.59	2.65
5942	Central Vancouver Island	0.84	0.68	0.77	0.89	0.00	0.00
5943	North Vancouver Island	0.90	0.96	0.95	0.94	0.00	0.00
5951	Northwest	0.86	0.39	0.68	0.97	0.00	0.00
5952	Northern Interior	0.94	0.83	0.84	0.73	0.00	0.00
5953	Northeast	0.87	0.98	0.95	0.86	0.00	0.00
Yukon Territory		0.88	0.00	0.50	0.95	0.00	0.00
Northwest Territories		1.00	0.89	1.00	0.99	0.00	0.00
Nunavut		0.43	0.00	0.00	0.50	0.00	0.00
Canada		..	..	..	..	..	..
2005–2006							
Quebec†		..	..	..	..	..	..
2401	Bas-Saint-Laurent	0.92	0.91	0.93	1.01	..	0.00
2402	Saguenay-Lac-Saint-Jean	1.01	0.99	1.02	1.03	..	1.00
2403	Capitale nationale	1.34	1.23	1.24	1.23	..	2.32
2404	Mauricie et Centre-du-Québec	0.87	1.07	1.06	0.91	..	0.00
2405	Estrie	1.07	0.62	0.58	0.98	..	1.53
2406	Montréal	1.39	1.65	1.56	1.55	..	2.98
2407	Outaouais	0.81	0.78	0.89	0.50	..	0.00
2408	Abitibi-Témiscamingue	0.97	1.04	1.02	1.03	..	0.00
2409	Côte-Nord	0.78	0.50	0.60	0.83	..	0.00
2411	Gaspésie-Îles-de-la-Madeleine	0.75	0.67	0.72	0.68	..	0.00
2412	Chaudière-Appalaches	0.75	0.91	0.91	0.90	..	0.00
2413	Laval	0.78	0.44	0.69	0.86	..	0.00
2414	Lanaudière	0.73	0.56	0.56	0.66	..	0.00
2415	Laurentides	0.81	0.61	0.57	0.59	..	0.00
2416	Montréal	0.78	0.60	0.66	0.78	..	0.00

† Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions.

