







Health Indicators 2010



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

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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.



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We inform Canadians through the analysis and dissemination of our 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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It should be noted that the analyses and conclusions in this report do not necessarily reflect the opinions of the experts or their affiliated organizations.

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The Health Indicators project is a joint effort by 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 *Heath Indicators* 2010 report. Statistics Canada and CIHI also jointly produce the *Health Indicators* e-publication, which provides additional health indicator data. Special appreciation goes to **Brenda Wannell**, **Tim Johnston** and **Lawson Greenberg** at Statistics Canada for their contribution to this print report. We would also like to extend our thanks to **Russell Wilkins** at Statistics Canada for his invaluable advice on neighbourhood income quintile methodology. We would also like to thank **Richard Klein**, **Kenneth Keppel**, **Jeffrey Pearcy** and **David Huang** from the U.S. National Center for Health Statistics, Centers for Disease Control and Prevention, for their advice on the summary measures for health disparities.

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Executive Summary

Health Indicators 2010, the 11th in a series of annual reports, presents the most recent health indicator data from the Canadian Institute for Health Information (CIHI) and Statistics Canada on a broad range of measures. As in the past, the report seeks to answer two important questions: "How healthy are Canadians?" and "How healthy is the Canadian health system?" Health regions and other stakeholders may use this information to identify areas where improvements are needed and to learn from jurisdictions with the best outcomes.

Each indicator falls into one of the four dimensions of the Health Indicator Framework listed below:

- Health status—provides insight on the health of Canadians, including well-being, human function and selected health conditions.
- Non-medical determinants of health—reflects 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—provides useful contextual information, rather than direct measures of health status or quality of care.

In addition to presenting the latest indicator data, this year's report focuses on **health disparities**, the fifth dimension in the framework. Measuring and reporting health disparities are important because some of them may be reduced or prevented. Reducing health disparities could help to address the problem of excess mortality and morbidity, ease economic burden and boost the nation's health profile as a whole.

This report does not attempt to represent a complete and comprehensive view of health disparities in Canada. Rather, it serves as a stepping stone toward continuous reporting and monitoring of health disparities in Canada. This work can highlight areas of potential concern at the national level and encourage jurisdictions to examine health disparities at the local level to determine what can be done to minimize the gaps.

While many factors contribute to disparities, this report examines socioeconomic status (SES) as one of the determinants of health disparities. SES was defined using neighbourhood income quintile. For the first time in this report, two health status indicators—heart attack events and injury hospitalizations—are presented by neighbourhood income quintile for each of the provinces. In addition, two summary measures—disparity rate ratio and potential rate reduction—are provided to describe the magnitude of health disparities. These two measures complement each other in evaluating the disparities.

Furthermore, the **In Focus** section of the report examines disparities in the health system as a part of the larger picture of health disparities. Analysis of two common reasons for hospitalization—heart attacks and hysterectomies—is presented to address the principles of a disparity-free health system. These principles include same access to available care for the same need; same utilization for the same need; and same quality of care for all.

Highlights of This Report

Heart Attacks and Disparities

- Substantial socio-economic gradients in the rates of heart attacks by neighbourhood income quintile exist, nationally as well as in most of the provinces. Overall, the rate of heart attacks in the least affluent neighbourhoods was 37% higher than the rate in the most affluent ones.
- Rates of heart attacks varied more than threefold among larger health regions as well as between provinces and territories. These geographical variations were more substantial than those by neighbourhood income quintile.
- There is some evidence that most Canadians who have had a heart attack experienced similar access to treatment and outcomes of care, regardless of their SES:
 - Little disparity was observed in rates of cardiac revascularization among heart attack patients.
 - Some small differences were observed in rates of readmission to hospital after a discharge for a heart attack.
 - No statistical differences were observed in rates of dying in hospital within 30 days after admission for a heart attack.

Hysterectomies and Disparities

Hysterectomies are performed at different rates across the country, with a
nearly threefold variation across the provinces and territories and more than
a fourfold variation across health regions. Significant differences were also
noted between urban and rural dwellers. The hysterectomy rate was 46%
higher for rural-dwelling women (464 per 100,000) than for urban-dwelling
women (318 per 100,000).

- There were some differences in the rates of hysterectomy by neighbourhood income quintile. Rates were lower in the least affluent and most affluent neighbourhoods, compared to the middle-income neighbourhoods.
 However, these differences were of a much smaller magnitude than the differences by geography.
- In 2008–2009, hospital readmission following hysterectomy occurred in 1.1% of hysterectomy cases. Rates did not vary widely, but they were statistically different for women from the least affluent neighbourhoods (1.4%) compared to women from the most affluent neighbourhoods (1.0%).

Other Health Indicators

- There are twofold or larger differences from region to region for the rates
 of in-hospital mortality after a heart attack or stroke, hospitalizations for
 ambulatory care sensitive conditions, Caesarean sections and most other
 health indicators.
- Rates of 30-day in-hospital mortality and readmissions after a heart attack continued to drop. The decreases were observed for all provinces and for the majority of the health regions.

Health disparities arise because of the circumstances and the environments in which people grow, live, work and age, and the health systems put in place to promote health and deal with illness. This report is the contribution of the Health Indicators project to measuring and reporting health disparities in Canada. The analysis indicated that socio-economic disparities may exist for certain conditions and procedures in Canada, but the geographic disparities are even more substantial. This was an exploratory step and more needs to be done to explain why and where disparities exist and how targeted interventions can help to reduce health disparities in Canada.

Health Indicator Framework

Health Status

How healthy are Canadians? Health status can be measured in a variety of ways, including well-being, health conditions, disability or death.

Well-being Health Human Death

Non-Medical Determinants of Health

Non-medical determinants of health are known to affect our health and, in some cases, when and how we use health care.

Health
behaviours

Living and
working
conditions

Personal
resources
factors

Health System Performance

How healthy is the health system? These indicators measure various aspects of the quality of health care.

Acceptability Accessibility		Appropriateness	Competence	
Continuity	Effectiveness	Efficiency	Safety	

Community and Health System Characteristics

These measures provide useful contextual information, but are not direct measures of health status or the quality of health care.

Community Health system Resources



Statistics Canada Statistique Canada





In Focus:

Measuring Disparities in the Health System

Measuring Disparities in the Health System

For the past decade the annual *Health Indicators* publication has provided a comparable, national picture on a broad range of indicators that seek to answer two fundamental questions:

- How healthy are Canadians?
- · How healthy is the Canadian health system?

However, the Health Indicators project has not yet addressed one important question: "Do all Canadians achieve the same level of health and receive the same health care?" In other words—do health disparities exist?

Measuring and reporting health disparities are important because some of them may be reduced or prevented. The Health Disparities Task Group of the Advisory Committee on Population Health and Health Security indicated that health disparities are not necessarily inevitable and many of them can be reduced with integrated efforts from different sectors. The World Health Organization (WHO), for example, articulated its number one target for the Health for All strategy as "equity in health" for this very reason and proposed strategies for closing the gaps in a generation.

Reducing health disparities could help address the problem of excess mortality and morbidity, ease economic burden and boost the nation's health profile as a whole. In fact, it is estimated that approximately 20% of health care spending can be attributed to socio-economic disparities, such as incomerelated disparities.¹

This analysis focuses on disparities in the health system as part of a larger picture of health disparities and does not attempt to represent a complete and all-encompassing view of health disparities in Canada. Rather, it can serve as a stepping stone for continuous reporting and monitoring of health disparities in Canada. This work can highlight areas of potential concern at the national level and encourage jurisdictions to examine health disparities at the local level to determine what can be done to minimize the gaps.

What Are Health Disparities?

In general, Canadians are among the world's most prosperous and healthy populations. However, not all Canadians are equally healthy. Systematic health disparities exist between different population groups.

Defining Health Disparities

It is important to distinguish between health disparities and inequities.

Health disparities can be defined as the differences in health experienced by various groups in society. These can be the result of genetic and biological factors, choices made or by chance and circumstance, but often they are the result of differing income, education, employment and social supports.⁴ This term is often used interchangeably with "inequalities."

Inequities are commonly referred to as those health disparities "that are deemed to be unfair or stemming from some form of injustice. Because identifying health inequities involves normative judgment, science alone cannot determine which disparities are also inequitable, nor what proportion of an observed disparity is unjust or unfair."

The term "disparities" is used in this report.

Health disparities are caused by a diverse set of factors.⁵ In general, these factors pertain to the conditions in which people are born, grow, live, work, age and eventually die. These are known as the determinants of heath and they include factors such as

- · Income and social status:
- Social support networks;
- Education;
- Employment and working conditions;
- · Social and physical environments;
- Biology and genetic endowment;
- Personal health practices and coping skills;
- Healthy child development;
- Health services;
- · Gender; and
- Culture.6

What Are Disparities in the Health System?

Adequate access to health services—or the lack thereof—is one of the determinants influencing disparities in health.⁷ Disparities in the health system can be categorized into three main principles, formulated by the WHO as part of a larger discussion on disparity-free health systems:⁸

- Same access to available care for the same need. This means the same entitlement to available services for everyone, an even distribution of services based on health care needs, ease of access in each geographical area and the removal of barriers to access.
- 2. Same utilization for the same need. This means that health services are used to the same extent in groups with the same underlying need for the service. This implies that groups with a greater need would have greater utilization of services and that groups with a lesser need for services would have lesser utilization. When disparities are found in the utilization rates of certain services by different population groups, it may prompt further study to ascertain why the utilization rates are different.
- 3. **Same quality of care for all.** This implies that providers strive to put the same commitment into the services that they deliver for all population groups so everyone can expect the same standard of professional care.

Examining disparities in the Canadian health system is the focus of this report. Analysis of two common reasons for hospitalization—heart attacks and hysterectomies—is presented to address the principles of the disparity-free health system. For example, do heart attack patients from different socioeconomic groups have the same access to cardiac services? Do women in Halifax, Vancouver, Toronto and Iqaluit undergo gynecological procedures, such as hysterectomies, at the same rate?

Methodology

While many factors can lead to disparities, this report focuses on socioeconomic status (SES) as one of the determinants of disparities in the health system.

How Is Socio-Economic Status Measured?

In this report, the SES of individuals was defined using neighbourhood income. In general, health-related administrative databases in Canada do not contain information on individual-level socio-economic factors. Therefore, in Canada, health disparities are most often monitored with the use of small geographic area socio-economic characteristics based on census data, such as neighbourhood income quintiles.⁹

Neighbourhood Income Quintile

Neighbourhood income quintiles categorize small geographic areas into five roughly equal population groups. Quintile 1 refers to the least affluent neighbourhoods, while quintile 5 pertains to the most affluent. The quintiles were constructed according to methods developed at Statistics Canada. A short description of the method is provided in the appendix.

While individual-level income and neighbourhood income may seem similar, researchers agree that they do not reflect the same reality as they are based on different constructs.9 Neighbourhood income is often considered a proxy measure of neighbourhood socio-economic characteristics, 10-13 because various socio-economic factors tend to determine a person's place of residence. For example, educational attainment typically qualifies a person for an occupation, which, in turn, produces a certain income. A person's income might also influence access to resources, such as housing. Furthermore, neighbourhood income may also reflect factors such as the crime rate, the quality of local services and the likelihood of social support from neighbours. 14 For example, studies have shown that people living in low-income neighbourhoods are more likely to experience more stressful working conditions, a higher rate of job insecurity and higher rates of life dissatisfaction. 15, 16 In addition, neighbourhood income may be a proper reflection of socio-economic status for population groups that are not actively employed, such as children and seniors. Many studies have shown that higher neighbourhood income levels are associated with better health.^{9, 12, 13, 16–19} However, it was also reported that neighbourhood income data tends to demonstrate disparities to a smaller extent, compared to individual-level data.^{9, 10}

What Does Neighbourhood Income Quintile Represent?

The analysis of Canadian 2006 census data provides some insights into this question. As shown in Table 1, less affluent neighbourhoods had higher rates of low income and unemployment; a higher proportion of recent immigrants, lone-parent families and people living alone; a higher percentage of Aboriginal population; as well as fewer post-secondary graduates and a smaller proportion of home owners.

Table 1
Socio-Economic Characteristics of Each Neighbourhood Income Quintile, Canada, 2006

Income Quintile	Low Income Rate (%)	Unemployment Rate (%)	Housing Owned (%)	Post- Secondary Graduates (%)	Aboriginal Population (%)	Recent Immigrants (%)	Lone- Parent Families (%)	Living Alone (%)
Quintile 1 (Least Affluent)	31.9	9.9	40.4	50.6	7.8	7.3	25.0	16.2
Quintile 2	17.7	6.9	63.6	55.0	3.3	3.9	18.3	12.5
Quintile 3	11.7	5.8	75.6	59.3	2.6	2.8	14.8	9.5
Quintile 4	8.4	5.2	82.6	63.6	2.4	2.1	21.1	7.8
Quintile 5 (Most Affluent)	6.3	4.7	85.9	71.1	1.9	1.8	9.4	6.9

Note

The definition of each characteristic appears on pages 46 and 47.

Source

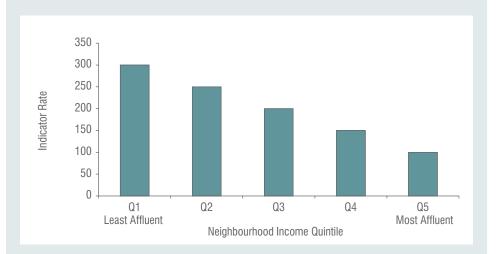
2006 Census, Statistics Canada.

How Are Health Disparities Measured?

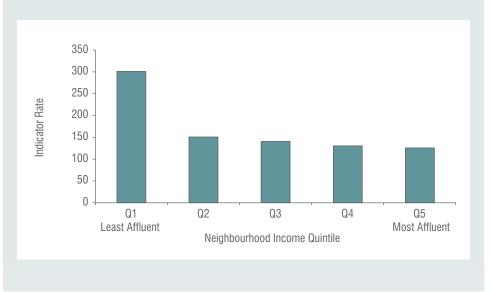
Measuring health disparities starts with examining an indicator's rates for each socio-economic group.²⁰ This can aid in understanding the pattern of health disparities, which can be present in different forms. For example, research commonly refers to a socio-economic gradient when mortality or morbidity decreases with each progressive income quintile. There could also be a threshold effect when significant differences are observed between certain quintiles. The gradient and the threshold effect may co-exist.

Socio-Economic Gradient and the Threshold Effect

A socio-economic gradient in health describes the phenomenon wherein people of a lower SES experience poorer health than their more affluent counterparts along the whole spectrum of socio-economic status. When visually depicted, a consistent decline (or slope) in rates is present when moving from the least affluent to the most affluent SES group.



A threshold effect describes a situation wherein the biggest difference in rates falls between certain socio-economic groups—for example the least affluent neighbourhood income quintile and the second income quintile—as shown in the graph below.



In addition, summary measures can be calculated to describe the magnitude of health disparities in one single number. In this report, two measures were used—disparity rate ratio and potential rate reduction, as defined in the sidebar. The main difference between the measures is that potential rate reduction takes into account not only information from the most and least affluent groups, but also from the second, third and fourth income quintiles.²⁰ These measures complement each other in evaluating disparities.

Summary Measures

Disparity rate ratio represents the rate of a health indicator for the least affluent neighbourhood income quintile divided by the rate for the most affluent neighbourhood income quintile. It provides a summary measure of the magnitude of the socio-economic disparities for a health indicator when comparing the least affluent to the most affluent group.

Potential rate reduction represents the reduction in a health indicator rate that would occur in the hypothetical scenario where each socioeconomic group experienced the rate of the most affluent socioeconomic group. This measure is based on the concept of the excess morbidity or mortality that could be prevented. It provides a summary measure of the overall effect of socio-economic disparities on a health indicator.

Heart Attacks and Disparities

Heart attacks (acute myocardial infarctions, or AMIs) are one of the leading causes of illness and death in Canada.²¹ However, the risk of having a heart attack is not the same for different population groups. Some people may have intrinsic characteristics that increase their chances of having a heart attack. But for many, the risk is largely based on health behaviours and lifestyle.²² For example, a healthy diet, a smoke-free lifestyle and being physically active may significantly reduce the risk of a heart attack.²³

The link between SES and the occurrence of heart attacks is also well described in the literature. Among studies have shown that unemployment and lower levels of education or income are related to higher rates of heart attacks. Differences in the rates of heart attacks among socio-economic groups are often attributed to differences in cardiovascular risk factors. Studies have shown that, in Canada, the prevalence of risk factors such as hypertension, diabetes, obesity and smoking is higher in low-income groups. Not only do these health gradients between income levels exist, but the gap between the highest and lowest income groups is widening for some of the risk factors, such as hypertension and diabetes. However, this is not the whole story. Research suggests that these factors are not entirely sufficient to explain all the differences between the socio-economic groups. Characteristics of socio-economic environment and lifestyle patterns may both have their influences in a variety of ways. Moreover, lifestyles do not develop in a vacuum—they are strongly influenced by socio-economic factors.

A Pan-Canadian View of Heart Attacks

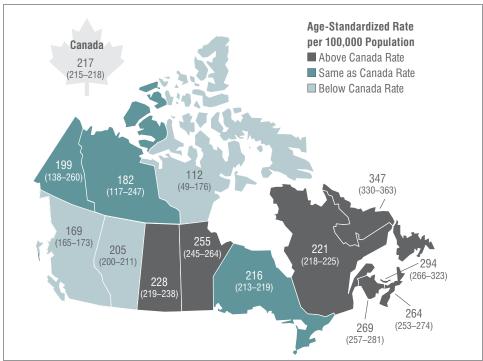
The rate of hospitalized AMI events can provide an estimate of the incidence of heart attacks in the community. In 2008–2009, 66,707 Canadians were hospitalized for a heart attack and 2,266 of them (3.4%) had more than one heart attack in a year. This represents an age-standardized rate of 217 hospitalized AMI events for every 100,000 adults (age 20 and older). Rates of hospitalized AMI events varied across the country. Age-standardized rates ranged from 169 per 100,000 in British Columbia and 205 per 100,000 in Alberta to 347 per 100,000 in Newfoundland and Labrador and 294 per 100,000 in Prince Edward Island (Figure 1).

i. For details on indicator methodology, please visit www.cihi.ca/indicators.

Figure 1

Age-Standardized Rates of Hospitalized Acute Myocardial Infarction

Events by Province/Territory, Canada, 2008–2009



Sources

Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

How Do Rates of Heart Attacks Compare Across Socio-Economic Groups?

Rates of heart attacks differed significantly by neighbourhood income. The age-standardized rate of hospitalized AMI events was 255 per 100,000 population from the least affluent neighbourhoods, compared to 186 per 100,000 from the most affluent neighbourhoods. These disparities are important from a population health perspective: if all socio-economic groups experienced the same rate as the most affluent group, the overall rate of hospitalized AMI events would be 16% lower, indicating potential rate reduction. This translates to about 10,400 fewer hospitalized heart attacks in Canada in 2008–2009.

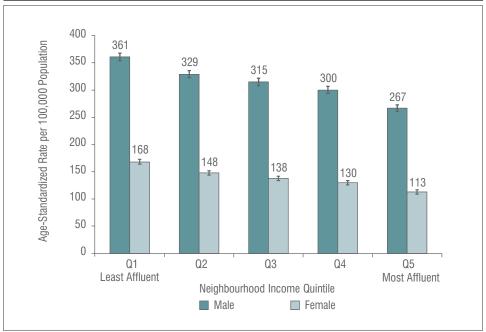
Are There Age and Sex Differences?

Rates of heart attacks also varied by age and sex. While rates of heart attacks were higher among males, similar socio-economic gradients were observed among males and females (Figure 2).

Figure 2

Age-Standardized Rates of Hospitalized Acute Myocardial Infarction

Events by Neighbourhood Income Quintile and Sex, Canada, 2008–2009



Notes

Population by income quintile for 2008–2009 was projected using 2001 and 2006 Canadian census data.

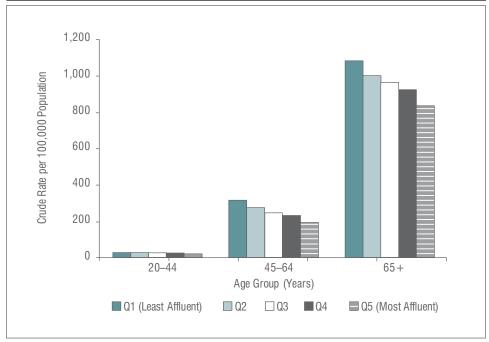
I represents 95% confidence intervals.

Sources

Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux; 2006 Census, Statistics Canada.

Significant socio-economic gradients were also observed for all age groups (Figure 3). For older adults (age 45 to 64) the rate of heart attacks in the least affluent neighbourhoods was 1.6 times higher (p<0.05) than in the most affluent neighbourhoods. Smaller ratios were observed for young adults (age 20 to 44) and seniors (age 65 and older). Although the relative difference and potential rate reduction were higher in younger age groups, the largest absolute difference in rates was among seniors, because rates in this age group were much higher compared to others.

Age-Specific Rates of Hospitalized Acute Myocardial Infarction Events by Neighbourhood Income Quintile, Canada, 2008–2009



Note

Population by income quintile for 2008–2009 was projected using 2001 and 2006 Canadian census data.

Sources

Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux; 2006 Census, Statistics Canada

How Does Access to Cardiac Care Compare Across Socio-Economic Groups?