Map Code	Health Region	General/Family Physicians 2006		Specialist Physicians 2006	
		Rate per 100,000 Population	95% CI	Rate per 100,000 Population	95% CI
Newfoundland and Labrador		103	(95–112)	97	(88–105)
1011	Eastern, N.L.	107	(95–119)	127	(114–140)
1012	Central, N.L.	96	(76–116)	57	(42–73)
1013	Western, N.L.	96	(75–118)	62	(45–80)
Prince Edward Island		92	(76–108)	58	(45–70)
Nova Scotia		120	(113–127)	99	(93–106)
1211	South Shore, N.S.	111	(84–137)	53	(35–71)
1212	South West Nova, N.S.	106	(80–132)	22	(11–34)
1213	Annapolis Valley, N.S.	97	(76–118)	73	(54–91)
1214	Colchester East Hants, N.S.	83	(62–104)	37	(23–51)
1218	Cape Breton, N.S.	116	(97–135)	61	(48–75)
1219	Capital, N.S.	140	(129–152)	164	(151–176)
New Brunswick		106	(99–113)	71	(65–77)
1301	Region 1, N.B. (Moncton area)	113	(99–128)	97	(83–110)
1302	Region 2, N.B. (Saint John area)	95	(81–110)	95	(80–109)
1303	Region 3, N.B. (Fredericton area)	95	(80–109)	54	(43–65)
1304	Region 4, N.B. (Edmundston area)	133	(101–165)	39	(22–56)
1306	Region 6, N.B. (Bathurst area)	100	(78–122)	50	(34–65)
Quebec		109	(107–112)	106	(104–108)
2401	Bas-Saint-Laurent	122	(107–137)	87	(74–100)
2402	Saguenay-Lac-Saint-Jean	106	(94–118)	77	(67–87)
2403	Capitale nationale	149	(140–158)	171	(161–181)
2404	Mauricie et Centre-du-Québec	90	(81–98)	71	(64–79)
2405	Estrie	135	(122–148)	119	(107–131)
2406	Montréal	124	(119–129)	199	(193–206)
2407	Outaouais	93	(83–103)	50	(42–57)
2408	Abitibi-Témiscamingue	121	(103–139)	71	(57–85)
2409	Côte-Nord	132	(109–155)	58	(43–74)
2411	Gaspésie-Îles-de-la-Madeleine	171	(145–197)	63	(47–78)
2412	Chaudière-Appalaches	102	(92–111)	63	(55–71)
2413	Laval	85	(76–94)	65	(57–73)
2414	Lanaudière	82	(73–90)	48	(42–55)
2415	Laurentides	93	(85–102)	46	(40–52)
2416	Montérégie	91	(86–96)	59	(55–63)
Ontario		84	(82–85)	90	(89–92)
3501	Erie St. Clair	60	(54–66)	51	(46–57)
3502	South West	81	(76–87)	99	(93–106)
3503	Waterloo Wellington	75	(69–82)	56	(51–62)
3504	Hamilton Niagara Haldimand Brant	74	(70–79)	89	(84–94)
3505	Central West	56	(50–61)	40	(36–45)
3506	Mississauga Halton	69	(64–74)	55	(51–60)
3507	Toronto Central	140	(133–147)	272	(263–282)
3508	Central	80	(75–84)	66	(62–70)
3509	Central East	66	(62–70)	54	(50–58)
3510	South East	97	(88–106)	99	(90–108)
3511	Champlain	106	(100–112)	127	(121–133)
3512	North Simcoe Muskoka	84	(75–93)	50	(44–57)
3513	North East	88	(81–96)	59	(52–65)
3514	North West	102	(89–114)	56	(46–65)
Manitoba		93	(87–99)	87	(82–93)
4610	Winnipeg	100	(92–107)	143	(134–152)
4625	South Eastman	66	(45–86)	*	**
4630	Interlake	78	(59–98)	14	(6–22)
4640	Central	82	(64–99)	14	(7–21)
4645	Assiniboine	83	(62–105)	*	**

Map Code	Health Region	General/Family Physicians 2006		Specialist Physicians 2006	
		Rate per 100,000 Population	95% CI	Rate per 100,000 Population	95% CI
Saskatchewan		91	(85–97)	69	(63–74)
4701	Sun Country	70	(47–92)	*	**
4702	Five Hills	78	(54–102)	34	(18–50)
4704	Regina	104	(91–117)	79	(68–91)
4705	Sunrise	58	(38–79)	22	(10–34)
4706	Saskatoon	106	(94–118)	135	(122–149)
4709	Prince Albert	98	(76–121)	42	(27–56)
4710	Prairie North	78	(57–99)	24	(12–36)
Alberta		104	(101–108)	88	(85–91)
4821	Chinook	96	(80–111)	52	(41–63)
4822	Palliser	83	(66–101)	44	(31–57)
4823	Calgary	112	(106–117)	111	(105–117)
4824	David Thompson	94	(84–105)	33	(27–40)
4825	East Central	84	(68–101)	11	(5–17)
4826	Capital	116	(110–123)	126	(119–132)
4827	Aspen	88	(75–102)	6	(2–10)
4828	Peace Country	82	(67–97)	25	(17–33)
4829	Northern Lights	67	(48–85)	17	(8–27)
British Columbia		109	(106–112)	90	(87–93)
5911	East Kootenay	138	(112–164)	27	(15–38)
5912	Kootenay Boundary	142	(115–168)	57	(40–73)
5913	Okanagan	104	(93–115)	85	(75–95)
5914	Thompson/Cariboo/Shuswap	98	(85–111)	52	(43–62)
5921	Fraser East	85	(74–96)	42	(34–50)
5922	Fraser North	80	(73–87)	71	(64–78)
5923	Fraser South	74	(67–81)	48	(43–54)
5931	Richmond	82	(69–95)	62	(51–74)
5932	Vancouver	159	(149–169)	249	(237–262)
5933	North Shore	116	(104–129)	57	(49–66)
5941	South Vancouver Island	153	(140–166)	127	(115–139)
5942	Central Vancouver Island	108	(95–120)	59	(49–68)
5943	North Vancouver Island	127	(106–147)	59	(45–72)
5951	Northwest	126	(101–150)	24	(13–35)
5952	Northern Interior	117	(100–135)	50	(39–62)
5953	Northeast	96	(72–119)	12	(4–21)
Yukon Territory		202	(152–252)	22	(6–39)
Northwest Territories		83	(56–111)	31	(14–48)
Nunavut		32	(12–53)	*	**
Canada		98	(97–99)	93	(92–94)

Physicians

Number of physicians per 100,000 population. Counts include all active physicians as of December 31 of the reference year. Physicians in clinical and non-clinical practice are included. Residents and unlicensed physicians who have requested that their information not be published are excluded. For all jurisdictions and data years, specialist physicians include certificants of the Royal College of Physicians and Surgeons of Canada (RCPSC) and/or the College des médecins du Québec (CMQ). As of 2004, specialists in Saskatchewan and Newfoundland and Labrador also include physicians who are licensed as specialists but who are not certified by the RCPSC or the CMQ (that is, non-certified specialists). For all other jurisdictions, and for Saskatchewan and Newfoundland and Labrador prior to 2004, non-certified specialists are counted as general practitioners. With the exception of the criteria just noted, all other physicians are counted as family physicians, including certificants of the College of Family Physicians of Canada. For further methodological information please see *Supply, Distribution and Migration of Canadian Physicians and Certified and Non-Certified Specialists: Understanding the Numbers* (www.cihi.ca). Physician-to-population rates are useful indicators and are published by a variety of agencies to support health human resource planning. However, results may vary across publication sources due to differing methodologies and readers are cautioned to avoid inferences regarding the adequacy of providers based on supply ratios alone.

Source: Scott's Medical Database, Canadian Institute for Health Information.

Selected Health Professionals,¹ 2006

	RNs	LPNs	Pharmacists	Dentists	Dental Hygienists	Dietitians	Occupational Therapists	Physio-therapists	Chiropractors	Optometrists	Psychologists
N.L.	1,084	519	109	32	18	29	28	40	9	8	38
PE.I.	1,030	432	102	45	43	41	25	40	6	14	18
N.S.	941	340	84	55	56	47	34	57	11	10	47
N.B.	1,026	353	87	39	39	43	32	58	7	14	45
Que.	834	223	92	54	57	31	48	48	15	17	104
Ont.	708	197	73	62	70	21	30	44	28	12	24
Man.	924	225	96	50	48	32	38	50	21	9	15
Sask.	858	225	104	37	36	27	23	56	19	12	44
Alta.	753	163	93	55	57	24	41	58	33	12	57
B.C.	665	125	73	66	52	22	33	57	23	10	24
Y.T.	1,044	193	93	64	64	..	} 19	..	19	16	..
N.W.T.	1,420	220	53	122	36	..		..	..	0	203
Nun.		..	55	158	..	..		..	..	..	65
Canada	772	205	83	58	59	26	36	49	23	13	48