Pathways of care following a heart attack are important to consider. The effectiveness of health care during both the acute phase and the subsequent medical follow-up may influence patient outcomes. For example, cardiac revascularization procedures (such as coronary angioplasty and bypass surgery) may be used to restore or improve blood supply to the heart muscle, which reduces the symptoms of coronary heart disease such as chest pain and weakness. Revascularization can improve the quality of patients' lives^{39, 40} and reduce mortality. ^{39, 41–43} However, access to care may be influenced by a patient's SES. Several international studies have identified disparities in access to cardiac care, with less affluent groups being less likely to be admitted to a cardiac care unit⁴⁴ and less likely to receive diagnostic and revascularization procedures. ^{29, 45–47}

Canadians have a universal health care system that intends to provide the same access to care for everyone, regardless of the patient's ability to pay. However, studies that analysed data from the 1990s demonstrated that patients from neighbourhoods with higher income levels were more likely to undergo cardiac angiography^{48, 49} and revascularization procedures and had shorter waiting times for these interventions.⁴⁸ In addition, more affluent patients were more likely to be referred for cardiac rehabilitation and to a cardiologist, compared to patients with lower income levels.⁵⁰ A study that analyzed the one-year revascularization rate showed that there was a strong positive relationship between SES and revascularization rates, even after taking into account baseline patient factors such as diabetes, high blood cholesterol and having had a heart attack in the past.⁵¹

Do these disparities still exist today? In 2008–2009, in Canada (outside Quebec), 44% of patients received a cardiac revascularization procedure within 28 days of being admitted to hospital for a heart attack. Among those patients who received revascularization, the median time to procedure was two days for patients in all income quintiles.

However, the comparison is not that simple, mainly because not every heart attack patient is selected for a cardiac revascularization procedure. Several factors, such as the patient's condition, the availability of specialized services and the patient's preferences are involved in the decision-making process. Some of these factors cannot be measured with the available data. However, some patient characteristics—such as age, sex, several co-existing conditions and the availability of services—were explored.

Table 2

Characteristics of Heart Attack Patients on Admission to Hospital by Neighbourhood Income Quintile, Canada, 2008–2009

	Quintile 1 (Least Affluant)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (Most Affluent)		
Age (Years), Median	71	71	71	70	70		
Female,* Percent	39.8	37.7	35.8	34.4	33.3		
Comorbidities,† Percent							
Shock	1.8	1.6	1.6	1.6	1.5		
Heart Failure*	15.2	13.9	13.1	12.9	11.9		
Acute Lung Edema	0.3	0.4	0.3	0.5	0.3		
Cardiac Dysrhythmia*	8.3	8.2	7.6	7.7	7.2		
AMI in the Preceding Year*	6.9	6.2	5.9	5.2	5.4		
Diabetes*	31.0	29.0	25.7	25.9	24.9		
Renal Disease*	7.3	6.7	6.1	6.2	5.7		
Cancer	0.9	0.9	0.9	0.8	0.9		
COPD*	4.1	3.3	3.1	2.8	2.7		
Hypertension*	4.6	4.2	3.8	4.0	4.4		
Admitted to a Facility With On-Site Revascularization Services,* Percent	34.2	33.3	34.0	34.0	35.9		

Notes

- * Statistically significant (p<0.05) as per chi-square test.
- † If coded as a significant comorbidity at the time of hospitalization in Discharge Abstract Database. Please refer to the Canadian Coding Standards for the definition of significant comorbidity. 52

Quebec is not included due to differences in data collection.

COPD: chronic obstructive pulmonary disease.

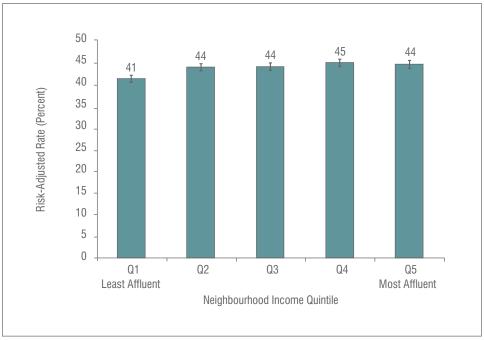
Sources

Discharge Abstract Database, Canadian Institute for Health Information; 2006 Census, Statistics Canada.

Table 2 illustrates characteristics of heart attack patients on admission to hospital by income quintile. Patients from the least affluent neighbourhoods tended to be sicker than patients from more affluent neighbourhoods, the former having a higher proportion of heart failure, cardiac dysrhythmia, previous heart attacks, diabetes, chronic obstructive pulmonary disease and renal disease. Given the evidence from previous studies indicating that angioplasty is usually performed on lower-risk patients, 53-55 the rates of revascularization procedures were adjusted for the differences in these patient factors. Furthermore, research suggests that patients who are first admitted to a hospital with on-site cardiac revascularization capability are more likely to undergo these procedures. Therefore, whether a patient was admitted to such a hospital was also taken into account.

After characteristics of patients were taken into account, the rate of revascularization for patients from the least affluent neighbourhoods was about 7% lower than that of the other income groups (p<0.05) (Figure 4).

Figure 4
Risk-Adjusted Rates of Cardiac Revascularization Procedures
Within 28 Days of a Heart Attack by Neighbourhood Income Quintile,
Canada, 2008–2009



Notes

Rates do not include Quebec due to differences in data collection.

I represents 95% confidence intervals.

Sources

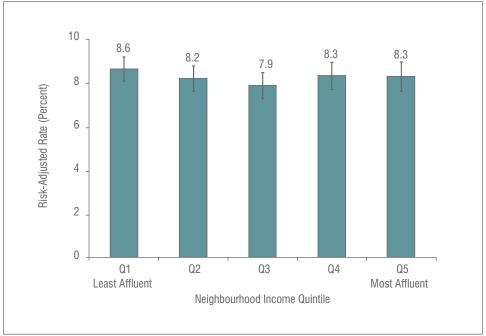
Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; 2006 Census, Statistics Canada.

Rates of In-Hospital Mortality and Readmissions After a Heart Attack Across Socio-Economic Groups

Rates of in-hospital mortality and readmissions after heart attacks may reflect quality of care and the underlying effectiveness of treatment in the hospital, as well as care provided in the community. Some studies suggest that lower SES is associated with higher mortality^{31, 48, 51, 59, 60} and readmission rates⁶¹ following hospitalization for a heart attack. For instance, it has been estimated that for every \$10,000 increase in neighbourhood median income, there is a 10% reduction in the risk of death after a heart attack.^{48, 59} However, the effects of SES on mortality are greatly reduced after taking into account the patient's age, previous cardiovascular events and risk factors.^{51, 59, 62}

In 2008–2009, in Canada (outside Quebec), 8.3% of patients died in hospital within 30 days of being admitted for a new heart attack. No statistically significant differences between neighbourhood income quintiles were observed in the rates of in-hospital mortality after a heart attack. Risk-adjusted rates by income quintile are presented in Figure 5.

Figure 5
Risk-Adjusted Rates of 30-Day Acute Myocardial Infarction In-Hospital
Mortality by Neighbourhood Income Quintile, Canada, 2008–2009



Notes

Rates do not include Quebec due to differences in data collection.

I represents 95% confidence intervals.

Sources

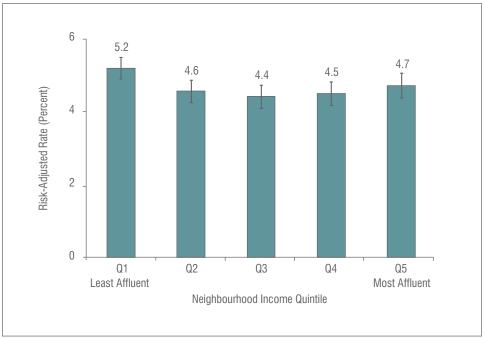
Discharge Abstract Database, Canadian Institute for Health Information; 2006 Census, Statistics Canada.

From 2006–2007 to 2008–2009, 4.7% of heart attack patients returned to hospital within 28 days of their discharge. Risk-adjusted AMI readmission rates iii varied by neighbourhood income quintile. The readmission rate of 5.2% for patients from the least affluent neighbourhoods was significantly higher than the rate in any other income quintile (Figure 6).

ii. This analysis included patients for whom heart attack was the main focus of care. For details on indicator methodology, please visit www.cihi.ca/indicators.

iii. For details on indicator methodology, please visit www.cihi.ca/indicators.

Figure 6
Risk-Adjusted Rates of Readmission After a Heart Attack by
Neighbourhood Income Quintile, Canada, 2006–2007 to 2008–2009



Notes

Rates are based on three years of pooled data.

Rates do not include Quebec due to differences in data collection.

I represents 95% confidence intervals.

Sources

Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; 2006 Census, Statistics Canada.

Heart Attacks and the Health System

Exploring the connection between heart attacks and neighbourhood income showed that large socio-economic gradients exist in the rates of heart attacks. Smaller disparities were observed in rates of cardiac revascularization, a treatment used for heart attack patients. Some differences were observed in rates of readmission to hospital after a discharge for a heart attack. However, no significant differences were observed in rates of dying in hospital 30 days after admission for a heart attack. This gives some indication that most Canadians who have had a heart attack experienced similar access to care and outcomes of care (in terms of mortality and readmissions), regardless of their SES. This suggests that disparities relating to heart attacks arise mainly before the individuals even get to the hospital. It also suggests that more needs to be done to prevent heart attacks in the first place, especially in the less affluent populations.

Hysterectomies and Disparities

Hysterectomy—defined as the complete or partial removal of the uterus—is the second most common surgery for Canadian women, after Caesarean section, although the rate of hysterectomy in this country has been steadily decreasing since the early 1980s.^{63, 64}

Hysterectomy rates vary widely worldwide, 65-68 as well as within Canada. In Canada, in 2008–2009, there was nearly a threefold variation in agestandardized hysterectomy rates across the provinces and territories and more than a fourfold variation by region.

There is no simple explanation for these variations, but three main types of factors that affect hysterectomy rates have been identified: patient factors, physician factors and health system factors.⁶⁴

Some patient factors are biological in nature. Examples of these include age,^{63, 69} the clinical reason for the surgery, history of miscarriage and the number of children born to the woman undergoing the hysterectomy.^{70, 71} Other patient-related factors are socio-economic in nature, such as educational attainment and household income. For instance, in several developed countries studies have shown that a woman's greater family net worth and socio-economic position are associated with a lower likelihood of hysterectomy.^{72–74} Additionally, lower educational attainment has been shown to be associated with an increased chance of both being offered⁷⁵ and choosing hysterectomy.^{70, 72, 75, 76}

Biological factors are sometimes interwoven with socio-economic ones. For example, there is some evidence suggesting that certain predisposing conditions for hysterectomy, such as gynecological cancers, may have a higher incidence in higher-income groups. To Conversely, some menstrual disorders—a possible reason for hysterectomy—may be more prevalent in lower-income groups. These relationships are important to consider. However, there is currently a limited amount of Canadian data describing major differences in biological factors that determine the need for hysterectomy across socio-economic or geographic groups.

The type of training a physician received, the number of years since graduating from medical school, as well as the physician's age or gender represent some of the physician factors that may influence hysterectomy rates.⁷⁹

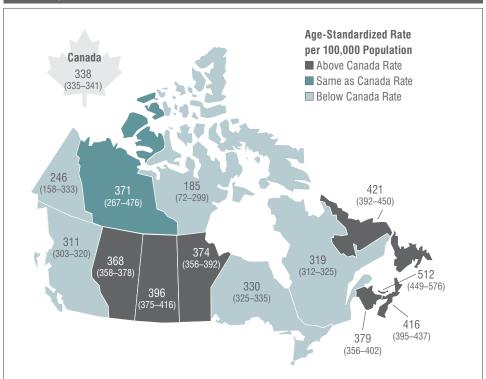
Health system factors speak to the larger picture: availability of resources and the specifics of health care delivery in a given location. For example, research shows that regions with teaching hospitals have lower rates of hysterectomy than regions without teaching hospitals. Similarly, variations in the provision of health care may exist between urban and rural areas and among the different provinces and territories.

A Pan-Canadian View of Hysterectomies

In 2008–2009, close to 47,000 hysterectomies were performed in Canada. This represents an age-standardized rate of 338 hysterectomies^{iv} for every 100,000 Canadian women age 20 and older. The age-standardized rate of hysterectomy varied substantially across the provinces and territories, however. Age-standardized rates ranged from 185 per 100,000 in Nunavut and 246 per 100,000 in the Yukon to 421 per 100,000 in Newfoundland and Labrador and 512 per 100,000 in Prince Edward Island (Figure 7).

Figure 7

Age-Standardized Hysterectomy Rates by Province/Territory,
Canada, 2008–2009



Sources

Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

iv. For details on indicator methodology, please visit www.cihi.ca/indicators.

What Is the Effect of Living in a Rural or Urban Area?

The age-standardized rate of hysterectomy for women living in rural areas (464 per 100,000) was 46% higher (p<0.05) than the rate for Canadians living in urban areas (318 per 100,000). Several factors have been identified in the literature that may explain the differences: dissimilar physician practice patterns; the varied approaches of teaching hospitals;⁸⁰ and access issues—for example, difficulties that rural woman may experience when travelling longer distances to receive outpatient care as an alternative.⁸¹

Defining Urban and Rural Areas

Urban areas were defined as areas located within the geographic boundaries of a census metropolitan area (with an urban core having a population of at least 100,000) or census agglomeration (with an urban core having a population of at least 10,000). Rural areas were defined as all remaining areas not classified as urban.

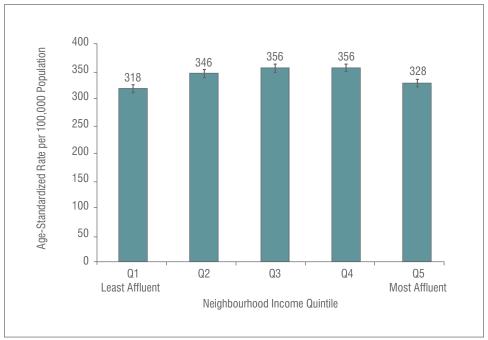
What Is the Effect of Socio-Economic Status?

This is a complex question. Not all treatments show a socio-economic gradient. Age-standardized hysterectomy rates varied by SES but did not show a consistent gradient or a pattern. In 2008–2009, age-standardized hysterectomy rates were significantly lower for women living in the least affluent neighbourhoods and the most affluent neighbourhoods, compared to the three middle-income groups (Figure 8).

Figure 8

Age-Standardized Hysterectomy Rates by Neighbourhood Income

Quintile, Canada, 2008–2009



Notes

Population by income quintile for 2008–2009 was projected using 2001 and 2006 Canadian census data.

I represents 95% confidence intervals.

Sources

Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux; 2006 Census, Statistics Canada.

A Closer Look: Indications for Hysterectomy

There are many different reasons for a woman to undergo a hysterectomy. Certain gynecological cancers are clear indications for hysterectomy, but other conditions are often more discretionary, which means that hysterectomy is not necessarily the sole treatment option. 82 Surgical procedures that are performed for discretionary indications are often those for which rates tend to vary the most and where disparities are most evident. 80,83 For this reason, exploring hysterectomy rates for different indications may be of particular interest.

In 2008–2009, the most frequent indications for hysterectomy included

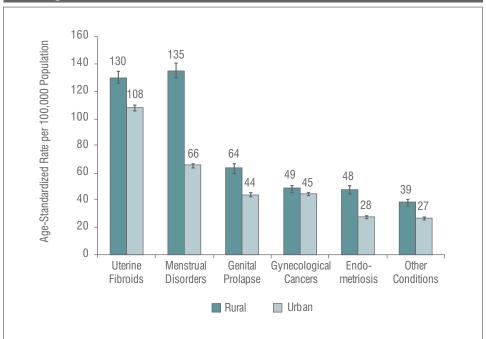
- Uterine fibroids (35%);
- Menstrual disorders (19%);
- Genital prolapse (15%);
- Gynecological cancers (15%);
- Endometriosis (8%); and
- Other conditions not described by the above groups (8%).

Hysterectomy rates varied by geography. Women from rural areas had significantly higher overall age-standardized rates of hysterectomy than women from urban areas, but the largest difference was seen for menstrual disorders (Figure 9). The age-standardized hysterectomy rate for menstrual disorders among rural women was more than double the rate among urban women. This made menstrual disorders the number one indication for women from rural areas, while the presence of uterine fibroids was the top indication for urban dwellers.

Figure 9

Age-Standardized Hysterectomy Rates by Indication and Urban/Rural

Dwelling, Canada, 2008–2009



Notes

Urban and rural population for 2008–2009 was projected using 2001 and 2006 Canadian census data.

I represents 95% confidence intervals.

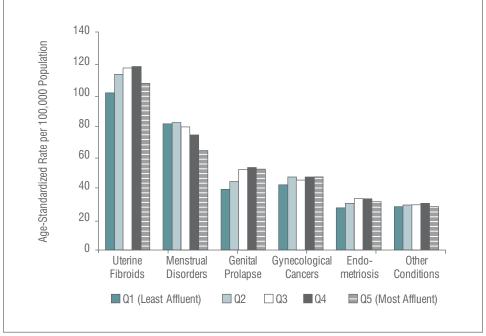
Sources

Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

Differences were also seen by neighbourhood income quintile, as shown in Figure 10. For example, the age-standardized hysterectomy rate for menstrual disorders was significantly lower for women from the most affluent neighbourhoods (64 per 100,000) compared to women from each of the other quintiles (74 to 82 per 100,000).

Figure 10

Age-Standardized Hysterectomy Rates by Indication and Neighbourhood Income Quintile, Canada, 2008–2009



Notes

Population by income quintile for 2008–2009 was projected using 2001 and 2006 Canadian census data.

For all indications except "other conditions," rates for quintile 1 were significantly different from the rates for quintile 5.

Sources

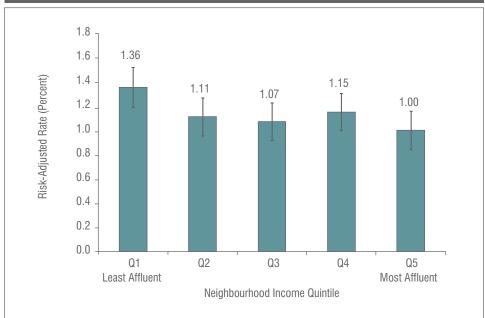
Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux; 2006 Census, Statistics Canada.

Readmissions to Hospital After Hysterectomy

While not all unplanned readmissions are avoidable, they are often seen as a measure of quality of care received during the initial stay and after discharge from the hospital. From 2006–2007 to 2008–2009, 1.1% of women had an unplanned hospital readmission within 28 days of being discharged after hysterectomy. About 92% of these readmissions were related to post-operative infections. Risk-adjusted hysterectomy readmission rates varied by province, from 1.8% in Saskatchewan to 1.0% in Alberta and British Columbia.

Hysterectomy readmission rates also varied by neighbourhood income quintile (Figure 11). The risk-adjusted hysterectomy readmission rate of 1.36% for women in the least affluent neighbourhoods was higher than the rate in the most affluent neighbourhoods (1.0%) (p<0.05). No significant differences were found between urban and rural dwellers.

Figure 11
Risk-Adjusted Hysterectomy Readmission Rates by Neighbourhood
Income Quintile, Canada, 2006–2007 to 2008–2009



Notes

Rates are based on three years of pooled data.

Rates do not include Quebec due to differences in data collection.

I represents 95% confidence intervals.

Sources

Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; 2006 Census, Statistics Canada.

v. For details on indicator methodology, please visit www.cihi.ca/indicators.

Hysterectomies: Who, Where and Why?

Disparities are important to consider. They can identify groups that may have a greater need for services or be at greater risk for surgical complications. Disparities can also act as a warning flag that a surgery may be over- or under-utilized, or they can signal where access to appropriate health care may be limited.

It is challenging to assess same access to available care for the same need and same utilization for the same need without comprehensive data on the prevalence of all underlying conditions. However, the significant variations in hysterectomy rate seen by geography and indication may point to disparities in utilization or in access to other treatment options. Additionally, variations in hysterectomy readmission rates by geography and neighbourhood income may relate to disparities in quality of care before, during or following hospitalization.

Concluding Remarks

Health disparities arise because of the circumstances and environments in which people grow, live, work and age, and the health systems put in place to promote health and deal with illness. This analysis was an initial attempt to examine disparities in the Canadian health system. Using two common reasons for hospitalization—heart attacks and hysterectomies—as examples, the analysis indicated that health disparities exist for certain conditions and procedures in Canada.

In particular, large socio-economic gradients were observed in the rates of heart attacks. However, very little difference was noted in the rates of readmission to hospital after a heart attack or in who gets treatments such as cardiac revascularization procedures. Moreover, no differences were observed in rates of dying in hospital within 30 days after being admitted to hospital for a heart attack. This suggests that for those experiencing heart attacks, there are almost no disparities in health care access or outcomes of care, but that the disparities arise prior to hospital admission.

Significant variations were observed in hysterectomy rates and hysterectomy readmission rates by geography. Additionally, there were some geographical differences related to the indication for which hysterectomy was done. Few socio-economic differences were noted in the rates of hysterectomy.

This report is a contribution of the Health Indicators project to measuring and reporting health disparities in Canada. More work is needed to explain why and where disparities exist and how targeted interventions can help to reduce health disparities in Canada.

Information Gaps

What We Know

- In Canada, health disparities exist among socio-economic groups and geographic areas for certain conditions and procedures.
- Measuring and reporting health disparities are important because some of them may be reduced or prevented.
- The rates of heart attacks vary largely across socio-economic groups in Canada. However, there are smaller or no differences in access to cardiac revascularization, readmission rates and 30-day in-hospital mortality after heart attacks.
- The rates of hysterectomy and readmission after hysterectomy vary across socio-economic groups and, more substantially, by geography.