1 Rates per 100,000 population.

Health Expenditure

	Current Dollars (\$ '000,000)			Total Health Expenditure						
	Actual 2005	Forecast 2006	Forecast 2007	% GDP 2005	% By Use of Funds (Percentage Distribution of \$ '000,000), 2005					
					Public Sector 2005	Institutional Services	Professional Services	Drugs	Public Health	Capital and Other Health
N.L.	2,235	2,368	2,551	10.4	75.5	51.1	19.3	16.3	4.4	8.9
PE.I.	576	603	652	13.8	72.0	45.6	19.2	16.7	4.9	13.5
N.S.	4,030	4,298	4,540	12.9	70.1	46.0	22.4	17.5	2.1	12.0
N.B.	3,312	3,559	3,803	13.7	70.0	44.6	20.5	17.5	2.9	14.4
Que.	29,875	31,774	33,632	10.9	71.6	42.0	21.4	19.5	4.0	13.0
Ont.	56,631	60,194	63,813	10.5	66.8	36.9	25.1	17.1	6.4	14.5
Man.	5,603	5,809	6,213	13.4	75.0	42.3	21.5	13.3	6.5	16.3
Sask.	4,431	4,776	5,091	10.3	76.2	40.0	21.8	14.8	9.4	14.0
Alta.	15,259	16,513	18,403	7.0	72.6	37.5	23.6	13.5	9.3	16.0
B.C.	18,480	19,503	20,542	10.9	71.6	36.3	27.7	13.7	5.8	16.5
Y.T.	189	211	221	12.4	80.6	38.8	17.0	10.8	15.5	17.8
N.W.T.	320	322	335	7.8	88.5	47.2	18.1	6.4	7.5	20.9
Nun.	302	340	338	27.1	95.1	40.1	15.0	5.4	9.1	30.3
Canada	141,241	150,269	160,134	10.3	70.1	39.0	23.9	16.5	6.0	14.6

	Public Sector Health Expenditure by Use of Funds (\$ per Capita), 2005					Private Sector Health Expenditure by Use of Funds (\$ per Capita), 2005				
	Institutional Services	Professional Services	Drugs	Public Health	Capital and Other Health	Institutional Services	Professional Services	Drugs	Public Health	Capital and Other Health
N.L.	2,051	569	232	191	240	172	268	477	0	148
PE.I.	1,622	476	188	206	511	281	325	510	0	53
N.S.	1,729	599	232	89	370	252	364	521	0	147
N.B.	1,711	559	215	129	469	257	346	554	0	166
Que.	1,458	477	334	159	388	196	364	433	0	125
Ont.	1,368	646	296	286	416	296	486	477	0	239
Man.	1,733	634	275	312	624	287	392	361	0	155
Sask.	1,589	645	259	418	498	203	330	403	0	131
Alta.	1,540	611	242	434	555	208	487	389	0	191
B.C.	1,442	666	216	251	534	135	537	378	0	182
Y.T.	1,840	746	347	941	1,013	513	286	306	0	68
N.W.T.	3,282	1,070	234	561	1,499	259	288	244	0	68
Nun.	3,975	1,345	340	915	2,980	57	166	201	0	66
Canada	1,472	601	282	262	451	235	444	441	..	186

Health professionals

Number of health professionals (selected professions) per 100,000 population. **Nursing professionals (RNs, LPNs)**, occupational therapists (with the exception of Quebec and the territories) and pharmacists (with the exception of Newfoundland and Labrador, New Brunswick, Quebec, Manitoba and Nunavut): Rates reflect health professionals registered with active-practising status and who are employed in these health professions. Rates will differ from data published by provincial/territorial regulatory authorities due to the CIHI collection, processing and reporting methodology. **Registered nurses (RNs)**: Data from the territories include secondary registrations. Please consult *Workforce Trends of Registered Nurses in Canada, 2006* for more detailed methodological notes and data quality issues. **Other health professional** data reflect personnel regardless of employment status and include the number of active registered dentists; registered dental hygienists; registered dietitians; active registered physiotherapists; registered chiropractors; active registered optometrists; and active registered psychologists. Personnel-per-population rates are revised annually using the most recent Statistics Canada population estimates and therefore may differ slightly from previously published figures. Please consult *Health Personnel Trends in Canada, 1995 to 2004* for more detailed methodological notes, data quality issues and profession-specific information. **Sources:** Health Personnel Database, Nursing Database, Occupational Therapists Database and Pharmacist Database, Canadian Institute for Health Information.

Total health expenditure

Total health expenditure includes any type of expenditure for which the primary objective is to improve or prevent the deterioration of health status. Presented in current dollars and as a proportion of gross domestic product (GDP). This definition allows economic activities to be measured according to primary purpose and secondary effects. Activities that are undertaken with the direct purpose of providing or maintaining health are included. Other activities are not included, even though they may impact health. For example, funds aligning with housing and income support policies which have social welfare goals as their primary purpose are not considered to be health expenditures, yet they are recognized as powerful factors in determining population health.