What We Don't Know

- The full extent of health disparities in Canada.
- How much health disparities are influenced by individual circumstances or behaviours, compared to the socio-economic environment.
- Which interventions and programs are most likely to reduce certain health disparities and in what contexts.

What's Happening

- In 2004, the Health Disparities Task Group (HDTG) was established by the Federal/Provincial/Territorial Advisory Committee on Population Health and Health Security. That same year the HDTG produced a report on reducing health disparities in Canada, Reducing Health Disparities—Roles of the Health Sector: Discussion Paper.
- In 2005, the World Health Organization (WHO) established a Commission on Social Determinants of Health to provide direction on reducing health disparities. In response, the Public Health Agency of Canada established the commission's Canadian Reference Group to advance action on the determinants of health.
- In 2008, the WHO commission published its final report, Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health, which provides direction for reducing health disparities. In addition, the report advises national governments to establish systems for monitoring health disparities and also proposes frameworks for minimum as well as comprehensive national health disparity surveillance systems.

• In 2010, the Pan-Canadian Public Health Network published the report *Indicators of Health Inequalities* to address the recommendations of both the WHO commission and the HDTG. The report recommends a set of indicators that can be used to measure and report on disparities in health and in key determinants of health in Canada.

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Health Indicators: Region by Region

Health indicators are standardized measures of various aspects of health and health care which can be used to monitor the health status of the population and the performance and characteristics of the health system over time and across the country. As in previous years, the *Health Indicators* annual report provides up-to-date comparable information for health regions and provinces and territories. This information can be used by regions and governments to evaluate progress and identify areas for improvement.

There's More on the Web

CIHI and Statistics Canada jointly produce and maintain the *Health Indicators* e-publication. This free web-based product provides data for a broad range of health indicators from both CIHI and Statistics Canada in one integrated online publication. This interactive online resource provides easy access to the most recent health indicator results, 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.gc.ca.

What Are Health Regions?

Health regions are administrative bodies, legislated by the provincial ministries of health. They are defined by geographical areas and are responsible for providing health services to their residents. The role of health regions in determining how resources are allocated and their relationship with local hospitals vary by province.

For this report, data is provided for all regions with a population of at least 50,000. In addition, data for the smaller regions, as well as for Nova Scotia zones and Ontario public health units, is included in the *Health Indicators* e-publication (www.cihi.ca/indicators or www.statcan.gc.ca). Please see page 84 for a map of all the health regions in Canada.

Interpreting the Indicators

Unless otherwise specified, health indicators are reported based on where a patient lives, not where he or she was hospitalized. Consequently, these figures reflect the experience of residents of a region regardless of where they were treated, even if it was outside their own province, rather than showing the activity of hospitals in a given 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).

Symbols and Abbreviations

Figures not available

* Figures suppressed due to small numbers or incomplete data

▼ Interpret with caution95% CI95% confidence interval

Statistically significantly different from the national (Canada) rate (p≤0.05)

ASSS Agence de la santé et des services sociaux

HSDA Health service delivery area
LHIN Local health integration network

RHA Regional health authority

Mari		Population ('000)	Population Age 65+ (%)	Dependency Ratio
Map Code Health Region	Legend Name	2008	2008	2008
Newfoundland and Labrador	N.L.	509	14.5	55.8
1011 Eastern Regional Integrated Health Authority	Eastern	298	13.5	53.1
1012 Central Regional Integrated Health Authority	Central	94	17.3	61.0
1013 Western Regional Integrated Health Authority	Western	79	16.6	61.0
Prince Edward Island	P.E.I.	141	15.2	63.3
Nova Scotia 1211 South Shore District Health Authority	N.S. South Shore	939 59	15.5 19.7	58.3 61.6
1212 South West Nova District Health Authority	South West Nova	60	17.9	62.9
1213 Annapolis Valley District Health Authority	Annapolis Valley	83	17.3	65.7
1214 Colchester East Hants Health Authority	Colchester East Hants	74	15.9	64.1
1218 Cape Breton District Health Authority	Cape Breton	125	18.2	65.9
1219 Capital District Health Authority	Capital	415	12.3	51.3
New Brunswick 1301 Zone 1	N.B. Zone 1 (Moncton area)	748 199	15.3 15.2	57.7 54.7
1302 Zone 2	Zone 2 (Saint John area)	174	14.9	61.7
1303 Zone 3	Zone 3 (Fredericton area)	171	13.9	57.4
1304 Zone 4	Zone 4 (Edmundston area)	50	15.7	55.0
1306 Zone 6	Zone 6 (Bathurst area)	79	16.5	55.4
Quebec	Que.	7,772	14.7	56.1
2401 ASSS du Bas-Saint-Laurent	Bas-Saint-Laurent	202	17.6	58.8 56.3
2402 ASSS du Saguenay–Lac-Saint-Jean 2403 ASSS de la Capitale-Nationale	Saguenay-Lac-Saint-Jean Capitale-Nationale	275 680	15.6 16.0	50.3 51.8
2404 ASSS de la Mauricie et du Centre-du-Québec	Mauricie et Centre-du-Québec	492	17.2	58.7
2405 ASSS de l'Estrie	Estrie	305	15.7	59.2
2406 ASSS de Montréal	Montréal	1,878	15.2	51.4
2407 ASSS de l'Outaouais	Outaouais	352	11.7	54.6
2408 ASSS de l'Abitibi-Témiscamingue 2409 ASSS de la Côte-Nord	Abitibi-Témiscamingue Côte-Nord	146 96	13.6 12.7	58.8 55.8
2411 ASSS de la Gaspésie-Îles-de-la-Madeleine	Gaspésie-Îles-de-la-Madeleine	95	18.5	57.6
2412 ASSS de la Chaudière-Appalaches	Chaudière-Appalaches	402	14.9	56.9
2413 ASSS de Laval	Laval	384	14.5	60.7
2414 ASSS de Lanaudière	Lanaudière	453	12.7	58.7
2415 ASSS des Laurentides 2416 ASSS de la Montérégie	Laurentides Montérégie	535 1,415	13.0 13.5	59.0 58.7
	Ont.			
Ontario 3501 Erie St. Clair LHIN	Erie St. Clair	12,977 649	13.5 14.6	58.5 61.8
3502 South West LHIN	South West	944	15.1	62.6
3503 Waterloo Wellington LHIN	Waterloo Wellington	731	12.1	57.0
3504 Hamilton Niagara Haldimand Brant LHIN	Hamilton Niagara Haldimand Brant		15.3	62.2
3505 Central West LHIN 3506 Mississauga Halton LHIN	Central West	812	10.1	57.3
3507 Toronto Central LHIN	Mississauga Halton Toronto Central	1,102 1,167	10.6 13.6	58.5 52.3
3508 Central LHIN	Central	1,664	11.9	56.0
3509 Central East LHIN	Central East	1,519	13.7	58.0
3510 South East LHIN	South East	487	16.9	62.6
3511 Champlain LHIN	Champlain	1,217	13.3	56.0
3512 North Simcoe Muskoka LHIN 3513 North East LHIN	North Simcoe Muskoka North East	447 569	15.0 16.7	62.7 61.8
3514 North West LHIN	North West	239	14.3	62.8
Manitoba	Man.	1,211	13.8	64.1
4610 Winnipeg RHA	Winnipeg	681	13.9	56.7
4615 Brandon RHA	Brandon	50	14.9	60.6
4625 South Eastman Health	South Eastman	66	10.5	73.8
4630 Interlake RHA 4640 RHA—Central Manitoba Inc.	Interlake Central	82	15.1	68.4
4645 Assiniboine RHA	Assiniboine	105 70	13.6 18.9	77.8 76.7
	,	7 U	10.9	10.1

Map			Population ('000)	Population Age 65+ (%)	Dependency Ratio
Code	Health Region	Legend Name	2008	2008	2008
Saska	atchewan	Sask.	1,021	14.9	68.5
4701	Sun Country Health Region	Sun Country	53	17.3	70.4
4702	Five Hills Health Region	Five Hills	53	19.0	72.5
4704	Regina Qu'Appelle Health Region	Regina	250	14.0	61.4
	Sunrise Health Region	Sunrise	54	22.1	83.0
4706	Saskatoon Health Region	Saskatoon	300	13.2	60.6
4709	Prince Albert Parkland RHA	Prince Albert	76	15.6	81.4
4710	Prairie North Health Region	Prairie North	70	12.5	76.7
Alber		Alta.	3,611	10.4	53.2
4821	,	Area 1 (Chinook)	167	13.1	65.4
	Area 2 (Palliser)	Area 2 (Palliser)	110	13.5	61.4
	Area 3 (Calgary)	Area 3 (Calgary)	1,322	9.5	48.9
	Area 4 (David Thompson)	Area 4 (David Thompson)	324	11.1	56.9
	Area 5 (East Central)	Area 5 (East Central)	118	14.9	68.8
	Area 6 (Capital)	Area 6 (Capital)	1,126	10.9	51.5
	Area 7 (Aspen)	Area 7 (Aspen)	187	11.3	66.6
	Area 8 (Peace Country)	Area 8 (Peace Country)	147	8.1	58.9
4829	Area 9 (Northern Lights)	Area 9 (Northern Lights)	84	3.2	43.2
	h Columbia	B.C.	4,406	14.6	57.5
5911	East Kootenay HSDA	East Kootenay	79	15.8	63.2
	Kootenay Boundary HSDA	Kootenay Boundary	78	17.9	65.0
5913	Okanagan HSDA	Okanagan	345	20.1	69.4
5914	Thompson/Cariboo/Shuswap HSDA	Thompson/Cariboo/Shuswap	220	16.2	64.0
5921	Fraser East HSDA	Fraser East	276	14.2	66.6
5922	Fraser North HSDA	Fraser North	585	12.0	52.1
5923	Fraser South HSDA	Fraser South	680	12.2	59.9
5931	Richmond HSDA	Richmond	189	13.9	55.8
	Vancouver HSDA	Vancouver	630	12.9	41.8
	North Shore/Coast Garibaldi HSDA	North Shore	273	15.5	59.6
5941	South Vancouver Island HSDA	South Vancouver Island	364	17.4	55.7
	Central Vancouver Island HSDA	Central Vancouver Island	258	19.7	69.9
5943	North Vancouver Island HSDA	North Vancouver Island	119	16.0	64.2
5951	Northwest HSDA	Northwest	75	10.6	64.4
5952	Northern Interior HSDA	Northern Interior	142	11.0	58.9
5953	Northeast HSDA	Northeast	67	8.4	58.1
Yukor	·	Y.T.	33	7.6	48.4
	west Territories	N.W.T.	43	5.0	53.8
Nuna		Nun.	32	2.8	83.5
Cana	da	Canada	33,441	13.8	57.6

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 provides the denominators used to calculate rates for most health and social indicators

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

Dependency ratio

The ratio of the combined population age 0 to 19 and the population age 65 and older to the population age 20 to 64. This ratio is presented as the number of dependents for every 100 people in the working-age population. Canadians age 65 and older and those younger than 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, Statistics Canada.

		Self-Reporte	d Conditions	
	Perceived H	lealth (Age 12+)	Asthm	a (Age 12+)
		or Very Ğood) ´ 2008		2008
	%	95% CI	%	95% CI
N.L.	61.5	(58.8-64.3)	8.3	(6.7–9.8)
P.E.I.	61.7	(57.9-65.4)	7.5	(5.4-9.5)
N.S.	56.3	(53.6-59.0)	9.9	(8.3–11.4)
N.B.	54.9	(52.3–57.5)	8.7	(7.4–10.0)
Que.	59.3	(57.9-60.7)	8.9	(8.1–9.7)
Ont.	59.3	(58.2-60.5)	8.3	(7.7–8.9)
Man.	54.1	(51.3–56.9)	10.4	(8.5–12.3)
Sask.	54.1	(52.0-56.3)	8.7	(7.5–9.9)
Alta.	63.0	(61.1–64.9)	7.8	(6.9–8.7)
B.C.	56.9	(55.4–58.5)	7.4	(6.5–8.3)
Y.T.	60.7	(55.7–65.6)	8.2▼	(5.5▼−10.9▼)
N.W.T.	48.7	(44.5–52.9)	6.5▼	(3.5▼-9.4▼)
Nun.	49.1	(43.2–55.1)	4.0▼	(1.5▼−6.5▼)
Canada	58.9	(58.2-59.6)	8.4	(8.0-8.7)

		essure (Age 12+) 2008	Diabetes (Age 12+) 2008			
	%	95% CI	%	95% CI		
N.L.	20.2	(18.3–22.1)	8.8	(7.3–10.4)		
P.E.I.	18.6	(15.8–21.3)	6.7	(5.0-8.5)		
N.S.	20.4	(18.5–22.2)	7.4	(6.1–8.6)		
N.B.	19.3	(17.9–20.8)	7.8	(6.7–9.0)		
Que.	16.3	(15.4–17.1)	6.0	(5.3-6.6)		
Ont.	16.6	(15.9–17.4)	6.2	(5.6-6.7)		
Man.	18.4	(16.8-20.0)	5.0	(4.1-5.9)		
Sask.	18.6	(17.0-20.2)	6.4	(5.5–7.3)		
Alta.	14.8	(13.6–15.9)	4.7	(4.0-5.4)		
B.C.	14.7	(13.7–15.7)	4.9	(4.3-5.6)		
Y.T.	11.3	(8.0-14.7)	2.7▼	(1.3▼−4.0▼)		
N.W.T.	10.8	(8.2–13.4)	3.8▼	(2.1▼-5.5▼)		
Nun.	6.1▼	(3.4▼-8.7▼)	*	* *		
Canada	16.4	(16.0–16.8)	5.9	(5.6-6.2)		

	Arthrit	is (Age 12+)	Adult Body Mass Index (Age 18+) (30 and Greater)			
		2008		2008		
	%	95% CI	%	95% CI		
N.L.	20.1	(18.0-22.3)	27.4	(24.6–30.2)		
P.E.I.	18.5	(15.8–21.3)	23.9	(20.6–27.2)		
N.S.	21.3	(19.5–23.1)	24.8	(22.5–27.1)		
N.B.	20.2	(18.5–21.8)	23.5	(21.3–25.7)		
Que.	11.2	(10.5–12.0)	15.5	(14.4–16.6)		
Ont.	16.9	(16.2–17.7)	17.1	(16.2–17.9)		
Man.	17.5	(16.0–19.0)	20.3	(18.2–22.4)		
Sask.	18.4	(16.9–19.9)	25.6	(23.5–27.6)		
Alta.	14.2	(13.0-15.3)	18.3	(16.9–19.7)		
B.C.	14.7	(13.7–15.6)	13.5	(12.4–14.6)		
Y.T.	11.3	(8.2–14.5)	17.6	(13.7–21.6)		
N.W.T.	11.0	(7.6–14.4)	24.9	(18.4–31.5)		
Nun.	10.7	(8.3–13.2)	27.7	(21.6-33.8)		
Canada	15.3	(14.9–15.7)	17.2	(16.8–17.7)		

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



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

Perceived health

Proportion of household population age 12 and older who reported perceiving their own health status as being either excellent or very good. A measure of overall health status, this indicator can reflect aspects of health not captured in other measures, such as incipient disease, disease severity, aspects of positive health status, physiological and psychological reserves, and social and mental function.

Source: Canadian Community Health Survey, Statistics Canada.

Asthma

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

Source: Canadian Community Health Survey, Statistics Canada.

High blood pressure

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

Source: Canadian Community Health Survey, Statistics Canada.

Diabetes

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

Source: Canadian Community Health Survey, Statistics Canada.

Arthritis

Proportion of household population age 12 and older who reported being diagnosed by a health professional as having arthritis. Arthritis includes both rheumatoid arthritis and osteoarthritis but excludes fibromyalgia.

Source: Canadian Community Health Survey, Statistics Canada.

Adult body mass index

Proportion of household population age 18 and older with a body mass index (BMI) of 30 or greater. According to the World Health Organization and Health Canada guidelines, a BMI of 30 or greater is classified as obesity and is associated with high health risk. BMI is calculated from weight and height collected from respondents by dividing body weight (in kilograms) by height (in metres) squared.

Source: Canadian Community Health Survey, Statistics Canada.

	2008-	pitalization -2009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador	539	(519–559)
1011 Eastern	* 486	(461–510)
1012 Central	* 433	(389–477)
1013 Western	587	(533–640)
Prince Edward Island	*580	(541–618)
Nova Scotia	⁺ 504	(490-518)
1211 South Shore	576	(515–637)
1212 South West Nova	530	(474–585)
1213 Annapolis Valley	* 458	(414–503)
1214 Colchester East Hants	563	(509–617)
1218 Cape Breton	*580	(537–622)
1219 Capital	*425	(406–445)
New Brunswick	*592 *475	(575–609)
1301 Zone 1 (Moncton area) 1302 Zone 2 (Saint John area)	*475 517	(445–504) (484–550)
1303 Zone 3 (Fredericton area)	*577	(543–612)
1304 Zone 4 (Edmundston area)	*950	(865–1,036)
1306 Zone 6 (Bathurst area)	* 601	(545–657)
Quebec	531	(526–536)
2401 Bas-Saint-Laurent	*610	(577–642)
2402 Saguenay-Lac-Saint-Jean	* 696	(665–727)
2403 Capitale-Nationale	526	(510–543)
2404 Mauricie et Centre-du-Québec	* 632	(610–654)
2405 Estrie	*680	(652–709)
2406 Montréal	* 414	(405–423)
2407 Outaouais	⁺ 472	(449–494)
2408 Abitibi-Témiscamingue	*830	(783–877)
2409 Côte-Nord	*691	(638–744)
2411 Gaspésie–Îles-de-la-Madeleine	* 720	(666–774)
2412 Chaudière-Appalaches 2413 Laval	549	(527–571)
2414 Lanaudière	*460 *509	(439–480) (488–530)
2415 Laurentides	*624	(603–645)
2416 Montérégie	*519	(508–531)
Ontario	*420	(416–423)
3501 Erie St. Clair	+ 437	(421–452)
3502 South West	533	(519–547)
3503 Waterloo Wellington	* 402	(387–416)
3504 Hamilton Niagara Haldimand Brant	* 497	(486–508)
3505 Central West	* 319	(307–332)
3506 Mississauga Halton	*330	(320–341)
3507 Toronto Central	*363	(353–373)
3508 Central Fact	*304	(296–312)
3509 Central East	*356 *413	(347–366)
3510 South East 3511 Champlain	*413 *426	(395–430) (415–438)
3512 North Simcoe Muskoka	*505	(485–524)
3513 North East	*631	(611–651)
3514 North West	⁺ 858	(821–895)
Manitoba	*684	(670–699)
4610 Winnipeg	* 505	(488–521)
4615 Brandon	^ 690	(620–761)
4625 South Eastman	* 666	(603–728)
4630 Interlake	*822	(759–885)
4640 Central	+ 742	(691–793)
4645 Assiniboine	*801	(734–868)

		pitalization –2009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI
Saskatchewan	*805	(788-822)
4701 Sun Country	* 1,059	(972–1,146)
4702 Five Hills	* 794	(720–869)
4704 Regina	* 726	(693–759)
4705 Sunrise	* 1,143	(1,053–1,233)
4706 Saskatoon	537	(512–562)
4709 Prince Albert	* 912	(843–982)
4710 Prairie North	* 988	(913–1,062)
Alberta	⁺ 715	(706–723)
4821 Area 1 (Chinook)	* 812	(769–854)
4822 Area 2 (Palliser)	* 859	(805–912)
4823 Area 3 (Calgary)	* 583	(570–596)
4824 Area 4 (David Thompson)	* 994	(960–1,028)
4825 Area 5 (East Central)	† 729	(682–776)
4826 Area 6 (Capital)	* 641	(626–655)
4827 Area 7 (Aspen)	* 1,034	(988–1,081)
4828 Area 8 (Peace Country)	*	* *
4829 Area 9 (Northern Lights)	↑ 854	(773–936)
British Columbia	⁺ 582	(576–589)
5911 East Kootenay	*888	(822–954)
5912 Kootenay Boundary	* 801	(735–867)
5913 Okanagan	* 676	(648–703)
5914 Thompson/Cariboo/Shuswap	* 784	(747–821)
5921 Fraser East	* 639	(610–668)
5922 Fraser North	520	(502–538)
5923 Fraser South	* 580	(563–598)
5931 Richmond	* 357	(331–383)
5932 Vancouver	* 405	(390–420)
5933 North Shore	* 605	(576–633)
5941 South Vancouver Island	542	(518–565)
5942 Central Vancouver Island	*619	(588–650)
5943 North Vancouver Island	698	(649–747)
5951 Northwest	*1,090	(1,011–1,168)
5952 Northern Interior	*819	(771–867)
5953 Northeast	* 693	(626–759)
Yukon	⁺ 1,232	(1,100–1,363)
Northwest Territories	⁺ 1,285	(1,162–1,408)
Nunavut	⁺ 1,154	(980–1,328)
Canada	534	(531–536)

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.