Source: National Health Expenditure Database, Canadian Institute for Health Information.

Proportion of public sector

Public-sector health expenditure presented as a proportion of total health expenditure. Public sector includes health care spending by governments and government agencies.

Source: National Health Expenditure Database, Canadian Institute for Health Information.

Total health expenditure by use of funds

Percentage distribution of total health expenditure by health-spending category. **Institutional services** include hospitals and residential care types of facilities that are approved, funded or operated by provincial/territorial governments. **Professional services** include expenditures on primary professional fees paid to physicians in private service as well as for the services of privately practising dentists, denturists, chiropractors and other health professionals. This category does not include the remuneration of health professionals on the payrolls of hospitals or public-sector health agencies and generally represents amounts that flow through provincial medical care plans. **Drugs** include expenditures on prescribed drugs and non-prescribed products purchased in retail stores. This category does not include drugs dispensed in hospitals and other institutions. **Public health** is that provided by governments and governmental agencies and includes expenditures for items such as food and drug safety, health inspections, health promotion, community mental health programs, public health nursing, measures to prevent the spread of communicable diseases and other related activities. **Capital and other health** include expenditure on construction, machinery, equipment and some software of hospitals, clinics, first-aid stations and residential care facilities (capital); cost of providing health insurance programs by the government and private health insurance companies and all costs for the infrastructure to operate health departments (administration expenditures); other health includes at the aggregate level expenditures on home care, medical transportation (ambulances), hearing aids, other appliances and prostheses, health research and miscellaneous health care.

Source: National Health Expenditure Database, Canadian Institute for Health Information.