Sources: National Trauma Registry, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

		yocardial Infarction Event 08–2009	Hospitalized S 2008–2	
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador	*347	(330-363)	⁺ 151	(140–162)
1011 Eastern	*346	(325-368)	* 156	(141-170)
1012 Central	* 413	(374–451)	138	(116–161)
1013 Western	* 267	(232–302)	142	(117–168)
Prince Edward Island	* 294	(266-323)	141	(122-160)
Nova Scotia	* 264	(253-274)	122	(115–129)
1211 South Shore	* 329	(287–371)	125	(100-150)
1212 South West Nova	*315	(271–358)	* 167	(135–198)
1213 Annapolis Valley	⁺ 271	(237–305)	114	(92–137)
1214 Colchester East Hants	*357	(315–400)	143	(117–170)
1218 Cape Breton 1219 Capital	*319 *180	(289–349)	129 *106	(110–148)
		(166–193)		(95–116)
New Brunswick	*269	(257–281)	*138	(130–147)
1301 Zone 1 (Moncton area) 1302 Zone 2 (Saint John area)	*263 *261	(240–285) (237–286)	129 133	(113–144) (116–150)
1303 Zone 3 (Fredericton area)	*316	(288–343)	136	(118–154)
1304 Zone 4 (Edmundston area)	218	(177–258)	149	(116–182)
1306 Zone 6 (Bathurst area)	215	(184–247)	139	(113–165)
Quebec	*221	(218–225)		
2401 Bas-Saint-Laurent	218	(199–238)		
2402 Saguenay-Lac-Saint-Jean	* 239	(221–257)		
2403 Capitale-Nationale	208	(197–218)		
2404 Mauricie et Centre-du-Québec	* 259	(245-273)		
2405 Estrie	* 276	(258–295)		
2406 Montréal	† 197	(190–203)		
2407 Outaouais	229	(212–247)	**	
2408 Abitibi-Témiscamingue	⁺ 293	(264–322)		
2409 Côte-Nord 2411 Gaspésie-Îles-de-la-Madeleine	*266 *317	(231–301) (284–351)		
2411 Gaspesie-lies-de-la-Madelellie 2412 Chaudière-Appalaches	*192	(284–331)		
2413 Laval	*179	(166–193)		
2414 Lanaudière	* 288	(272–305)		
2415 Laurentides	204	(192–217)		
2416 Montérégie	* 226	(218–234)		
Ontario	216	(213–219)	129	(127–131)
3501 Erie St. Clair	* 246	(234–258)	* 151	(141–160)
3502 South West	* 238	(228–248)	122	(115–129)
3503 Waterloo Wellington	222	(210-234)	137	(127–146)
3504 Hamilton Niagara Haldimand Brant	⁺ 255	(246–263)	129	(123–135)
3505 Central West	212	(201–224)	* 140	(130–150)
3506 Mississauga Halton	*174	(165–183)	134	(126–142)
3507 Toronto Central 3508 Central	*160 *165	(153–168) (158–171)	131 *122	(124–138) (116–128)
3509 Central East	*206	(198–171)	†122	(116–128)
3510 South East	* 240	(227–253)	134	(124–144)
3511 Champlain	*193	(185–201)	* 103	(97–109)
3512 North Simcoe Muskoka	215	(202–229)	139	(127–150)
3513 North East	* 314	(300–328)	* 153	(143–163)
3514 North West	*393	(367–418)	* 170	(153–187)
Manitoba	⁺ 255	(245-264)	135	(128–142)
4610 Winnipeg	† 237	(225-249)	131	(122–139)
4615 Brandon	* 271	(223–318)	106	(77–135)
4625 South Eastman	236	(193–279)	145	(111–179)
4630 Interlake	*283	(246–320)	128	(103–153)
4640 Central	249 *273	(216–282)	119	(97–141)
4645 Assiniboine	2/3	(235–310)	131	(106–156)

		ocardial Infarction Event 3–2009	Hospitalized Stroke Event 2008–2009		
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	
Saskatchewan	+ 228	(219-238)	133	(126-140)	
4701 Sun Country	243	(201–285)	107	(80–135)	
4702 Five Hills	236	(195–276)	141	(110–172)	
4704 Regina	215	(196–234)	136	(121–151)	
4705 Sunrise	* 262	(223-302)	115	(89-140)	
4706 Saskatoon	203	(185-220)	137	(123-151)	
4709 Prince Albert	* 259	(221-296)	152	(123-181)	
4710 Prairie North	* 276	(233–319)	140	(110–171)	
Alberta	⁺ 205	(200-211)	*123	(119-127)	
4821 Area 1 (Chinook)	230	(205-255)	123	(105-141)	
4822 Area 2 (Palliser)	230	(200-261)	127	(105-150)	
4823 Area 3 (Calgary)	* 170	(162–179)	† 115	(108-122)	
4824 Area 4 (David Thompson)	* 286	(265-307)	* 158	(142-173)	
4825 Area 5 (East Central)	246	(217–275)	120	(100-140)	
4826 Area 6 (Capital)	* 197	(188–206)	† 115	(108-122)	
4827 Area 7 (Aspen)	235	(210-260)	133	(114-152)	
4828 Area 8 (Peace Country)	*	* *	*	* *	
4829 Area 9 (Northern Lights)	190	(136-244)	157	(103-211)	
British Columbia	*169	(165-173)	*121	(118-124)	
5911 East Kootenay	* 258	(224-292)	133	(107–159)	
5912 Kootenay Boundary	* 261	(228-294)	130	(105–155)	
5913 Okanagan	205	(191–219)	137	(126-148)	
5914 Thompson/Cariboo/Shuswap	233	(213-253)	123	(109-137)	
5921 Fraser East	* 191	(174–208)	119	(106-132)	
5922 Fraser North	* 129	(119-139)	121	(111-131)	
5923 Fraser South	* 175	(164–186)	134	(125-144)	
5931 Richmond	* 115	(99-131)	* 103	(88-118)	
5932 Vancouver	* 133	(124-143)	* 110	(101-119)	
5933 North Shore	* 165	(150-180)	119	(106-132)	
5941 South Vancouver Island	* 119	(108-130)	+ 99	(89-109)	
5942 Central Vancouver Island	* 177	(162–191)	* 113	(101–125)	
5943 North Vancouver Island	* 177	(154-201)	127	(107-147)	
5951 Northwest	225	(186–264)	* 179	(143-215)	
5952 Northern Interior	219	(191–246)	* 157	(133-181)	
5953 Northeast	* 276	(226-326)	150	(112–187)	
Yukon	199	(138–260)	201	(126–275)	
Northwest Territories	182	(117–247)	194	(126–262)	
Nunavut	*112	(49–176)	* 247	(129–366)	
Canada	217	(215–218)	128	(127–130)	

Hospitalized acute myocardial infarction event

Age-standardized rate of new acute myocardial infarction (AMI) events admitted to an acute care hospital per 100,000 population age 20 and older. New event is defined as a first-ever hospitalization for an AMI or a recurrent hospitalized AMI occurring more than 28 days after the admission for the previous event in the reference period. AMI is one of the leading causes of morbidity and death. This indicator is important for planning and evaluating preventive strategies, allocating health resources and estimating costs. Sources: Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

Hospitalized stroke event

Age-standardized rate of new stroke events admitted to an acute care hospital per 100,000 population age 20 and older. New event is defined as a first-ever hospitalization for stroke or a recurrent hospitalized stroke occurring more than 28 days after the admission for the previous event in the reference period. Stroke is one of the leading causes of long-term disability and death. This indicator is important for planning and evaluating preventive strategies, allocating health resources and estimating costs.

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

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

	Socio-Economic Profile, 2006							
Neighbourhood Income Quintile	Low Income Rate %	Unemployment Rate %	Housing Owned %	Post- Secondary Graduates %	Aboriginal Population %	Recent Immigrants %	Lone-Parent Families %	Living Alone %
Newfoundland and Labrador								
Quintile 1 (Least Affluent)	26.9	24.9	72.2	40.5	4.2	0.3	20.4	9.6
Quintile 2	16.5	20.6	77.4	49.5	5.8	0.1	17.3	8.4
Quintile 3	12.0	18.8	80.9	53.5	3.3	0.1	14.1	7.7
Quintile 4	9.9	16.9	83.1	59.6	4.9	0.2	13.6	6.9
Quintile 5 (Most Affluent)	7.2	11.5	80.8	69.2	5.0	0.6	11.2	6.8
Prince Edward Island								
Quintile 1 (Least Affluent)	21.5	13.8	49.9	48.0	2.3	0.6	25.6	15.4
Quintile 2	13.1	11.5	72.3	53.5	1.7	0.3	19.9	9.8
Quintile 3	6.7	10.6	82.8	55.7	0.9	0.8	14.4	7.6
Quintile 4	5.7	9.4	84.2	62.2	0.7	0.3	12.6	7.5
Quintile 5 (Most Affluent)	5.4	9.7	86.1	66.2	0.8	1.1	9.1	7.4
Nova Scotia								
Quintile 1 (Least Affluent)	26.8	11.2	51.9	49.6	5.9	1.1	25.7	15.9
Quintile 2	14.8	9.6	70.0	54.7	2.3	0.6	19.3	12.3
Quintile 3	11.5	9.1	76.8	59.2	1.9	0.7	15.1	9.9
Quintile 4	8.6	8.2	80.9	65.1	1.7	0.5	13.5	9.2
Quintile 5 (Most Affluent)	6.6	7.2	84.1	70.7	1.3	0.8	10.9	7.8
New Brunswick								
Quintile 1 (Least Affluent)	25.9	13.6	57.2	41.2	6.2	1.0	24.6	13.8
Quintile 2	15.3	11.1	74.8	47.0	1.9	0.5	17.3	11.0
Quintile 3	10.2	9.3	81.1	51.3	1.5	0.5	14.8	9.3
Quintile 4	8.8	9.0	82.8	56.5	1.2	0.4	13.4	8.6
Quintile 5 (Most Affluent)	6.2	6.8	83.8	66.4	1.0	0.6	10.6	7.1
Quebec								
Quintile 1 (Least Affluent)	35.6	11.3	31.4	51.8	2.4	6.1	24.9	20.2
Quintile 2	20.3	7.7	51.1	56.7	1.3	2.6	19.2	16.0
Quintile 3	12.8	6.0	67.1	60.0	1.1	1.6	15.7	11.9
Quintile 4	8.9	5.1	77.4	64.2	1.2	1.2	12.8	9.3
Quintile 5 (Most Affluent)	6.5	4.6	83.6	73.2	1.0	1.3	10.5	8.0

Neighbourhood income quintile

Small geographic areas divided into five roughly equal population groups. Quintile 1 refers to the least affluent neighbourhoods, while Quintile 5 refers to the most affluent. The quintiles were constructed according to the methods developed at Statistics Canada. A short description of the method is provided in the appendix.

Low income rate (income for the year prior to the census)

Proportion of population in economic families and persons age 15 and older not in economic families with incomes below the Statistics Canada low income before tax cut-off (LICO-BT). The cut-offs represent levels of income where people spend 20% more than average of their before-tax income on food, shelter and clothing. LICOs are set based on size of the family and area of residence. This indicator is a widely used measure of socio-economic status. Higher income is associated with better health.

Source: 2006 Census, Statistics Canada.

Unemployment rate

Proportion of the labour force age 15 and older who were unemployed in the week (Sunday to Saturday) prior to census day (May 16, 2006). The labour force includes the employed and the unemployed. The unemployment rate is a traditional measure of the economy. Unemployed people tend to experience more health problems.

Note: The unemployment rate based on the census data may differ from that based on Labour Force Survey data due to differences in definition and data source.

Source: 2006 Census, Statistics Canada.

Housing owned

Proportion of owned, occupied private dwellings among total number of occupied private dwellings. An "owned, occupied private dwelling" refers to a private dwelling that is owned or being purchased by some member of the household. A dwelling is classified as "owned" even if it is not fully paid for, such as one that has a mortgage or some other claim on it.

Source: 2006 Census, Statistics Canada.

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		Socio-Economic Profile, 2006							
Neighbourhood Income Quintile	Low Income Rate %	Unemployment Rate %	Housing Owned %	Post- Secondary Graduates %	Aboriginal Population %	Recent Immigrants %	Lone-Parent Families %	Living Alone %	
Ontario									
Quintile 1 (Least Affluent)	31.9	9.5	39.5	51.5	4.0	10.1	25.6	14.2	
Quintile 2	16.6	6.8	67.9	55.2	1.9	5.4	18.2	10.5	
Quintile 3	10.7	5.7	79.9	60.0	1.5	4.0	14.5	7.9	
Quintile 4	7.6	5.2	85.8	64.6	1.2	2.8	11.8	6.7	
Quintile 5 (Most Affluent)	5.7	4.9	87.4	72.0	1.0	1.9	9.1	6.4	
Manitoba									
Quintile 1 (Least Affluent)	42.6	11.0	32.5	40.6	40.2	6.6	32.8	16.3	
Quintile 2	20.0	5.0	63.8	49.1	11.6	3.1	19.5	15.2	
Quintile 3	12.2	4.2	79.8	52.3	9.0	2.3	14.3	10.4	
Quintile 4	7.9	3.7	85.5	58.5	8.2	1.9	11.6	8.3	
Quintile 5 (Most Affluent)	5.1	3.9	88.4	65.6	6.8	1.2	8.6	6.8	
Saskatchewan									
Quintile 1 (Least Affluent)	33.5	11.0	41.0	42.5	39.4	1.6	31.1	16.0	
Quintile 2	17.1	5.0	70.8	48.2	11.3	0.8	18.5	14.1	
Quintile 3	11.4	4.5	78.0	53.3	8.8	0.7	15.0	11.9	
Quintile 4	7.6	3.9	85.2	56.9	6.3	0.6	10.5	9.1	
Quintile 5 (Most Affluent)	5.3	4.1	87.2	64.2	6.1	0.8	8.9	7.3	
Alberta									
Quintile 1 (Least Affluent)	24.7	6.0	47.5	49.8	12.4	5.9	22.5	14.6	
Quintile 2	14.5	4.3	67.5	55.1	4.9	3.3	17.2	12.0	
Quintile 3	9.5	3.6	79.5	59.6	4.0	2.5	13.9	8.6	
Quintile 4	6.7	3.6	86.9	63.7	3.6	2.3	10.7	6.5	
Quintile 5 (Most Affluent)	5.2	3.3	89.0	70.2	2.7	2.0	7.9	5.9	
British Columbia				<u> </u>					
Quintile 1 (Least Affluent)	31.2	8.3	48.5	53.6	8.4	7.7	22.2	17.4	
Quintile 2	19.7	6.3	67.2	56.5	4.3	5.2	16.8	12.2	
Quintile 3	14.7	5.4	74.0	61.1	3.5	3.6	14.5	10.3	
Quintile 4	11.0	4.7	79.6	63.8	3.3	2.8	12.2	8.8	
Quintile 5 (Most Affluent)	8.9	4.5	84.6	69.3	2.5	2.7	9.4	7.1	

Post-secondary graduates

Proportion of population age 25 to 64 who have obtained a post-secondary certificate, diploma or degree. It is a measure of educational attainment and socio-economic status.

Source: 2006 Census, Statistics Canada.

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.

Recent immigrants

Proportion of recent immigrants living in a geographic area. Refers to people who became landed immigrants between 2001 and 2006 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.

Lone-parent families

Proportion of lone-parent families among all census families living in private households. A census family refers to a married or common-law couple or lone parent with at least one never-married son or daughter living in the same household.

Source: 2006 Census. Statistics Canada.

Living alone

Proportion of people living alone among total population in private households.

Source: 2006 Census, Statistics Canada.

		Neighbou	rhood Income	Quintile†			
	Q1 95% CI	Q2 95% CI	Q3 95% CI	Q4 95% CI	Q5 95% CI	Disparity Rate Ratio 95% CI	Potential Rate Reduction (%) 95% CI
N.L.	377	336	332	337	314	** 1.20	7.5
	(340-414)	(301-372)	(297–366)	(301-374)	(278-350)	(1.03-1.40)	(-2.5–16.7)
P.E.I.	374	326	302	309	241	** 1.55	**22.2
	(300-447)	(256-395)	(235-370)	(240-378)	(184–299)	(1.14-2.11)	(3.5–37.9)
N.S.	293	301	263	248	225	** 1.30	* ** 15.5
	(269-318)	(277-326)	(239-286)	(225-270)	(203–247)	(1.14–1.48)	(7.6–22.8)
N.B.	283	295	290	253	253	1.12	8.1
	(256-311)	(268-322)	(262-318)	(228-278)	(225–281)	(0.97–1.30)	(-1.3–16.8)
Que.	254	236	216	222	189	**1.34 [^]	** 15.5
	(246-262)	(228-243)	(208-223)	(214-230)	(182–197)	(1.28–1.41)	(12.4–18.5)
Ont.	263	232	227	207	183	**1.44	** 17.6
	(257–270)	(225-238)	(220-233)	(201–213)	(178–189)	(1.38–1.50)	(15.3–19.9)
Man.	334	267	233	247	231	**1.45	***11.8 <i>*</i>
	(307-361)	(245-288)	(213-253)	(226-269)	(210–252)	(1.28-1.63)	(4.3–18.7)
Sask.	312	217	220	217	205	**1.52 [^]	**12.2
	(284-340)	(196–238)	(199–240)	(196–238)	(183–226)	(1.33–1.75)	(3.5–20.2)
Alta.	222	224	225	205	182	**1.22 [^]	**14.2
	(209-235)	(211-236)	(212-238)	(192–218)	(170–194)	(1.12–1.33)	(8.8–19.3)
B.C.	202	188	170	160	145	**1.39 [^]	**16.2
	(192–212)	(179–198)	(161–179)	(151–169)	(137–154)	(1.29–1.50)	(11.7–20.6)
Y.T.	*	*	*	*	*	*	*
N.W.T.	*	*	*	*	*	*	*
Nun.	*	*	*	*	*	*	*
Canada	255	232	221	210	186	**1.37	**15.8
	(251–259)	(228–236)	(217–224)	(207–214)	(183–190)	(1.34–1.41)	(14.4–17.3)

	Injury Hospitalization, 2008–2009							
		Neighbourhood Income Quintile [†]						
	Q1 95% CI	Q2 95% CI	Q3 95% CI	Q4 95% CI	Q5 95% CI	Disparity Rate Ratio 95% CI	Potential Rate Reduction (%) 95% CI	
N.L.	532	585	504	525	521	1.02	2.4	
	(486–578)	(537-633)	(459-549)	(479-572)	(476–566)	(0.90-1.15)	(-5.4–9.7)	
P.E.I.	589	615	689	547	578	1.02	4.1	
	(502-676)	(521–709)	(591–788)	(460-634)	(486–670)	(0.82-1.26)	(-10.2–17.0)	
N.S.	544	536	512	481	505	1.08	2.0	
	(511–577)	(503-568)	(480-544)	(449-513)	(471–539)	(0.98-1.18)	(-4.0–7.8)	
N.B.	669	601	622	549	558	**1.20	++ 7.0	
	(628–710)	(562-641)	(582-662)	(511–587)	(520–597)	(1.09-1.31)	(1.0–12.6)	
Que.	589	553	538	539	496	**1.19	**8.8	
	(578–601)	(542–565)	(527–549)	(527–551)	(484–507)	(1.15–1.22)	(6.9–10.7)	
Ont.	487	428	433	414	403	**1.20	**6.8	
	(479–496)	(420-436)	(425-441)	(406-422)	(396-411)	(1.18–1.24)	(5.2–8.4)	
Man.	1,145	657	588	565	591	**1.94	** 16.8	
	(1,102–1,189)	(626-689)	(557–618)	(535–596)	(558–623)	(1.81–2.07)	(12.6–20.9)	
Sask.	1,200	799	725	` 716	742	**1.62 [^]	**11.4	
	(1,151–1,249)	(759-838)	(687–762)	(678–753)	(702–781)	(1.51–1.73)	(7.0–15.6)	
Alta.	900	750	737	697	673	**1.34 [^]	**10.4	
	(878–922)	(730–770)	(717–758)	(677–717)	(653-694)	(1.28–1.39)	(7.9–12.9)	
B.C.	666	607	610	590	575	** 1.16	** 5.7	
	(650–683)	(590-623)	(594-626)	(573-607)	(558–592)	(1.11–1.20)	(3.2–8.2)	
Y.T.	*	*	*	*	*	*	*	
N.W.T.	*	*	*	*	*	*	*	
Nun.	*	*	*	*	*	*	*	
Canada	634	547	538	519	501	**1.27	**8.5	
	(629–640)	(541–552)	(532-543)	(514–525)	(496–507)	(1.25-1.28)	(7.6-9.5)	

[†] Age-standardized rates per 100,000 population.

^{**} Statistically significant disparity rate ratio or potential rate reduction.

	Gini Coe	fficient, 2006
	Total Income	After-Tax Income
N.L.	0.41	0.36
P.E.I.	0.37	0.34
N.S.	0.41	0.37
N.B.	0.40	0.37
Que.	0.42	0.38
Ont.	0.43	0.39
Man.	0.41	0.38
Sask.	0.43	0.40
Alta.	0.42	0.39
B.C.	0.43	0.40
Y.T.		
N.W.T.		
Nun.		
Canada	0.43	0.39

Neighbourhood income quintile

Small geographic areas divided into five roughly equal population groups. Quintile 1 refers to the least affluent neighbourhoods, while Quintile 5 refers to the most affluent. The quintiles were constructed according to the methods developed at Statistics Canada. A short description of the method is provided in the appendix.

Disparity rate ratio (RR)

Ratio of a health indicator rate for the least affluent neighbourhood income quintile (Q1) to the rate for the most affluent neighbourhood income quintile (Q5). It provides a summary measure of the magnitude of the socio-economic disparity for a health indicator in a jurisdiction. It should be evaluated together with other measures such as the indicator rate for each neighbourhood income quintile as well as the potential rate reduction. The 95% confidence interval (CI) is provided to assist interpretation. When the 95% CI does not contain a value of 1, RR indicates a statistically significant disparity between Q1 and Q5 rates within a jurisdiction, as indicated by the ** symbol.

Potential rate reduction (PRR)

Reduction in a health indicator rate that would occur in the hypothetical scenario that each neighbourhood income group experienced the rate of the most affluent neighbourhood income quintile (Q5), expressed as a percent. This measure is based on the concept of the excess morbidity or mortality that could be prevented and provides a summary measure of the overall effect of socio-economic disparities on a health indicator. It should be evaluated together with other measures such as the indicator rate for each neighbourhood income quintile as well as the disparity rate ratio. The 95% confidence interval (CI) is provided to assist interpretation. When the 95% CI does not contain a value of 0, the PRR indicates a statistically significant potential reduction in the overall indicator rate within a jurisdiction, as indicated by the ** symbol.

Gini coefficient

The Gini coefficient is a number between zero and one that measures the relative degree of inequality in the distribution of income. The coefficient would register zero (minimum inequality) for a population in which each member received exactly the same income, and it would register a coefficient of one (maximum inequality) if one member received all the income and the rest received none. Even though a single Gini coefficient value has no simple interpretation, generally the higher the coefficient, the higher the inequality of the distribution.

Source: Income Statistics Division, Statistics Canada.

		Self-Reported He	alth Behaviours		
		g (Age 12+) 2008	Heavy Drinking (Age 12+) 2008		
	%	95% CI	%	95% CI	
N.L.	24.6	(22.2–27.0)	22.3	(19.7–24.9)	
P.E.I.	21.1	(17.9–24.3)	16.5	(13.3–19.6)	
N.S.	23.5	(21.2–25.9)	20.6	(18.4–22.9)	
N.B.	23.3	(21.2–25.5)	19.4	(17.6–21.3)	
Que.	23.3	(22.1–24.5)	17.3	(16.3–18.3)	
Ont.	19.8	(18.9–20.8)	15.5	(14.7–16.2)	
Man.	24.2	(21.8–26.6)	19.6	(17.4-21.9)	
Sask.	25.1	(23.2–27.1)	18.8	(16.9–20.6)	
Alta.	22.7	(21.0-24.4)	17.6	(16.1–19.1)	
B.C.	18.6	(17.3–19.9)	15.5	(14.3–16.8)	
Y.T.	31.6	(25.7–37.6)	24.0	(18.2–29.9)	
N.W.T.	34.3	(29.8–38.9)	23.5	(18.4–28.6)	
Nun.	54.2	(48.3–60.2)	25.1▼	(16.0▼-34.2▼)	
Canada	21.4	(20.9-21.9)	16.7	(16.3–17.2)	

	Fruit and Vegetable Consumption (Age 12+) (5+ per Day) 2008		Leisure-Time Physical Activity (Age 12+) (Active/Moderately Active) 2008		
	%	95% CI	%	95% CI	
N.L.	32.6	(29.6-35.7)	43.6	(40.8–46.4)	
P.E.I.	34.7	(30.8–38.7)	47.1	(43.2–50.9)	
N.S.	36.7	(33.8–39.5)	48.4	(45.6–51.3)	
N.B.	38.8	(36.5-41.2)	48.5	(46.1–50.9)	
Que.	53.2	(51.7–54.7)	47.6	(46.2-49.0)	
Ont.	40.5	(39.4-41.6)	49.5	(48.4-50.6)	
Man.	34.5	(31.8-37.2)	52.8	(50.3-55.3)	
Sask.	40.5	(38.3-42.6)	48.7	(46.4-51.1)	
Alta.	45.2	(43.1-47.3)	53.4	(51.4-55.4)	
B.C.	42.4	(40.7-44.0)	58.7	(57.1-60.2)	
Y.T.	36.5	(31.3-41.7)	54.3	(48.1-60.4)	
N.W.T.	20.3	(16.4–24.3)	39.5	(33.7–45.3)	
Nun.	24.2	(17.6–30.8)	48.2	(36.3-60.0)	
Canada	43.7	(43.0-44.3)	50.6	(50.0-51.3)	

	Self-Reported Environmental Factors					
	Exposure to Second-Hand Smoke (Age 12+) (At Home) 2008		Exposure to Second-Hand Smoke (Age 12+) (In Vehicles and Public Places) 2008			
	%	95% CI	%	95% CI		
N.L.	7.7	(5.8-9.6)	14.0	(11.7–16.3)		
P.E.I.	8.3	(5.8–10.8)	13.2	(9.9–16.5)		
N.S.	7.0	(5.6-8.4)	16.3	(14.3–18.4)		
N.B.	8.9	(7.5–10.4)	14.9	(12.8–16.9)		
Que.	9.7	(8.7–10.6)	13.5	(12.4–14.6)		
Ont.	5.9	(5.3-6.5)	15.5	(14.5–16.5)		
Man.	7.0	(5.4-8.7)	14.3	(12.0–16.6)		
Sask.	8.1	(6.6–9.5)	14.2	(12.5–15.8)		
Alta.	5.5	(4.6-6.4)	15.9	(14.2–17.7)		
B.C.	3.6	(3.0-4.2)	13.7	(12.2–15.1)		
Y.T.	6.6▼	(4.0▼-9.3▼)	7.0▼	(4.2▼-9.8▼)		
N.W.T.	5.8▼	(2.8▼-8.8▼)	7.9▼	(4.2▼−11.5▼)		
Nun.	17.6▼	(9.3▼-28.9▼)	17.4▼	(9.1▼-25.7▼)		
Canada	6.6	(6.3-7.0)	14.7	(14.2–15.3)		

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



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

Smoking

Proportion of household population age 12 and older who reported being a current smoker on either a daily or occasional basis.

Source: Canadian Community Health Survey, Statistics Canada.

Heavy drinking

Proportion of household population age 12 and older who reported drinking five or more drinks on at least one occasion per month in the past 12 months.

Source: Canadian Community Health Survey, Statistics Canada.

Fruit and vegetable consumption

Proportion of household population age 12 and older who reported consuming fruits and vegetables five or more times per day, on average.

Source: Canadian Community Health Survey, Statistics Canada.

Leisure-time physical activity

Proportion of household population age 12 and older reporting an active or moderately active level of physical activity, based on their responses to questions about the frequency, duration and intensity of their participation in leisure-time physical activity over the past three months.

Source: Canadian Community Health Survey, Statistics Canada.

Exposure to second-hand smoke at home

Proportion of non-smoking household population age 12 and older who reported that at least one person smoked inside their home every day or almost every day.

Source: Canadian Community Health Survey, Statistics Canada.

Exposure to second-hand smoke in vehicles and public places

Proportion of non-smoking household population age 12 and older who reported being exposed to second-hand smoke in private vehicles and/or public places every day or almost every day during the past month.

Source: Canadian Community Health Survey, Statistics Canada.

Mar.	Low Income Rate (2005 Income)	Unemployment Rate 2008	Housing Owned 2006
Map Code Health Region	%	%	%
Newfoundland and Labrador	14.7	13.2	78.8
1011 Eastern	14.9	10.9	77.3
1012 Central	14.9	18.6	83.8
1013 Western	16.3	18.6	79.0
Prince Edward Island	11.0	10.7	73.8
Nova Scotia	13.8	7.7	72.2
1211 South Shore	11.6	7.6	83.4
1212 South West Nova	12.9	10.5	79.7
1213 Annapolis Valley 1214 Colchester East Hants	13.9 11.1	8.6 6.6	74.2 77.2
1218 Cape Breton	16.7	13.1	76.2
1219 Capital	14.1	5.3	64.8
New Brunswick	13.5	8.6	75.8
1301 Zone 1 (Moncton area)	12.6	7.1	74.3
1302 Zone 2 (Saint John area)	14.6	6.9	73.6
1303 Zone 3 (Fredericton area)	12.3	6.8	76.3
1304 Zone 4 (Edmundston area)	13.5	12.8	75.0
1306 Zone 6 (Bathurst area)	15.3	13.0	79.1
Quebec	17.2	7.2	60.1
2401 Bas-Saint-Laurent 2402 Saguenay-Lac-Saint-Jean	12.6 12.6	8.8 8.5	70.2 66.7
2402 Saguenay–Lac-Saint-Jean2403 Capitale-Nationale	16.2	4.5	58.3
2404 Mauricie et Centre-du-Québec	15.6	8.1	64.0
2405 Estrie	14.7	5.9	61.4
2406 Montréal	29.0	8.7	37.9
2407 Outaouais	14.4	5.4	69.3
2408 Abitibi-Témiscamingue	12.1	7.6	66.0
2409 Côte-Nord2411 Gaspésie-Îles-de-la-Madeleine	9.5	11.8 17.3	71.8
2411 Gaspésie–Îles-de-la-Madeleine 2412 Chaudière-Appalaches	11.8 10.0	5.0	75.5 73.3
2413 Laval	16.0	6.7	68.9
2414 Lanaudière	12.1	7.2	76.0
2415 Laurentides	11.7	7.3	73.2
2416 Montérégie	12.5	6.6	69.1
Ontario	14.7	6.5	71.0
3501 Erie St. Clair	12.2	8.4	74.9
3502 South West	11.1	6.2	71.2
3503 Waterloo Wellington3504 Hamilton Niagara Haldimand Brant	9.8 13.8	5.6 6.6	72.1 73.4
3505 Central West	14.6	6.9	78.1
3506 Mississauga Halton	13.3	6.0	77.4
3507 Toronto Central	24.2	6.2	48.1
3508 Central	17.7	6.9	73.0
3509 Central East	16.1	7.9	75.5
3510 South East	11.9	6.0	73.2
3511 Champlain 3512 North Simcoe Muskoka	13.8 9.7	5.0 6.2	69.1 80.8
3512 North East	12.8	6.1	71.0
3514 North West	10.7	7.9	75.5
Manitoba	16.7	4.2	70.3
4610 Winnipeg	19.9	4.4	65.6
4615 Brandon	15.8	3.1	63.7
4625 South Eastman	8.6	4.9	82.5
4630 Interlake	9.4	4.7	85.0
4640 Central 4645 Assiniboine	12.0 12.1	3.7 2.7	79.8 82.5
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	Low Income Rate	Unemployment Rate	Housing Owned
	(2005 Income)	2008	2006
Map Code Health Region	%	%	%
Saskatchewan	14.4	4.1	72.7
4701 Sun Country	10.1	2.0	78.1
4702 Five Hills	14.7	4.6	73.3
4704 Regina	13.2	3.8	71.8
4705 Sunrise	15.0	3.7	79.0
4706 Saskatoon	15.7	3.8	69.1
4709 Prince Albert	17.6	6.3	72.2
4710 Prairie North	14.2	4.7	73.3
Alberta	12.2	3.6	73.1
4821 Area 1 (Chinook)	11.9	3.7	76.0
4822 Area 2 (Palliser)	10.2	2.9	72.9
4823 Area 3 (Calgary)	12.8	3.4	74.5
4824 Area 4 (David Thompson)	9.3	3.9	75.6
4825 Area 5 (East Central)	8.6	2.4	77.4
4826 Area 6 (Capital)	14.2	3.7	69.3
4827 Area 7 (Aspen)	8.7	4.4	78.0
4828 Area 8 (Peace Country)	8.5	4.3	75.7
4829 Area 9 (Northern Lights)	7.3	*	72.2
British Columbia	17.3	4.6	69.6
5911 East Kootenay	12.7	5.2	79.3
5912 Kootenay Boundary	14.1	4.5	79.7
5913 Okanagan	13.5	5.0	75.9
5914 Thompson/Cariboo/Shuswap	13.0	6.2	77.5
5921 Fraser East	13.9	4.9	74.5
5922 Fraser North	20.3	4.0	68.7
5923 Fraser South	15.8	4.8	76.6
5931 Richmond	26.1	5.3	76.3
5932 Vancouver	26.8	4.2	47.9
5933 North Shore	14.5	2.5	73.2
5941 South Vancouver Island	13.1	3.3	65.3
5942 Central Vancouver Island	13.9	6.0	77.1
5943 North Vancouver Island	15.0	4.4	76.5
5951 Northwest	13.8	7.6	73.2
5952 Northern Interior	12.8	7.3	75.3
5953 Northeast	8.8	4.7	73.8
Yukon			67.7
Northwest Territories			53.2
Nunavut			22.7
Canada	15.3	6.1	68.5

Low income rate (income for the year prior to the census)

Proportion of population in economic families and persons age 15 and older not in economic families with incomes below the Statistics Canada low income before tax cut-off (LICO-BT). The cut-offs represent levels of income where people spend 20% more than average of their before-tax income on food, shelter and clothing. LICOs are set based on size of the family and area of residence. This indicator is a widely used measure of socio-economic status. Higher income is associated with better health. Source: 2006 Census, Statistics Canada.

Unemployment rate

Proportion of the labour force age 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, Statistics Canada.

Housing owned

Proportion of owned, occupied private dwellings among the total number of occupied private dwellings. An "owned, occupied private dwelling" refers to a private dwelling that is owned or being purchased by some member of the household. A dwelling is classified as "owned" even if it is not fully paid for, such as one that has a mortgage or some other claim on it.

Source: 2006 Census, Statistics Canada.

	Hospitalized Hip 2008-			In-Hospital Hip Fracture 2006–2007 to 2008–2009		
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Risk-Adjusted Rate per 1,000 Discharges	95% CI		
Newfoundland and Labrador	⁺ 545	(494–596)	0.8	(0.5–1.0)		
1011 Eastern	* 544	(476–612)	0.7	(0.4–1.1)		
1012 Central	491	(388–595)	*	* *		
1013 Western	520	(403-637)	*	* *		
Prince Edward Island	539	(450-629)	0.8	(0.4-1.2)		
Nova Scotia	478	(445-512)	1.0	(0.8-1.2)		
1211 South Shore	525	(403-647)	*	* *		
1212 South West Nova	463	(341–585)	*	* *		
1213 Annapolis Valley	472	(367–576)	*	* *		
1214 Colchester East Hants	504	(387–620)	*	* *		
1218 Cape Breton	468	(385–551)	1.0	(0.5–1.4)		
1219 Capital	476	(420–532)	1.1	(0.8–1.4)		
New Brunswick	477	(440–514)	0.9	(0.7–1.0)		
1301 Zone 1 (Moncton area)	480	(408–551)	0.8	(0.5–1.1)		
1302 Zone 2 (Saint John area)1303 Zone 3 (Fredericton area)	528 491	(445–612)	*1.3 1.2	(1.0–1.7)		
1304 Zone 4 (Edmundston area)	607	(409–574) (443–771)	1.∠ *	(0.8–1.6)		
1306 Zone 6 (Bathurst area)	*284	(198–370)	*	* *		
Quebec	*418	(407–429)				
2401 Bas-Saint-Laurent	427	(365–489)				
2402 Saguenay–Lac-Saint-Jean	*327	(275–379)				
2403 Capitale-Nationale	437	(401–474)				
2404 Mauricie et Centre-du-Québec	439	(399–480)	**			
2405 Estrie	436	(381–492)				
2406 Montréal	445	(423-468)				
2407 Outaouais	417	(356-477)				
2408 Abitibi-Témiscamingue	374	(292–457)	**			
2409 Côte-Nord	*340	(236–443)				
2411 Gaspésie-Îles-de-la-Madeleine	*369 *304	(284–454)				
2412 Chaudière-Appalaches 2413 Laval	*384 *399	(338–430) (349–449)				
2414 Lanaudière	+393	(342–444)				
2415 Laurentides	458	(408–507)				
2416 Montérégie	⁺ 421	(393–449)				
Ontario	451	(442–460)	⁺ 0.6	(0.6-0.7)		
3501 Erie St. Clair	* 502	(461–544)	0.7	(0.5–1.0)		
3502 South West	+ 491	(458-525)	0.6	(0.4-0.8)		
3503 Waterloo Wellington	440	(400 - 480)	0.7	(0.4-0.9)		
3504 Hamilton Niagara Haldimand Bran		(447–501)	0.6	(0.5-0.8)		
3505 Central West	*341	(303–380)	0.6	(0.3–0.9)		
3506 Mississauga Halton	423	(388–458)	⁺ 0.5	(0.3–0.7)		
3507 Toronto Central	⁺ 425	(396–455)	*0.5	(0.3–0.7)		
3508 Central 3509 Central East	430 *414	(404–457) (389–440)	*0.5 0.7	(0.3–0.6) (0.5–0.9)		
3510 South East	489	(444–533)	1.0	(0.8–1.3)		
3511 Champlain	467	(436–497)	0.7	(0.5–0.9)		
3512 North Simcoe Muskoka	482	(433–532)	0.6	(0.3–0.8)		
3513 North East	488	(446–530)	0.7	(0.5–0.9)		
3514 North West	* 550	(476–623)	0.7	(0.4–1.0)		
Manitoba	⁺ 536	(505-568)	*1.1	(0.9-1.2)		
4610 Winnipeg	* 536	(494–578)	* 1.3	(1.0–1.5)		
4615 Brandon	498	(356-640)	*	* *		
4625 South Eastman	478	(326–631)	*	* *		
4630 Interlake	522	(402–643)	*	* *		
4640 Central	496	(391–601)	*	* *		
4645 Assiniboine	* 601	(482–720)	^			

			Fracture Event -2009		In-Hospital Hip Fracture 2006–2007 to 2008–2009	
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Risk-Adjusted Rate per 1,000 Discharges	95% CI	
Saska	tchewan	482	(450-513)	0.7	(0.5-0.8)	
4701	Sun Country	421	(307-535)	*	* *	
4702	Five Hills	537	(413-661)	*	* *	
4704	Regina	515	(447-584)	0.6	(0.3-0.9)	
4705	Sunrise	498	(387-609)	0.8	(0.4-1.2)	
4706	Saskatoon	448	(387–509)	0.7	(0.4-1.0)	
4709	Prince Albert	366	(265-467)	*	* *	
4710	Prairie North	520	(384–656)	*	* *	
Alber	ta	⁺ 481	(461–502)	⁺ 1.1	(1.0-1.2)	
4821	Area 1 (Chinook)	* 589	(494–684)	1.2	(0.8–1.6)	
4822	Area 2 (Palliser)	452	(356–548)	*	* *	
4823	Area 3 (Calgary)	476	(441–512)	*1.1	(0.9-1.3)	
4824	Area 4 (David Thompson)	* 578	(505-651)	* 1.4	(1.1–1.7)	
1825	Area 5 (East Central)	* 363	(285-441)	1.0	(0.6–1.4)	
4826	Area 6 (Capital)	475	(440-511)	0.9	(0.7–1.1)	
1827	Area 7 (Aspen)	392	(311–473)	* 1.4	(1.0–1.8)	
1828	Area 8 (Peace Country)	*	* *	*	* *	
4829	Area 9 (Northern Lights)	335	(102-567)	*	* *	
3ritisl	n Columbia	+ 474	(458-489)	*0.9	(0.9-1.0)	
5911	East Kootenay	* 593	(466–720)	*	* *	
5912	Kootenay Boundary	492	(387-598)	*	* *	
5913	Okanagan	473	(426-519)	0.7	(0.5-1.0)	
5914	Thompson/Cariboo/Shuswap	501	(430-572)	0.9	(0.6-1.3)	
5921	Fraser East	508	(444-572)	1.1	(0.7-1.4)	
5922	Fraser North	480	(433-527)	1.0	(0.8-1.3)	
5923	Fraser South	* 549	(503-596)	* 1.3	(1.0-1.5)	
5931	Richmond	* 361	(295-427)	0.9	(0.4-1.4)	
5932	Vancouver	* 393	(354-432)	0.9	(0.7-1.1)	
5933	North Shore	485	(424 - 545)	0.8	(0.5-1.2)	
5941	South Vancouver Island	447	(402-492)	0.9	(0.6-1.2)	
5942	Central Vancouver Island	471	(415–526)	1.0	(0.7-1.3)	
5943	North Vancouver Island	510	(412–607)	*	* *	
5951	Northwest	495	(336-654)	*	* *	
5952	Northern Interior	*675	(546-804)	*	* *	
5953	Northeast	650	(435–865)	*	* *	
Yukor	1	650	(286-1,014)	*	* *	
North	west Territories	691	(332–1,049)	*	* *	
Nuna	vut	*	* *	*	* *	
Cana	da	456	(451-462)	0.8		

Hospitalized hip fracture event

Age-standardized rate of new hip fractures admitted to an acute care hospital per 100,000 population age 65 and older. New event is defined as a first-ever hospitalization for hip fracture or a subsequent hip fracture occurring more than 28 days after the admission for the previous event in the reference period. Hip fractures represent a significant health burden for seniors and for the health system. As well as causing disability or death, hip fracture may have a major effect on independence and quality of life. This indicator is important for planning and evaluating preventive strategies, allocating health resources and estimating costs.

Sources: Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

In-hospital hip fracture

The risk-adjusted rate of in-hospital hip fracture among acute care inpatients age 65 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.

Notes: Rates for Quebec are not available due to the differences in data collection. Canada rate does not include Quebec. To reflect the concept of patient safety in hospitals, this indicator is reported by the jurisdiction where hospitalization occurred rather than by the jurisdiction of patient residence.