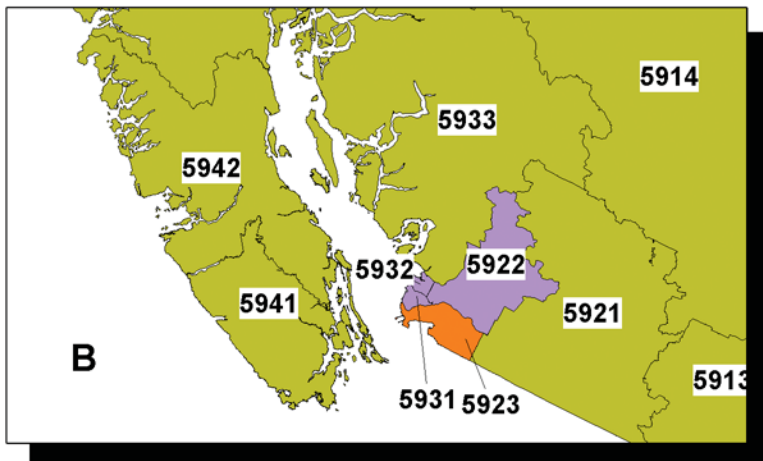
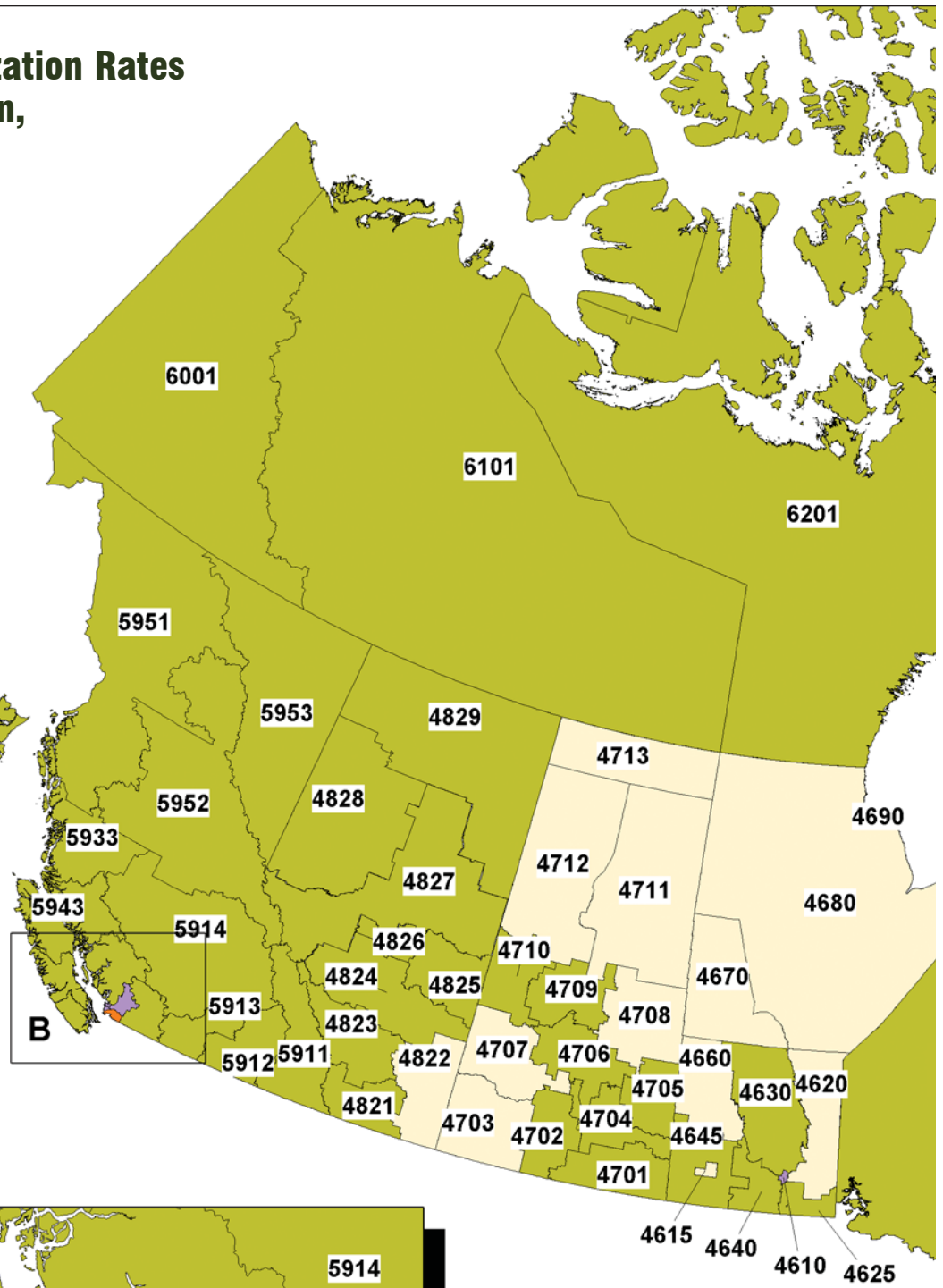
- The methodology used for these indicators was designed to maximize inter-regional, interprovincial and inter-territorial comparability given the characteristics of available national data sets. For this reason, there may be differences between definitions, data sources and extraction procedures used in some local, regional or provincial/territorial reports when compared to those described here. In addition, discrepancies may exist due to ongoing updates to the databases. Data presented here include the latest updates available at the time of publication.
- Health regions are defined by provincial governments as areas of responsibility for regional health boards (that is, legislated) or as regions of interest to health care authorities. In order to determine what health region a patient belongs to, postal codes are first mapped to census geography using Statistics Canada's "Postal Code Conversion File (PCCF)" and then to a health region using another Statistics Canada product, "Health Regions: Boundaries and Correspondence with Census Geography." Boundaries are those that were in effect as of December 2007.
- Data for regions with a population of at least 50,000 are reported. This threshold ensures stability in rates and reduces the risk of suppression stemming from privacy and confidentiality issues.
- With the exception of in-hospital hip fracture rates, indicator data are reported based on the region of the patient's residence, not region of hospitalization. In-hospital hip fracture rate is a measure of patient safety in a hospital. Therefore, this indicator is reported based on the jurisdiction where hospitalization occurred, not the jurisdiction of patient residence.