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

Newfoundland and Labrador			Wait Time for Hip Fracture Surgery				
Newfoundland and Labrador 69.0 64.3-73.7 788.2 64.7-73.7 69.0 64.3-73.7 788.2 64.7-73.7 69.0 64.3-73.7 788.2 64.7-73.7 69.0 64.3-73.7 788.2 64.7-73.7 69.0 67.7-2.6 67.0 67.2-2.6 67.3			or Next	Day)	Same, Next or D	ay After)	
1011 Eastern 1012 Central 1012 Central 1012 Central 1012 Central 1013 Western 70.6 (59.0-82.1) 86.4 (77.9-95 1013		Health Region				95% CI	
1012 Central 1927 (718-93.7) 193.5 (85.3-10.1) (85.9-82.1) 86.4 (77.9-9.1) (77	Newfo	oundland and Labrador	*69.0	(64.3-73.7)	*88.2	(84.7–91.7)	
Prince Edward Island	1011	Eastern	66.7	(60.5–72.8)	87.3	(82.7–92.0)	
Prince Edward Island	1012	Central	*82.7	(71.8 - 93.7)	* 93.5	(85.3-100.0)	
Nova Scotia 62.9 (59.6-66.3) 73.3 (78.8-83) 1211 South Shore 63.7 (521-75.3) 73.3 (64.5-8.9) 61.75.3) 73.3 (64.5-8.9) 61.75.3) 73.3 (64.5-8.9) 61.75.3) 73.3 (64.5-8.9) 61.75.3) 73.3 (64.5-8.9) 73.8 (60.5-871) 89.6 (79.7-9) 73.8 (60.5-871) 89.6 (79.7-9) 73.8 (60.5-871) 89.6 (79.7-9) 73.8 (60.5-871) 89.6 (79.7-9) 73.8 (60.5-871) 89.6 (79.7-9) 73.8 (60.5-871) 89.6 (79.7-9) 73.9 (63.2-7.0) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-8.1) 73.0 (69.7-9.1)	1013	Western	70.6	(59.0-82.1)	86.4	(77.9-95.0)	
1211 South Shore 63.7 (52.1-75.3) 73.3 (64.5-8) 1212 South West Nova 73.8 (60.5-87.1) 89.6 (79.7-95 1213 Annapolis Valley 78.8 (78.1-95.5) 98.1 (90.2-10) 1214 Colchester East Hants 55.0 (44.0-66.0) 78.0 (69.7-86 1218 Cape Breton 78.0 (72.4-89.4) 93.9 (876-10) 1219 Capital 47.7 (416-53.1) 72.5 (68.2-76 New Brunswick 68.8 (64.9-72.6) 88.0 (65.7-80 1301 Zone 1 (Moncton area) 74.9 (67.4-82.5) 93.1 (874-91.3) 1302 Zone 2 (Saint John area) 49.6 (419-57.4) 80.8 (75.0-81.3) 1303 Zone 3 (Fredericton area) 76.3 (62.7-90.0) 91.4 (811-100.3) 1304 Zone 4 (Edmundston area) 76.3 (62.7-90.0) 91.4 (811-100.3) 1305 Zone 6 (Bathurst area) 78.2 (67.3-97.6) 88.3 (77.0-90.3) 1304 Zone 6 (Bathurst area) 78.2 (67.3-97.6) 88.3 (77.0-90.3) 1305 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1306 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1307 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1308 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1309 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1300 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1301 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1302 Zone 7 (77.9-90.3) (77.9-90.3) 1303 Zone 7 (77.9-90.3) (77.9-90.3) 1304 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1305 Zone 6 (Bathurst area) 78.3 (77.9-90.3) 1306 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1307 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1308 Zone 7 (77.9-90.3) (77.9-90.3) 1309 Zone 7 (77.9-90.3) (77.9-90.3) 1300 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1301 Zone 6 (Bathurst area) 78.2 (77.9-90.3) 1302 Zone 7 (77.9-90.3) (77.9-90.3) 1303 Zone 6 (Bathurst area) (77.9-90.3) 1304 Zone 6 (Eathurst area) (77.9-90.3) 1304 Zone 6 (Eathurst area) (77.9-90.3) 1304 Zone 6 (Eathurst area) (77.9-90.3) 130	Prince	e Edward Island	63.6	(55.5-71.7)	84.9	(78.9-90.9)	
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1213 Annapolis Valley	1211			(52.1-75.3)	⁺ 73.3	(64.5 - 82.0)	
1214 Colchester East Hants 55.0 (44.0-66.0) 78.0 (69.7-86.1) 1218 Cape Breton 180.9 (72.4-89.4) 193.9 (87.6-101.19 Capital 147.3 (416.5-53.1) 172.5 (68.2-76.19 Capital 147.3 (416.5-31.1) 172.5 (68.2-76.19 Capital 147.3 (416.5-31.1) 172.5 (68.2-76.19 Capital 147.3 (416.5-31.1) 172.5 (68.2-76.19 Capital 147.5 Capital 1				,		(79.7 - 99.5)	
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1219 Capital				\ /		(69.7–86.2)	
New Brunswick		·		,		(87.6–100.0)	
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3511 Champlain 62.1 (58.8–65.3) 86.6 (84.2–89.3) 3512 North Simcoe Muskoka *51.0 (45.8–56.3) *74.5 (70.5–78.3) 3513 North East *68.0 (63.5–72.5) 85.5 (82.1–88.3) 3514 North West *49.9 (43.1–56.7) 80.4 (75.2–85.3) Manitoba 63.5 (60.6–66.5) 84.1 (81.9–86.4) 4610 Winnipeg 62.4 (58.5–66.2) 84.3 (81.4–87.2)				,		(83.0-87.7)	
3512 North Simcoe Muskoka *51.0 (45.8–56.3) *74.5 (70.5–78 3513 North East *68.0 (63.5–72.5) 85.5 (82.1–88 3514 North West *49.9 (43.1–56.7) 80.4 (75.2–85 Manitoba 63.5 (60.6–66.5) 84.1 (81.9–86 4610 Winnipeg 62.4 (58.5–66.2) 84.3 (81.4–87				,		(85.7–92.5)	
3513 North East *68.0 (63.5–72.5) 85.5 (82.1–88.5) 3514 North West *49.9 (43.1–56.7) 80.4 (75.2–85.5) Manitoba 63.5 (60.6–66.5) 84.1 (81.9–86.4) 4610 Winnipeg 62.4 (58.5–66.2) 84.3 (81.4–87.5)						(84.2–89.1)	
3514 North West *49.9 (43.1–56.7) 80.4 (75.2–85) Manitoba 63.5 (60.6–66.5) 84.1 (81.9–86) 4610 Winnipeg 62.4 (58.5–66.2) 84.3 (81.4–87)							
Manitoba 63.5 (60.6–66.5) 84.1 (81.9–86 4610 Winnipeg 62.4 (58.5–66.2) 84.3 (81.4–87				,			
4610 Winnipeg 62.4 (58.5–66.2) 84.3 (81.4–87)							
				,		(81.4–87.2)	
				,		(80.0–100.0)	
				,		(68.7–92.3)	
						(74.8–93.1)	
						(70.0–85.6)	
	4645	Assiniboine	† 72.9	(63.3-82.6)	88.7	(81.6–95.9)	

		Wait Time for Hip Fracture Surgery			
Мар	(Proportion With S or Next D 2008–20	ay) i	Same, Next or D	portion With Surgery e, Next or Day After) 2008–2009	
Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI	
Saskatchewan	⁺ 47.1	(43.9-50.2)	*72.2	(69.8–74.5)	
4701 Sun Country	75.1	(62.0-88.1)	87.8	(77.9–97.6)	
4702 Five Hills	* 43.6	(32.4-54.7)	* 73.4	(65.2–81.7)	
4704 Regina	61.9	(55.6 - 68.2)	83.4	(78.7-88.1)	
4705 Sunrise	52.6	(42.2 - 62.9)	* 76.0	(68.2-83.7)	
4706 Saskatoon	* 33.4	(27.1 - 39.8)	* 62.3	(57.6-67.1)	
4709 Prince Albert	49.9	(35.8 - 63.9)	* 64.8	(53.8-75.8)	
4710 Prairie North	* 33.6	(19.0 - 48.2)	* 67.2	(56.1-78.3)	
Alberta	61.4	(59.2-63.6)	85.6	(84.0-87.3)	
4821 Area 1 (Chinook)	*80.5	(72.5 - 88.6)	* 91.2	(85.1-97.2)	
4822 Area 2 (Palliser)	* 81.3	(71.0 - 91.7)	* 93.6	(85.8-100.0)	
4823 Area 3 (Calgary)	* 67.0	(63.2–70.8)	* 88.7	(85.8–91.5)	
4824 Area 4 (David Thompson)	* 44.6	(38.3-50.9)	79.5	(74.7–84.2)	
4825 Area 5 (East Central)	*40.4	(29.6 - 51.2)	* 68.8	(60.6-77.0)	
1826 Area 6 (Capital)	* 57.2	(53.4 - 61.0)	84.1	(81.2-87.0)	
1827 Area 7 (Aspen)	56.3	(45.1 - 67.5)	84.6	(76.2 - 93.0)	
4828 Area 8 (Peace Country)	69.3	(56.7-81.9)	89.5	(79.8-99.1)	
1829 Area 9 (Northern Lights)	*	* *	*	* *	
British Columbia	64.2	(62.6-65.8)	*85.8	(84.6-87.1)	
5911 East Kootenay	↑ 83.1	(72.1 - 94.0)	* 93.4	(85.2–100.0)	
5912 Kootenay Boundary	*82.5	(71.4 - 93.6)	90.2	(81.9-98.6)	
5913 Okanagan	63.3	(58.3 - 68.3)	85.8	(82.0 - 89.5)	
5914 Thompson/Cariboo/Shuswap	↑ 72.2	(65.0 - 79.3)	* 91.4	(86.1-96.8)	
5921 Fraser East	⁺ 71.9	(65.6–78.1)	* 90.6	(85.9-95.3)	
5922 Fraser North	+ 44.8	(40.0 - 49.6)	⁺ 73.1	(69.5–76.7)	
5923 Fraser South	58.6	(54.2 - 62.9)	82.0	(78.7–85.3)	
5931 Richmond	63.1	(54.0 - 72.3)	86.3	(79.3 - 93.2)	
5932 Vancouver	62.4	(57.6 - 67.2)	86.5	(82.9–90.1)	
5933 North Shore	⁺ 53.5	(47.1–59.8)	80.9	(76.2 - 85.7)	
5941 South Vancouver Island	65.2	(60.5 - 69.9)	↑ 88.1	(84.6–91.6)	
5942 Central Vancouver Island	↑ 85.5	(79.7–91.4)	* 95.5	(91.0-99.9)	
5943 North Vancouver Island	*81.8	(72.3–91.3)	+ 93.3	(86.2–100.0)	
5951 Northwest	*42.8	(25.9 - 59.7)	86.2	(73.5–98.9)	
5952 Northern Interior	72.3	(62.6-82.1)	89.4	(82.1–96.8)	
5953 Northeast	68.2	(51.3–85.1)	90.7	(77.8–100.0)	
Yukon	*	* *	*	* *	
Northwest Territories	*	* *	83.0	(64.4–100.0)	
Nunavut	*	* *	*	* *	
Canada	62.7		84.2		

Wait time for hip fracture surgery

Proportion with surgery same or next day: Risk-adjusted proportion of hip fracture patients age 65 and older who underwent hip fracture surgery on the day of admission or the next day.

Proportion with surgery same, **next day or day after:** Risk-adjusted proportion of hip fracture patients age 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 that 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.

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

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

		Ambulatory Care Sensitive Conditions 2008–2009		an Section –2009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	%	95% CI
Newfoundland and Labrador	*504	(485-524)	31.5	(30.2–32.8)
1011 Eastern	* 450	(425–474)	32.2	(30.5–33.9)
1012 Central	* 573	(525–622)	33.4	(30.0–36.8)
1013 Western	* 529	(478–581)	28.3	(24.9–31.8)
Prince Edward Island	*480	(443–516)	30.5	(28.1–32.9)
Nova Scotia	*365	(353–377)	27.8	(26.9–28.7)
1211 South Shore	292	(250–335)	30.2	(25.9–34.4)
1212 South West Nova	*432	(381–483)	26.6	(22.7–30.5)
1213 Annapolis Valley	* 267	(234–300)	24.7	(21.5–27.8)
1214 Colchester East Hants	*433	(386–479)	28.8	(25.6–32.0)
1218 Cape Breton	*511	(471–551)	31.7	(29.0-34.4)
1219 Capital	* 280	(263–297)	26.8	(25.5–28.2)
New Brunswick	*542	(526–559)	27.5	(26.4–28.5)
1301 Zone 1 (Moncton area)	*399	(371–427)	29.8	(27.8–31.9)
1302 Zone 2 (Saint John area)	*446	(415–477)	22.7	(20.8–24.6)
1303 Zone 3 (Fredericton area)	*633	(596–670)	27.7	(25.7–29.8)
1304 Zone 4 (Edmundston area)	*585	(520–650)	29.1	(25.0–33.1)
1306 Zone 6 (Bathurst area)	*582	(529–636)	28.1	(24.4–31.7)
Quebec	*324	(320–328)	23.1	(22.8–23.4)
2401 Bas-Saint-Laurent	315	(292–338)	24.1	(22.2–26.1)
2402 Saguenay-Lac-Saint-Jean	*485	(458–511)	22.0	(20.5–23.6)
2403 Capitale-Nationale	* 257	(245–269)	22.8	(21.8–23.8)
2404 Mauricie et Centre-du-Québec	335	(319–351)	21.0	(19.9–22.2)
2405 Estrie	*381	(359–402)	18.4	(17.0–19.7)
2406 Montréal	* 274	(267–282)	24.0	(23.5–24.6)
2407 Outaouais	* 375	(355–396)	27.0	(25.6–28.3)
2408 Abitibi-Témiscamingue	* 498	(462–534)	22.5	(20.6–24.5)
2409 Côte-Nord	* 556	(509–602)	20.6	(18.3–23.0)
2411 Gaspésie-Îles-de-la-Madeleine	* 621	(574-668)	26.7	(23.6-29.9)
2412 Chaudière-Appalaches	* 277	(261-293)	25.1	(23.8-26.3)
2413 Laval	* 251	(235-267)	24.8	(23.5-26.1)
2414 Lanaudière	333	(316 - 350)	19.4	(18.3–20.5)
2415 Laurentides	*342	(327 - 358)	22.9	(21.8-23.9)
2416 Montérégie	322	(313–331)	23.1	(22.4–23.7)
Ontario	⁺ 290	(287–293)	28.6	(28.4-28.9)
3501 Erie St. Clair	*361	(346–375)	26.1	(25.0–27.2)
3502 South West	314	(302–325)	23.4	(22.6–24.3)
3503 Waterloo Wellington	⁺ 252	(240–264)	26.9	(26.0–27.9)
3504 Hamilton Niagara Haldimand Bran		(323–343)	29.9	(29.1–30.7)
3505 Central West	*287	(275–299)	30.5	(29.6–31.3)
3506 Mississauga Halton	⁺ 213	(204–222)	27.4	(26.6–28.2)
3507 Toronto Central	*232	(223–240)	29.5	(28.7–30.3)
3508 Central	*183 *060	(177–190)	29.2	(28.6–29.9)
3509 Central East	*268 *340	(260–277)	31.0	(30.3–31.8)
3510 South East	*340 *357	(324–356)	27.6	(26.3–28.9)
3511 Champlain	*257 *252	(248–267)	29.1	(28.3–29.9)
3512 North Simcoe Muskoka 3513 North East	*353 *525	(336–371) (506–543)	31.0 28.3	(29.6–32.4) (27.1–29.5)
3514 North West	*548	(518–577)	26.3 24.1	(22.5–25.8)
Manitoba	*347	(336–357)	20.2	(19.6–20.9)
4610 Winnipeg	*243	(231–255)	20.4	(19.5–20.9)
4615 Brandon	*455	(395–516)	30.3	(26.8–33.8)
4625 South Eastman	*273	(231–315)	19.1	(16.7–21.5)
4630 Interlake	*442	(398–485)	17.6	(15.0–20.1)
4640 Central	*371	(333–409)	19.2	(17.3–21.1)
4645 Assiniboine	* 479	(427–530)	26.0	(22.9–29.1)
		/	-	/

	Ambulatory Care Se 2008-	ensitive Conditions 2009		ean Section 8–2009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	%	95% CI
Saskatchewan	*486	(472–499)	23.0	(22.3-23.7)
4701 Sun Country	*603	(537–670)	20.2	(17.2–23.2)
4702 Five Hills	+ 468	(409–528)	27.5	(23.9–31.1)
4704 Regina	† 501	(472–529)	23.1	(21.6–24.5)
4705 Sunrise	^ 785	(711–858)	27.2	(23.7–30.7)
4706 Saskatoon	⁺ 289	(269–309)	24.0	(22.6–25.4)
4709 Prince Albert	*488	(438–537)	18.8	(16.6–21.0)
4710 Prairie North	+ 689	(625–752)	21.5	(19.3–23.7)
Alberta	*308	(302–314)	27.7	(27.4–28.1)
4821 Area 1 (Chinook)	+ 405	(374–436)	26.4	(24.7–28.1)
4822 Area 2 (Palliser)	+ 489	(447–531)	22.4	(20.2–24.6)
4823 Area 3 (Calgary)	* 236	(227-245)	29.2	(28.5 - 29.9)
4824 Area 4 (David Thompson)	* 391	(369-414)	29.2	(27.9–30.5)
4825 Area 5 (East Central)	+ 401	(365–437)	26.8	(24.6–29.1)
4826 Area 6 (Capital)	+ 246	(236–255)	27.4	(26.7–28.1)
4827 Area 7 (Aspen)	* 569	(534-604)	26.6	(25.0-28.3)
4828 Area 8 (Peace Country)	*	* *	23.5	(21.7–25.3)
4829 Area 9 (Northern Lights)	† 577	(499-655)	26.4	(24.3–28.5)
British Columbia	⁺ 279	(274–284)	31.1	(30.6-31.5)
5911 East Kootenay	+ 464	(416-511)	32.7	(29.3 - 36.0)
5912 Kootenay Boundary	314	(275–352)	26.7	(23.2–30.2)
5913 Okanagan	*372	(351–393)	30.8	(29.2–32.5)
5914 Thompson/Cariboo/Shuswap	*345	(321-368)	32.7	(30.7 - 34.8)
5921 Fraser East	334	(312-355)	27.6	(26.0-29.1)
5922 Fraser North	*215	(203-228)	33.1	(31.9 - 34.3)
5923 Fraser South	* 270	(258-283)	32.2	(31.2-33.3)
5931 Richmond	* 154	(135–172)	30.1	(27.9 - 32.3)
5932 Vancouver	* 200	(188–212)	31.1	(30.0 - 32.3)
5933 North Shore	* 266	(246-286)	34.0	(32.1-36.0)
5941 South Vancouver Island	* 202	(186–218)	34.0	(32.2–35.7)
5942 Central Vancouver Island	* 295	(274–316)	26.0	(24.1–27.8)
5943 North Vancouver Island	336	(304–368)	30.0	(27.2-32.8)
5951 Northwest	⁺ 535	(482–589)	24.2	(21.5–27.0)
5952 Northern Interior	+ 491	(454–527)	27.6	(25.5-29.8)
5953 Northeast	*484	(429–539)	30.5	(27.8–33.3)
Yukon	⁺ 453	(377–530)	23.3	(19.0-27.6)
Northwest Territories	⁺ 713	(614-813)	21.3	(18.3-24.4)
Nunavut	⁺ 1,181	(992–1,371)	6.9	(5.1-8.7)
Canada	320	(318-322)	26.9	(26.8-27.0)

Ambulatory care sensitive conditions

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. 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.

Sources: Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

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 and 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: Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

	30-Day Acute Myocardial Infarction In-Hospital Mortality 2006–2007 to 2008–2009		30-Day Stro In-Hospital Mor 2006–2007 to 200	tality
Map Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador	9.0	(8.1–10.0)	⁺ 21.2	(19.4–23.0)
1011 Eastern	8.7	(7.4–10.0)	20.0	(17.6-22.4)
1012 Central	8.8	(7.0–10.6)	⁺ 25.3	(21.3–29.2)
1013 Western	10.1	(7.7–12.5)	18.9	(14.2–23.6)
Prince Edward Island	9.8	(7.9–11.7)	14.7	(11.1–18.2)
Nova Scotia	9.4	(8.6–10.1)	⁺ 21.3	(19.9–22.8)
1211 South Shore 1212 South West Nova	7.6	(4.8–10.4)	*22.6	(18.1–27.2)
1213 Annapolis Valley	9.7 *5.2	(7.1–12.3) (2.5–7.8)	21.1 *28.0	(16.6–25.6) (23.3–32.7)
1214 Colchester East Hants	8.8	(6.6–10.9)	20.7	(16.0–25.4)
1218 Cape Breton	*11.7	(9.9–13.5)	18.5	(14.8–22.3)
1219 Capital	8.2	(6.8–9.6)	* 21.0	(18.5–23.5)
New Brunswick	9.7	(8.9-10.6)	17.5	(16.0-18.9)
1301 Zone 1 (Moncton area)	9.0	(7.3-10.8)	18.0	(15.1–20.9)
1302 Zone 2 (Saint John area)	9.8	(8.1–11.5)	18.7	(15.5–21.8)
1303 Zone 3 (Fredericton area)	8.9	(7.1–10.8)	20.1	(17.0–23.2)
1304 Zone 4 (Edmundston area)1306 Zone 6 (Bathurst area)	*12.5 9.4	(9.3–15.7) (6.8–12.0)	14.6 17.5	(9.2–19.9) (13.0–22.0)
Quebec	9.4	(0.0-12.0)	17.5	(13.0-22.0)
2401 Bas-Saint-Laurent				
2402 Saguenay-Lac-Saint-Jean				
2403 Capitale-Nationale				
2404 Mauricie et Centre-du-Québec			**	
2405 Estrie				
2406 Montréal				
2407 Outaouais2408 Abitibi-Témiscamingue				
2409 Côte-Nord			**	
2411 Gaspésie-Îles-de-la-Madeleine			**	
2412 Chaudière-Appalaches			•	
2413 Laval				
2414 Lanaudière 2415 Laurentides				
2416 Montérégie				
Ontario	9.0	(8.8–9.2)	17.6	(17.3–18.0)
3501 Erie St. Clair	9.6	(8.7–10.4)	16.8	(15.3–18.4)
3502 South West	8.9	(8.1–9.7)	* 19.6	(18.2–20.9)
3503 Waterloo Wellington	8.2	(7.2-9.2)	* 20.6	(18.9-22.3)
3504 Hamilton Niagara Haldimand Brant	8.7	(8.1–9.3)	17.9	(16.8–19.0)
3505 Central West	8.1	(7.0–9.1)	*14.1	(12.4–15.8)
3506 Mississauga Halton 3507 Toronto Central	8.9 9.0	(8.0–9.8) (8.3–9.8)	18.5 16.9	(17.0–20.0) (15.7–18.2)
3508 Central	*9.7	(9.0–10.4)	*16.3	(15.2–17.4)
3509 Central East	9.4	(8.7–10.1)	17.5	(16.4–18.6)
3510 South East	* 10.0	(9.0–11.0)	* 20.6	(18.8–22.4)
3511 Champlain	* 7.8	(7.1–8.6)	17.2	(15.9–18.5)
3512 North Simcoe Muskoka	8.9	(7.7–10.0)	17.7	(15.7–19.6)
3513 North East 3514 North West	*10.5 7.7	(9.7–11.4) (6.5–8.9)	18.9 * 14.1	(17.3–20.5) (11.7–16.5)
Manitoba 4610 Winnipeg	*7.8 * 6.5	(7.2–8.5) (5.7–7.4)	17.3 16.5	(16.1–18.5) (15.0–18.1)
4615 Brandon	10.6	(7.5–13.8)	15.1	(8.4–21.7)
4625 South Eastman	12.2	(8.6–15.8)	18.9	(12.2–25.7)
4630 Interlake	9.1	(6.5–11.6)	19.3	(14.6–24.0)
4640 Central	10.7	(8.3–13.1)	17.5	(13.3–21.7)
4645 Assiniboine	9.5	(6.9–12.1)	* 24.6	(19.4–29.8)

Man	30-Day Acute Myocard In-Hospital Mo 2006–2007 to 200	rtality	30-Day Strol In-Hospital Mor 2006–2007 to 200	ortality	
Map Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI	
Saskatchewan	8.6	(7.8-9.3)	16.8	(15.5–18.1)	
4701 Sun Country	8.7	(5.3-12.0)	* 10.4	(4.1-16.7)	
4702 Five Hills	8.2	(5.3-11.1)	15.1	(9.9-20.2)	
4704 Regina	8.1	(6.5 - 9.7)	16.6	(13.9 - 19.3)	
4705 Sunrise	* 13.8	(10.9-16.6)	17.5	(12.7-22.2)	
4706 Saskatoon	7.9	(6.4 - 9.4)	15.5	(13.0 - 17.9)	
4709 Prince Albert	8.0	(5.3-10.6)	20.0	(15.3-24.7)	
4710 Prairie North	7.7	(4.8-10.5)	20.0	(14.8-25.2)	
Alberta	⁺ 7.3	(6.8-7.8)	⁺ 16.4	(15.6-17.3)	
4821 Area 1 (Chinook)	8.3	(6.2-10.4)	17.0	(13.6-20.5)	
4822 Area 2 (Palliser)	7.2	(4.8 - 9.6)	17.6	(13.3-21.9)	
4823 Area 3 (Calgary)	↑ 6.5	(5.6 - 7.4)	* 14.2	(12.7–15.7)	
4824 Area 4 (David Thompson)	8.6	(7.2-10.1)	* 20.7	(18.2-23.3)	
4825 Area 5 (East Central)	9.1	(6.7–11.5)	* 23.6	(19.6-27.7)	
4826 Area 6 (Capital)	↑ 6.8	(5.9 - 7.7)	* 14.9	(13.4-16.4)	
4827 Area 7 (Aspen)	9.2	(6.8-11.5)	19.1	(15.2-22.9)	
4828 Area 8 (Peace Country)	9.1	(6.6-11.6)	19.4	(15.1-23.6)	
4829 Area 9 (Northern Lights)	*	* *	16.7	(7.7–25.7)	
British Columbia	* 9.4	(9.0 - 9.8)	17.9	(17.2-18.5)	
5911 East Kootenay	9.3	(6.6-12.0)	20.1	(15.3-24.8)	
5912 Kootenay Boundary	9.5	(6.8-12.2)	* 23.4	(19.2-27.5)	
5913 Okanagan	9.4	(8.2-10.6)	17.1	(15.2-19.0)	
5914 Thompson/Cariboo/Shuswap	9.6	(8.0-11.3)	18.9	(16.1-21.6)	
5921 Fraser East	8.9	(7.2-10.7)	18.5	(15.9-21.2)	
5922 Fraser North	* 10.9	(9.4-12.4)	16.4	(14.6-18.3)	
5923 Fraser South	9.3	(8.2–10.4)	16.4	(14.7–18.1)	
5931 Richmond	* 11.4	(9.0-13.9)	18.5	(15.4-21.6)	
5932 Vancouver	7.9	(6.7–9.1)	17.5	(15.7–19.3)	
5933 North Shore	9.4	(7.8-11.1)	16.0	(13.6-18.5)	
5941 South Vancouver Island	9.8	(8.3–11.3)	19.1	(16.9–21.2)	
5942 Central Vancouver Island	8.6	(7.0–10.1)	18.3	(15.8-20.8)	
5943 North Vancouver Island	6.8	(4.0-9.5)	20.3	(16.4–24.2)	
5951 Northwest	10.0	(6.1–13.9)	20.9	(15.6–26.3)	
5952 Northern Interior	10.9	(8.3–13.5)	20.4	(16.5–24.4)	
5953 Northeast	+ 14.7	(10.3–19.2)	20.8	(13.8–27.8)	
Yukon	*	* *	19.7	(10.7–28.7)	
Northwest Territories	*	* *	9.1	(4.1–18.9)	
Nunavut	*	* *	*	* *	
Canada	8.9		17.7		

30-day acute myocardial infarction 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 (AMI, or heart attack). Rates are based on three years of pooled data.

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

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

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.

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

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

Mon	Acute Myocardial Infarction Readmission 2006–2007 to 2008–2009		Asthma Readmission 2006–2007 to 2008–2009	
Map Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador	⁺ 5.9	(5.2-6.6)	3.6	(1.5-5.7)
1011 Eastern	5.1	(4.1-6.0)	*	* *
1012 Central	6.1	(4.7–7.5)	*	* *
1013 Western	* 7.7	(5.9–9.5)		
Prince Edward Island	5.9	(4.3–7.4)	*	* *
Nova Scotia	5.1	(4.4–5.7)	3.7	(1.8–5.5) * *
1211 South Shore 1212 South West Nova	4.3 4.7	(2.1–6.5) (2.5–6.9)	*	* *
1213 Annapolis Valley	4.4	(2.4–6.3)	*	* *
1214 Colchester East Hants	* 7.9	(5.9–9.8)	*	* *
1218 Cape Breton	4.1	(2.6-5.7)	*	* *
1219 Capital	4.2	(3.0-5.3)	*	* *
New Brunswick	⁺ 5.5	(4.9-6.2)	2.0	(0.3-3.7)
1301 Zone 1 (Moncton area)	3.9	(2.5–5.3)	*	* *
1302 Zone 2 (Saint John area) 1303 Zone 3 (Fredericton area)	3.9 5.2	(2.4–5.4) (3.7–6.7)	*	* *
1304 Zone 4 (Edmundston area)	*10.5	(7.8–13.3)	*	* *
1306 Zone 6 (Bathurst area)	↑ 7.6	(5.5–9.7)	*	* *
Quebec				
2401 Bas-Saint-Laurent			**	
2402 Saguenay-Lac-Saint-Jean				
2403 Capitale-Nationale				
2404 Mauricie et Centre-du-Québec				
2405 Estrie				
2406 Montréal				
2407 Outaouais2408 Abitibi-Témiscamingue				
2409 Côte-Nord				
2411 Gaspésie–Îles-de-la-Madeleine				
2412 Chaudière-Appalaches				
2413 Laval				
2414 Lanaudière				
2415 Laurentides				
2416 Montérégie				** **
Ontario	4.6	(4.4–4.8)	4.1	(3.6–4.6)
3501 Erie St. Clair 3502 South West	*6.2 4.6	(5.5–7.0) (3.9–5.2)	2.5 3.5	(0.2–4.8)
3503 Waterloo Wellington	4.0	(3.1–4.8)	3.6	(1.4–5.6) (1.1–6.0)
3504 Hamilton Niagara Haldimand Brant	*3.8	(3.3–4.4)	3.9	(2.3–5.5)
3505 Central West	4.5	(3.6–5.3)	5.0	(3.4–6.7)
3506 Mississauga Halton	*3.4	(2.6-4.2)	* 2.0	(0.0-3.9)
3507 Toronto Central	4.9	(4.1–5.7)	5.5	(3.8–7.2)
3508 Central 3509 Central East	4.2 4.5	(3.5–4.9) (3.9–5.1)	3.8 3.9	(2.1–5.4) (2.6–5.3)
3510 South East	4.8	(3.9–5.7)	5.6	(3.4–7.8)
3511 Champlain	*3.4	(2.7–4.0)	4.7	(2.9–6.6)
3512 North Simcoe Muskoka	4.7	(3.8–5.7)	*	* *
3513 North East	⁺ 7.3	(6.6–8.0)	3.4	(1.6–5.2)
3514 North West	5.3	(4.2–6.4)	*	* *
Manitoba	5.1	(4.5–5.7)	*7.2 *	(5.8–8.6)
4610 Winnipeg 4615 Brandon	4.2 *	(3.4–5.0)	*	* *
4625 South Eastman	*	* *	*	* *
4630 Interlake	6.8	(4.7-9.0)	*	* *
4640 Central	4.7	(2.7-6.7)	*	* *
4645 Assiniboine	6.0	(3.7–8.2)	*	* *

Mon	Acute Myocardial Infarction 2006–2007 to 200		ssion Asthma Readmis 2006–2007 to 2008	
Map Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saskatchewan	5.0	(4.3-5.7)	4.0	(2.5-5.5)
1701 Sun Country	*	* *	*	* *
1702 Five Hills	*	* *	*	* *
704 Regina	* 3.1	(1.6-4.5)	*	* *
705 Sunrise	4.3	(1.7–6.8)	*	* *
706 Saskatoon	4.8	(3.5-6.2)	*	* *
709 Prince Albert	4.8	(2.6-6.9)	*	* *
710 Prairie North	7.1	(4.6–9.6)	*	* *
Alberta	*3.7	(3.2-4.1)	3.5	(2.5-4.5)
821 Area 1 (Chinook)	4.2	(2.4–5.9)	*	* *
822 Area 2 (Palliser)	5.4	(3.3–7.5)	*	* *
823 Area 3 (Calgary)	*3.2	(2.5-3.9)	4.1	(2.1-6.0)
824 Area 4 (David Thompson)	4.2	(2.9-5.4)	*	* *
825 Area 5 (East Central)	4.7	(2.7–6.6)	*	* *
826 Area 6 (Capital)	* 2.9	(2.1-3.7)	* 2.1	(0.1-4.1)
827 Area 7 (Aspen)	5.6	(3.9 - 7.3)	*	* *
828 Area 8 (Peace Country)	6.4	(4.4 - 8.5)	*	* *
829 Area 9 (Northern Lights)	*	* *	*	* *
British Columbia	4.8	(4.4-5.2)	4.7	(3.8-5.5)
911 East Kootenay	4.7	(2.5-6.9)	*	* *
912 Kootenay Boundary	* 7.9	(5.7-10.2)	*	* *
913 Okanagan	5.5	(4.4-6.6)	*	* *
914 Thompson/Cariboo/Shuswap	6.1	(4.7-7.5)	*	* *
921 Fraser East	3.3	(1.8-4.9)	*	* *
922 Fraser North	3.9	(2.7-5.2)	*	* *
923 Fraser South	4.8	(3.7-5.8)	4.2	(2.0-6.4)
931 Richmond	3.3	(1.1-5.6)	*	* *
932 Vancouver	4.1	(2.9-5.2)	*	* *
933 North Shore	3.8	(2.3-5.3)	*	* *
941 South Vancouver Island	* 2.9	(1.5-4.3)	*	* *
942 Central Vancouver Island	* 6.1	(4.8-7.4)	*	* *
943 North Vancouver Island	6.0	(3.9 - 8.1)	*	* *
951 Northwest	6.4	(3.6-9.2)	*	* *
952 Northern Interior	5.8	(4.0-7.7)	*	* *
5953 Northeast	6.9	(4.0-9.8)	*	* *
/ukon	*	* *	*	* *
Northwest Territories	*	* *	*	* *
Nunavut	*	* *	*	* *
Canada	4.7		4.2	

Acute myocardial infarction readmission

The risk-adjusted rate of unplanned readmission following discharge for acute myocardial infarction (AMI, or heart attack).

Rates are based on three years of pooled data.

Notes: Rates for Quebec are not available due to the differences in data collection. 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.

Notes: Rates for Quebec are not available due to the differences in data collection. 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.

No.	Prostatectomy Readmission 2006–2007 to 2008–2009		Hysterectomy Read 2006–2007 to 200	lmission 8–2009
Map Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfoundland and Labrador	1.7	(0.5-3.0)	+ 1.6	(1.2-2.1)
1011 Eastern	*	* *	† 1.8	(1.2-2.4)
1012 Central	*	* *	*	* *
1013 Western	*	* *	*	* *
Prince Edward Island	*	* *	*	* *
Nova Scotia	2.8	(2.1–3.6)	1.2 *	(0.9–1.6)
1211 South Shore 1212 South West Nova	*	* *	*	* *
1213 Annapolis Valley	*	* *	*	* *
1214 Colchester East Hants	*	* *	*	* *
1218 Cape Breton	*	* *	*	* *
1219 Capital	2.7	(1.5-3.9)	* 2.0	(1.4-2.6)
New Brunswick	3.2	(2.5-4.0)	1.5	(1.1–1.8)
1301 Zone 1 (Moncton area)	*	* *	0.5	(0.2-1.2)
1302 Zone 2 (Saint John area)	*	* *	*	* *
1303 Zone 3 (Fredericton area)	*	* *	*	* *
1304 Zone 4 (Edmundston area)1306 Zone 6 (Bathurst area)	*	* *	*	* *
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	2.6	(2.4–2.9)	1.1	(1.0–1.2)
3501 Erie St. Clair 3502 South West	1.8 2.4	(1.0–2.7) (1.5–3.3)	0.9 *1.6	(0.5–1.3) (1.3–1.9)
3503 Waterloo Wellington	2.2	(1.1–3.3)	1.1	(0.7–1.5)
3504 Hamilton Niagara Haldimand Brant	2.7	(2.0-3.3)	1.1	(0.8–1.4)
3505 Central West	3.6	(2.5-4.8)	0.8	(0.3-1.3)
3506 Mississauga Halton	3.2	(2.3-4.1)	0.9	(0.5-1.3)
3507 Toronto Central	2.8	(2.0-3.7)	1.2	(0.7–1.7)
3508 Central Fact	2.8	(2.1–3.4)	1.0	(0.7–1.3)
3509 Central East 3510 South East	2.5 3.2	(1.8–3.1) (2.0–4.4)	*0.7 1.1	(0.4–1.0) (0.6–1.6)
3511 Champlain	1.9	(1.1–2.7)	1.2	(0.9–1.5)
3512 North Simcoe Muskoka	1 .0	(0.5–2.0)	1.0	(0.6–1.5)
3513 North East	3.4	(2.4-4.4)	0.9	(0.6–1.3)
3514 North West	* 5.0	(3.8-6.2)	1.4	(0.8–2.1)
Manitoba	1.5	(0.6-2.5)	1.5	(1.1–1.8)
4610 Winnipeg	*1.2	(0.5–2.4)	* 1.9	(1.4–2.4)
4615 Brandon	*	* *	*	* *
4625 South Eastman 4630 Interlake	*	* *	*	* *
4640 Central	*	* *	*	* *
4645 Assiniboine	*	* *	*	* *
4645 Assiniboine	*	* *	*	* *

M				Hysterectomy Readmission 2006–2007 to 2008–2009	
Map Code Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI	
Saskatchewan	2.0	(1.1–2.9)	⁺ 1.8	(1.5–2.1)	
4701 Sun Country	*	* *	*	* *	
4702 Five Hills	*	* *	*	* *	
1704 Regina	*	* *	*	* *	
1705 Sunrise	*	* *	*	* *	
1706 Saskatoon	*	* *	* 2.0	(1.3-2.6)	
1709 Prince Albert	*	* *	*	* *	
1710 Prairie North	*	* *	*	* *	
Alberta	2.0	(1.5-2.5)	1.0	(0.8-1.2)	
4821 Area 1 (Chinook)	*	* *	*	* *	
1822 Area 2 (Palliser)	*	* *	*	* *	
4823 Area 3 (Calgary)	2.4	(1.6-3.2)	1.3	(1.0-1.7)	
1824 Area 4 (David Thompson)	1.2	(0.5-2.9)	0.8	(0.3-1.4)	
1825 Area 5 (East Central)	*	* *	*	* *	
1826 Area 6 (Capital)	1.9	(0.9-2.9)	0.8	(0.4-1.1)	
1827 Area 7 (Aspen)	*	* *	*	* *	
1828 Area 8 (Peace Country)	*	* *	*	* *	
1829 Area 9 (Northern Lights)	*	* *	*	* *	
British Columbia	2.3	(2.0-2.6)	1.0	(0.8-1.2)	
5911 East Kootenay	*	* *	*	* *	
5912 Kootenay Boundary	*	* *	*	* *	
5913 Okanagan	2.3	(1.2-3.5)	0.9	(0.3-1.5)	
5914 Thompson/Cariboo/Shuswap	*	* *	0.9	(0.3-1.4)	
5921 Fraser East	2.0	(0.9-3.2)	1.2	(0.6-1.8)	
5922 Fraser North	2.6	(1.8–3.4)	0.6	(0.1–1.2)	
5923 Fraser South	2.9	(2.0-3.8)	0.9	(0.3–1.4)	
5931 Richmond	*	* *	*	* *	
5932 Vancouver	3.1	(2.3–3.9)	1.7	(1.1–2.4)	
5933 North Shore					
5941 South Vancouver Island	1.8	(0.6–3.0)	1.7	(1.1–2.3)	
5942 Central Vancouver Island	1.6	(0.5–2.7)	0.6	(0.3–1.2)	
5943 North Vancouver Island	*	* *	*	* *	
5951 Northwest	*	* *	*	* *	
5952 Northern Interior 5953 Northeast	*	* *	*	* *	
Yukon	*	* *	*	* *	
Northwest Territories	*	* *	*	* *	
Nunavut	*	* *	*	* *	
Canada	2.5		1.1		

Prostatectomy readmission

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

Notes: Rates for Quebec are not available due to the differences in data collection. 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.

Notes: Rates for Quebec are not available due to the differences in data collection. Canada rate does not include Quebec. Beginning with 2006–2007 to 2008–2009 data, the rates include both total and subtotal hysterectomies.