- Unless otherwise specified, hospitalizations include discharges and deaths for inpatients in acute care hospitals for the reference period. Same-day surgery (outpatient) cases are included in several indicators. Patients admitted to non-acute care hospitals (for example, chronic care, psychiatric or rehabilitation facilities) are not included in the totals.
- For procedure-derived indicators (for example, hip and knee replacement, percutaneous coronary intervention, coronary artery bypass), rates are based on the total number of discharges rather than the total number of interventions. For example, a bilateral knee replacement provided at the same admission is counted as one event. Procedure-derived indicators include discharges from acute care hospitals as well as same-day surgery facilities, where applicable.
- Quebec data for 2006–2007 were unavailable for inclusion in this publication; therefore, data for earlier years are presented for Quebec regions. In addition, residents from other provinces and territories hospitalized in Quebec in 2006–2007 could not be included in the rates of their home province or territory. Also, Canada rates for most indicators have not been calculated for 2006–2007. Updated rates will be posted in the *Health Indicators* e-publication as soon as data become available.
- ICD-10-CA and the Canadian Classification of Health Interventions (CCI) systems of coding diagnoses and procedures came into effect in 2001 and by April 1, 2004 had been adopted by all provinces and territories with the exception of Quebec. New and revised coding standards introduced with the ICD-10-CA/CCI classification systems may affect the comparability of rates with those appearing in previous releases for some of the indicators.

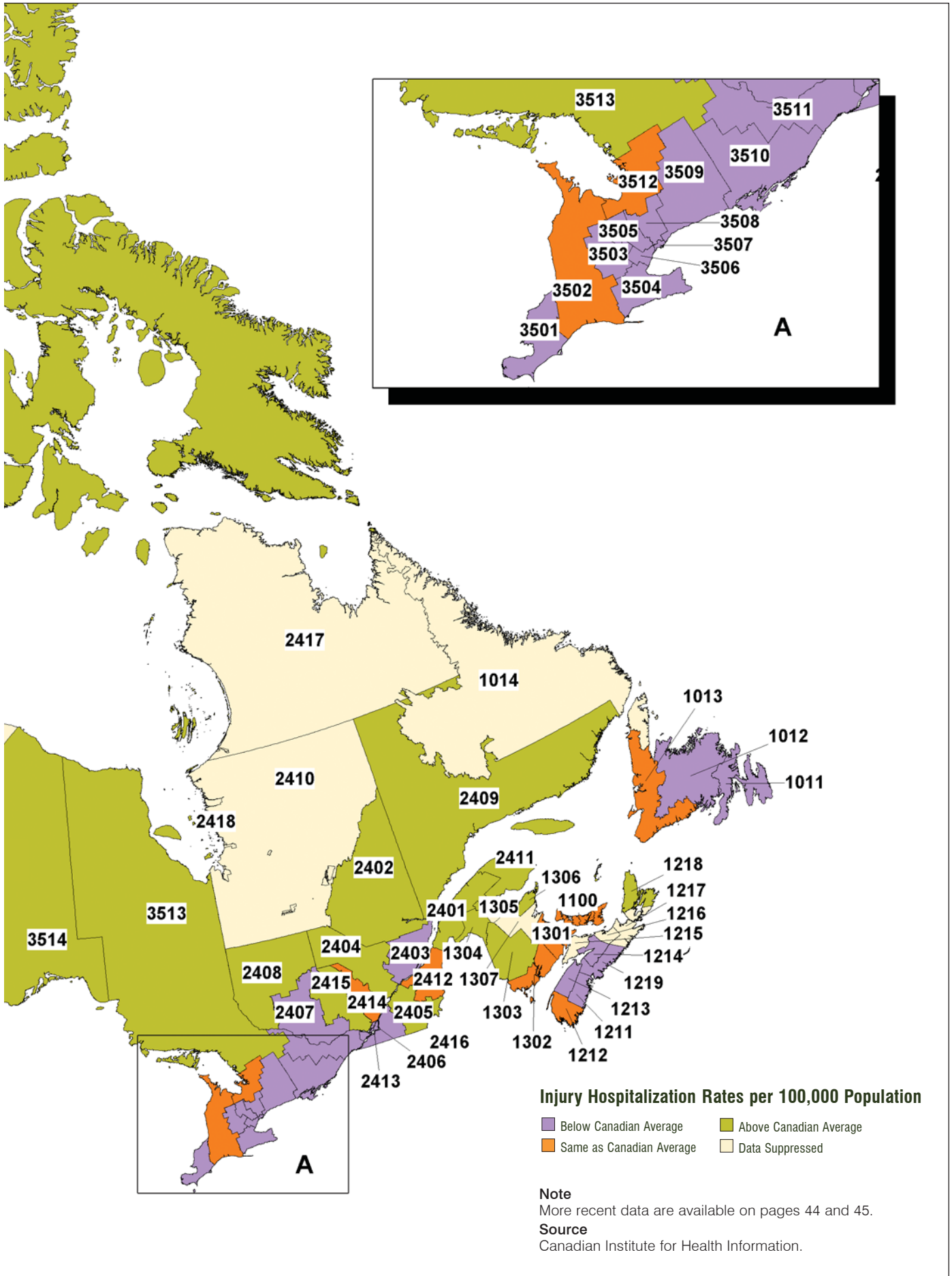
- Hospitalization data for 2005–2006 for Palliser Health Region in Alberta were incomplete, and several indicators—including hip and knee replacement, hip fracture, injury hospitalization, ambulatory care sensitive conditions (ACSC) and hysterectomy as well as inflow/outflow indicator for hip and knee replacement, hysterectomy and overall—could not be calculated for this region.
- Hospitalization data for 2006–2007 for Peace Country Health Region in Alberta were incomplete, and several indicators—including hip and knee replacement, hip fracture, injury hospitalization, ambulatory care sensitive conditions (ACSC), hysterectomy, Caesarean section, wait time for hip fracture surgery, in-hospital hip fracture, mortality and readmission rates as well as inflow/outflow indicator for hip and knee replacement, hysterectomy and overall—could not be calculated for this region.
- Standardized rates are adjusted by age (collapsed to five-year groupings) using a direct method of standardization based on the July 1, 1991, Canadian population.
- See the *Health Indicators* e-publication (www.cihi.ca/indicators or www.statcan.ca) for diagnosis and procedure codes used to extract the indicator data and detailed definitions and technical notes. Indicator rates for years prior to those appearing in this publication are also available in the e-publication.

Indicator Index

30-day acute myocardial infarction in-hospital mortality	.64–65
30-day stroke in-hospital mortality	.66–67
Aboriginal population	.38–39
acute myocardial infarction readmission	.60–61
ambulatory care sensitive conditions	.56–59
asthma	.42
asthma readmission	.60–61
Caesarean section	.54–55
cancer incidence	.40
cardiac revascularization	.78–79
coronary artery bypass graft surgery	.76–77
dependency ratio	.36–37
diabetes	.42
health expenditure	.84
health professionals	.84
high blood pressure	.42
hip fracture hospitalization	.52–53
hip replacement	.68–69
hysterectomy	.72–73
hysterectomy readmission	.62–63
immigrant population	.38–39
infant mortality	.40
inflow/outflow ratio	.80–81
in-hospital hip fracture	.52–53
injury hospitalization	.44–45
knee replacement	.70–71
life expectancy at birth	.40
low birth weight	.40
percutaneous coronary intervention	.74–75
perinatal mortality	.40
physicians	.82–83
population	.36–37
prostatectomy readmission	.62–63
rural population	.38–39
unemployment rate	.46–47
wait time for hip fracture surgery	.48–51

Injury Hospitalization Rates by Health Region, 2005–2006





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