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

	Hip Repla 2008–		Knee Repla 2008–2	
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador	+ 74	(66-82)	*123	(113–132)
1011 Eastern	* 81	(70–91)	† 114	(102–127)
1012 Central	+ 65	(48-81)	139	(117–161)
1013 Western	* 65	(48-83)	+ 117	(94–140)
Prince Edward Island	*122	(104–140)	150	(129–171)
Nova Scotia	104	(98–111)	161	(153–170)
1211 South Shore	* 144	(116–172)	*206	(173–239)
1212 South West Nova	* 64	(45–83)	† 96	(73–120)
1213 Annapolis Valley	81	(63–100)	140	(115–165)
1214 Colchester East Hants	123	(97–149)	154	(126–181)
1218 Cape Breton	108	(90-126)	* 201	(178-225)
1219 Capital	100	(90-111)	159	(145-172)
New Brunswick	*91	(84-98)	*140	(131–148)
1301 Zone 1 (Moncton area)	101	(87–115)	* 136	(120-153)
1302 Zone 2 (Saint John area)	108	(92-123)	170	(150-190)
1303 Zone 3 (Fredericton area)	94	(78–109)	165	(144–185)
1304 Zone 4 (Edmundston area)	77	(53–100)	* 102	(75–129)
1306 Zone 6 (Bathurst area)	* 57	(40-73)	* 82	(63–102)
Quebec	⁺ 66	(64-68)	⁺ 97	(95-99)
2401 Bas-Saint-Laurent	* 72	(61–84)	*115	(101–130)
2402 Saguenay-Lac-Saint-Jean	† 70	(60-80)	* 138	(125–152)
2403 Capitale-Nationale	* 68	(62–75)	•97	(90–105)
2404 Mauricie et Centre-du-Québec	+ 60	(53–67)	*105	(96–114)
2405 Estrie	*63	(54–71)	† 90	(79–101)
2406 Montréal	*64 *76	(60–68)	*82	(78–86)
2407 Outaouais2408 Abitibi-Témiscamingue	*76 *62	(66–86) (48–76)	*118 *85	(105–130) (69–101)
2409 Côte-Nord	*77	(58–97)	134	(109–101)
2411 Gaspésie–Îles-de-la-Madeleine	*50	(36–63)	*132	(111–153)
2412 Chaudière-Appalaches	* 78	(69–87)	*120	(109–131)
2413 Laval	* 53	(45–61)	* 75	(66–84)
2414 Lanaudière	* 67	(59–76)	+ 94	(84–103)
2415 Laurentides	* 62	(55–69)	* 80	(72–88)
2416 Montérégie	* 69	(65–74)	* 103	(97–108)
Ontario	* 111	(109–113)	*189	(186–191)
3501 Erie St. Clair	* 123	(115–132)	* 222	(210–234)
3502 South West	* 145	(137–153)	* 224	(214–234)
3503 Waterloo Wellington	* 125	(116–134)	* 186	(175–197)
3504 Hamilton Niagara Haldimand Brant	* 121	(115-127)	* 209	(201-217)
3505 Central West	* 78	(71–86)	* 184	(172–195)
3506 Mississauga Halton	100	(93–106)	160	(151–169)
3507 Toronto Central	* 93	(87–99)	1 22	(115–129)
3508 Central	* 87	(82–92)	154	(147–160)
3509 Central East	101	(96–107)	*196	(188–203)
3510 South East	*139 *114	(128–149)	*241 *210	(228–254)
3511 Champlain 3512 North Simcoe Muskoka	*114 *116	(108–121)	*210 *184	(201–218) (171–197)
3512 North Simcoe Muskoka 3513 North East	*119	(106–126) (110–128)	*184 *208	(171–197) (197–220)
3513 North West	*156	(110–126)	*208	(189–227)
Manitoba 4610 Winnipeg	*116 * 114	(109–123) (105–123)	*199 * 199	(190–208) (187–210)
4615 Brandon	106	(75–123)	129	(187–210) (96–163)
4625 South Eastman	128	(75–136) (95–161)	*236	(191–280)
4630 Interlake	*125	(100–149)	184	(154–214)
4640 Central	118	(95–142)	*197	(167–227)
4645 Assiniboine	110	(85–135)	* 201	(168–235)
	1	`/		

	Hip Repla 2008–2	cement 2009	Knee Repla 2008–2	cement 009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan	*127	(120-135)	* 194	(185-204)
4701 Sun Country	110	(82–138)	* 200	(162–238)
4702 Five Hills	114	(86–143)	189	(153–225)
4704 Regina	* 120	(106–135)	* 186	(168–205)
4705 Sunrise	* 160	(126-194)	* 237	(199-274)
4706 Saskatoon	* 124	(110-138)	* 200	(182-218)
4709 Prince Albert	* 151	(122-180)	* 192	(160-224)
4710 Prairie North	112	(83–141)	155	(122–188)
Alberta	⁺ 109	(105-113)	* 166	(161–171)
4821 Area 1 (Chinook)	* 176	(153–198)	*312	(282 - 342)
1822 Area 2 (Palliser)	99	(79–120)	174	(147-202)
1823 Area 3 (Calgary)	*112	(105–119)	162	(154–171)
4824 Area 4 (David Thompson)	*124	(110-138)	* 189	(172-207)
1825 Area 5 (East Central)	105	(86–124)	168	(144–193)
1826 Area 6 (Capital)	96	(90–103)	* 142	(133–150)
1827 Area 7 (Aspen)	92	(76–108)	* 192	(169-214)
1828 Area 8 (Peace Country)	*	* *	*	* *
1829 Area 9 (Northern Lights)	* 41	(22–60)	* 78	(41–115)
British Columbia	*115	(112–118)	* 168	(164–172)
5911 East Kootenay	121	(97–144)	* 225	(193-258)
5912 Kootenay Boundary	*142	(117–167)	177	(149-205)
5913 Okanagan	* 167	(154–180)	* 224	(210-239)
5914 Thompson/Cariboo/Shuswap	* 134	(119–149)	* 211	(193-230)
5921 Fraser East	⁺ 120	(106–134)	* 218	(199-236)
5922 Fraser North	102	(93–111)	* 130	(120–141)
5923 Fraser South	103	(94–111)	* 182	(171–194)
5931 Richmond	* 73	(60–86)	*89	(75–103)
5932 Vancouver	*70	(63–77)	* 86	(78–94)
5933 North Shore	† 143	(128–157)	169	(153–185)
5941 South Vancouver Island	109	(98–119)	1 29	(118–141)
5942 Central Vancouver Island	[†] 133	(120–146)	* 205	(189–220)
5943 North Vancouver Island	*144	(123–166)	⁺ 269	(241–297)
5951 Northwest	125	(96–154)	*242	(202–281)
5952 Northern Interior	*127	(106–148)	* 205	(179–231)
5953 Northeast	129	(94–164)	181	(141–222)
Yukon	156	(96–216)	172	(108–235)
Northwest Territories	84	(42–126)	*84	(50–119)
Nunavut	59	(15–103)	[*] 358	(227–489)
Canada	99	(98-101)	158	(157–160)

Hip replacement

Age-standardized rate of unilateral or bilateral hip replacement surgery performed on inpatients in acute care hospitals per 100,000 population age 20 and older. Hip replacement surgery has the potential to improve functional status, reduce pain and 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: Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

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 age 20 and older. Knee replacement surgery has the potential to improve functional status, reduce pain and 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: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

	Percutaneous Coro 2008–		Coronary Artery Bypa 2008–2	iss Graft Surgery 009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrador	*147	(136–157)	* 98	(90–107)
1011 Eastern	157	(142–172)	* 104	(92–116)
1012 Central	149	(126–172)	* 109	(89–128)
1013 Western	* 114	(92-136)	59	(43-75)
Prince Edward Island	*131	(112–150)	80	(65–95)
Nova Scotia	*159	(151–167)	*63	(58-68)
1211 South Shore	192	(160–225)	62	(43–80)
1212 South West Nova	181	(148-215)	66	(46-85)
1213 Annapolis Valley	* 139	(114–163)	* 41	(28-54)
1214 Colchester East Hants	182	(151–213)	82	(62–103)
1218 Cape Breton	162	(140–183)	* 85	(70–101)
1219 Capital	*144	(131–156)	* 58	(50–66)
New Brunswick	*196	(186–206)	*86	(79–93)
1301 Zone 1 (Moncton area)	177	(158–196)	73	(60-85)
1302 Zone 2 (Saint John area)	*237	(214–260)	82	(68–96)
1303 Zone 3 (Fredericton area)1304 Zone 4 (Edmundston area)	*232 *	(208–256)	* 92 *	(77–107) * *
1306 Zone 6 (Bathurst area)	151	(125–177)	77	(59–96)
Quebec			* 66	(64–68)
2401 Bas-Saint-Laurent			* 54	(45–64)
2402 Saguenay-Lac-Saint-Jean			66	(56–75)
2403 Capitale-Nationale			75	(69–82)
2404 Mauricie et Centre-du-Québec			* 58	(52–65)
2405 Estrie			* 50	(42–58)
2406 Montréal			* 65	(61-69)
2407 Outaouais			* 51	(43-60)
2408 Abitibi-Témiscamingue		** **	63	(50–77)
2409 Côte-Nord			88	(68–108)
2411 Gaspésie–Îles-de-la-Madeleine			85	(68–101)
2412 Chaudière-Appalaches 2413 Laval			65 65	(57–73)
2413 Lavai 2414 Lanaudière			*61	(57–74) (54–69)
2415 Laurentides			*61	(54–68)
2416 Montérégie			* 78	(73–83)
Ontario	*166	(163–168)	+ 74	(73–76)
3501 Erie St. Clair	*139	(130–149)	*89	(81–97)
3502 South West	⁺ 115	(108–122)	* 79	(73–85)
3503 Waterloo Wellington	* 103	(94–111)	* 61	(55–68)
3504 Hamilton Niagara Haldimand Bran		(164–178)	* 92	(87–97)
3505 Central West	* 179	(169-190)	71	(64-78)
3506 Mississauga Halton	* 158	(149–166)	* 78	(72-84)
3507 Toronto Central	* 153	(145–160)	* 53	(49-58)
3508 Central	* 159	(152–166)	* 65	(60–69)
3509 Central East	169	(162–176)	66	(62–71)
3510 South East	*218 *104	(205–231)	*106	(98–115)
3511 Champlain 3512 North Simcoe Muskoka	*184 168	(176–192) (156–181)	*64 *91	(59–69) (82–100)
3512 North East	*232	(220–245)	*57	(51–63)
3514 North West	*237	(217–258)	*111	(97–125)
Manitoba	*148	(141–156)	* 81	(75–87)
4610 Winnipeg	* 145	(135–154)	*80	(73–88)
4615 Brandon	* 127	(93–161)	55	(32–78)
4625 South Eastman	143	(109–178)	90	(62–117)
4630 Interlake	*140	(113–166)	86	(65–107)
4640 Central	*118	(94–141)	76	(57–94)
4645 Assiniboine	149	(121–177)	61	(44–79)

	Percutaneous Coror 2008–2		Coronary Artery Bypa 2008–20	ss Graft Surgery 009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan	⁺ 206	(197–216)	+ 89	(83-95)
4701 Sun Country	197	(158–235)	75	(51–99)
4702 Five Hills	160	(125–194)	77	(53–101)
4704 Regina	177	(159–194)	* 96	(82–109)
4705 Sunrise	176	(141-210)	* 104	(79-129)
4706 Saskatoon	+ 242	(223-262)	* 90	(78-103)
4709 Prince Albert	⁺ 232	(196-268)	* 93	(71–116)
4710 Prairie North	200	(163–237)	86	(62–111)
Alberta	172	(167–177)	⁺ 53	(50-56)
4821 Area 1 (Chinook)	* 132	(113-151)	+ 46	(35-58)
1822 Area 2 (Palliser)	153	(127-179)	+ 48	(34-63)
1823 Area 3 (Calgary)	* 157	(149-165)	+ 46	(41-50)
1824 Area 4 (David Thompson)	* 187	(170-204)	† 56	(46-65)
1825 Area 5 (East Central)	181	(156-207)	† 52	(38-66)
1826 Area 6 (Capital)	* 178	(169–187)	† 56	(51-61)
1827 Area 7 (Aspen)	* 196	(174-219)	71	(57-85)
1828 Area 8 (Peace Country)	† 227	(196-259)	74	(55-92)
1829 Area 9 (Northern Lights)	190	(139-240)	64	(32-97)
British Columbia	167	(163-171)	⁺ 62	(59-64)
5911 East Kootenay	* 120	(97–143)	+ 44	(30-59)
5912 Kootenay Boundary	* 120	(97-142)	56	(40-71)
5913 Okanagan	* 127	(116–138)	† 55	(48-62)
5914 Thompson/Cariboo/Shuswap	* 140	(124–155)	† 53	(44-62)
5921 Fraser East	* 240	(220-259)	74	(63-85)
5922 Fraser North	* 192	(179-204)	* 62	(55-69)
5923 Fraser South	† 226	(213-238)	*83	(75–90)
931 Richmond	* 129	(111–146)	* 52	(41-63)
932 Vancouver	* 120	(111–130)	* 45	(39-51)
5933 North Shore	* 144	(130-158)	61	(51-70)
5941 South Vancouver Island	162	(149–175)	* 60	(52-68)
5942 Central Vancouver Island	175	(160-191)	62	(53-71)
North Vancouver Island	181	(157–205)	75	(60-90)
5951 Northwest	181	(146-215)	73	(51-94)
5952 Northern Interior	165	(142–188)	72	(56-88)
5953 Northeast	181	(142–221)	78	(52–104)
Yukon	161	(107–214)	81	(42–120)
Northwest Territories	144	(93–195)	63	(22–104)
Nunavut	105	(41–168)	66	(4-129)
Canada	168	(166-169)	70	(69-71)

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 age 20 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 and referral patterns, as well as differences in population health and socio-economic status.

Notes: Rates for Quebec are not available due to the differences in data collection. Canada rate does not include Quebec. Cardiac procedures for residents of Zone 4, New Brunswick, are performed mostly in Quebec; rates are suppressed due to differences in data collection in Quebec. Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness.

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 age 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.

Notes: Cardiac procedures for residents of Zone 4, New Brunswick, are performed mostly in Quebec; rates are suppressed due to differences in data collection in Quebec.

Sources: Discharge Abstract Database, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

Map Code Health Region Age-Standardized Rate per 100,000 95% CI Age-Standardized Rate per 100,000 95% CI Newfoundland and Labrador 244 (230-257) 421 (392-45 1011 Eastern 259 (240-278) 399 (363-45) 1012 Central 258 (228-288) 435 (367-50) 1013 Western 1173 (146-201) 508 (425-55) Prince Edward Island *210 (186-235) *512 (449-57) Nova Scotia *221 (211-231) *416 (395-43) 1211 South Shore 254 (216-291) 356 (272-4-121) 1212 South West Nova 247 (208-285) *604 (506-70) 1213 Annapolis Valley *178 (150-206) *534 (447-60) 1214 Colchester East Hants 261 (224-298) *583 (492-61) 1218 Cape Breton 247 (200-273) *546 (474-61) 1219 Capital *201 (186-216) *244 (220-26) New Brunswick	60) 85) 92) 76) 87) 441) 91) 921) 73) 18) 97) 92) 837)
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2402 Saguenay-Lac-Saint-Jean " "" \$589 (538-63) 2403 Capitale-Nationale " "" \$277 (257-29) 2404 Mauricie et Centre-du-Québec " "" \$395 (364-42) 2405 Estrie " "" \$477 (436-5) 2406 Montréal " "" \$229 (218-24) 2407 Outaouais " "" \$583 (516-68) 2408 Abitibi-Témiscamingue " "" \$583 (516-68)	
2403 Capitale-Nationale " "" \$277 (257–29 2404 Mauricie et Centre-du-Québec " "" \$395 (364–42 2405 Estrie " "" \$477 (436–5) 2406 Montréal " "" \$229 (218–24) 2407 Outaouais " "" \$258 (232–28) 2408 Abitibi-Témiscamingue " "" \$583 (516–68)	,
2404 Mauricie et Centre-du-Québec " "" *395 (364–42 2405 Estrie " "" *477 (436–5) 2406 Montréal " "" *229 (218–24) 2407 Outaouais " "" *258 (232–28) 2408 Abitibi-Témiscamingue " "" *583 (516–68)	,
2405 Estrie " "" 477 (436-5) 2406 Montréal " "" 229 (218-24) 2407 Outaouais " "" 258 (232-28) 2408 Abitibi-Témiscamingue " "" 583 (516-68)	,
2406 Montréal " " "	,
2407 Outaouais " " " *258 (232–28) 2408 Abitibi-Témiscamingue " " " *583 (516–65)	,
2408 Abitibi-Témiscamingue " *583 (516–65	,
	,
2409 Côte-Nord " " 353 (291–4"	,
2411 Gaspésie–Îles-de-la-Madeleine " " *438 (367–5	,
2412 Chaudière-Appalaches " " *398 (365–43	
2413 Laval " " *276 (250–30	,
2414 Lanaudière " " + 299 (274–32	24)
2415 Laurentides " " 323 (299–34)	
2416 Montérégie " " 322 (307–33	37)
Ontario 238 (235–241) *330 (325–33	5)
3501 Erie St. Clair 227 (215–239) *439	6)
3502 South West *192 (183–201) *403 (382–42	25)
3503 Waterloo Wellington *163 (153–173) *405	,
3504 Hamilton Niagara Haldimand Brant *262 (254–271) *401 (384–4:	
3505 Central West 248 (236–261) *263 (246–28	
3506 Mississauga Halton 235 (224–245) *238 (224–245)	,
3507 Toronto Central	/
3508 Central	,
3509 Central East 235 (227–243) 330 (316–34	,
3510 South East	,
3511 Champlain 246 (236–255) *355 (338–37	
3512 North Simcoe Muskoka	
3513 North East	,
Manitoba 229 (219–238) *374 (356–38	
4610 Winnipeg	,
4615 Brandon	,
4625 South Eastman 233 (189–277) *469 (379–55	,
4630 Interlake 226 (192–259) 388 (315–46	,
4640 Central *193 (164–223) *458 (389–52	
4645 Assiniboine 210 (177–243) +472 (383–56	/

	Cardiac Revaso 2008–2		Hysterec 2008–2	tomy 009
Map Code Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Saskatchewan	*293	(282-304)	* 396	(375–416)
4701 Sun Country	272	(226–317)	397	(305–489)
4702 Five Hills	235	(194–277)	* 533	(425–642)
4704 Regina	* 270	(248–292)	341	(304–379)
4705 Sunrise	+ 280	(237–322)	421	(332–510)
4706 Saskatoon	* 329	(306–351)	336	(302–370)
4709 Prince Albert	* 326	(283–368)	316	(249–384)
4710 Prairie North	* 286	(242–331)	⁺ 751	(638–864)
Alberta	⁺ 224	(218–230)	*368	(358-378)
4821 Area 1 (Chinook)	* 178	(156-201)	⁺ 610	(544 - 677)
4822 Area 2 (Palliser)	* 200	(171-230)	* 465	(395 - 535)
4823 Area 3 (Calgary)	* 202	(193-211)	*304	(289 - 319)
4824 Area 4 (David Thompson)	242	(223-262)	* 438	(400 - 477)
4825 Area 5 (East Central)	233	(204-262)	† 525	(454 - 596)
4826 Area 6 (Capital)	234	(223-244)	* 366	(348 - 384)
4827 Area 7 (Aspen)	* 267	(240-293)	* 397	(348 - 445)
4828 Area 8 (Peace Country)	* 301	(265 - 337)	*	* *
4829 Area 9 (Northern Lights)	254	(194–314)	384	(306-463)
British Columbia	+227	(222-231)	*311	(303 - 320)
5911 East Kootenay	* 164	(137–192)	374	(305-442)
5912 Kootenay Boundary	* 175	(148–203)	* 418	(341-496)
5913 Okanagan	* 181	(168–194)	^ 405	(369-441)
5914 Thompson/Cariboo/Shuswap	* 192	(174–210)	* 586	(529 - 642)
5921 Fraser East	*311	(289 - 333)	^ 489	(445-533)
5922 Fraser North	* 252	(238-266)	* 243	(224-263)
5923 Fraser South	* 307	(293-322)	* 243	(224-261)
5931 Richmond	* 179	(159–199)	* 151	(125-177)
5932 Vancouver	* 163	(152–174)	* 167	(152–183)
5933 North Shore	* 204	(187–221)	* 229	(202-257)
5941 South Vancouver Island	† 220	(205–235)	335	(305 - 366)
5942 Central Vancouver Island	237	(219-254)	* 530	(480 - 580)
5943 North Vancouver Island	256	(227–284)	* 461	(392–531)
5951 Northwest	252	(211–292)	349	(279-419)
5952 Northern Interior	235	(207–263)	* 528	(463-592)
5953 Northeast	259	(212–307)	421	(336–506)
Yukon	242	(176–308)	⁺ 246	(158–333)
Northwest Territories	208	(142–273)	371	(267–476)
Nunavut	*132	(61–204)	⁺ 185	(72–299)
Canada	237	(235-239)	338	(335 - 341)

Cardiac revascularization

Age-standardized rate of coronary artery bypass graft (CABG) surgery performed on inpatients in acute care hospitals or percutaneous coronary intervention (PCI) performed on patients in acute care hospitals, same-day surgery facilities or catheterization laboratories per 100,000 population age 20 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 and 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.

Notes: Rates for Quebec are not available due to the differences in data collection. Canada rate does not include Quebec. Cardiac procedures for residents of Zone 4, New Brunswick, are performed mostly in Quebec; rates are suppressed due to differences in data collection in 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

Age-standardized rate of hysterectomy provided to patients in acute care hospitals or same-day surgery facilities per 100,000 women age 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.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

			Inflow/Outflow	Ratio, 2008–2009		
Map Code Health Region	Overall	Hip Replacement	Knee Replacement	Hysterectomy	Percutaneous Coronary Intervention	Bypass Surgery
Newfoundland and Labrador						ourgery
1011 Eastern	1.12	1.02	1.04	1.07	1.64	1.68
1012 Central	0.85	1.12	0.99	0.92	0.00	0.00
1013 Western	0.93	0.98	1.02	0.96	0.00	0.00
Prince Edward Island	0.92	0.97	0.98	0.95	0.00	0.00
Nova Scotia						
1211 South Shore	0.58	0.00	0.00	0.73	0.00	0.00
1212 South West Nova	0.80	0.00	0.00	0.86	0.00	0.00
1213 Annapolis Valley	1.03	2.41	2.18	1.20	0.00	0.00
1214 Colchester East Hants	0.53	0.00	0.00	0.78	0.00	0.00
1218 Cape Breton	0.91	1.06	1.08	0.81	0.00	0.00
1219 Capital	1.48	1.47	1.36	1.33	3.17	3.41
New Brunswick						
1301 Zone 1 (Moncton area)	1.11	1.33	1.27	1.26	0.00	0.00
1302 Zone 2 (Saint John area) 1303 Zone 3 (Fredericton area)	1.17 0.92	0.93 1.10	0.98 1.07	0.85 0.99	3.73 0.00	4.45 0.00
1304 Zone 4 (Edmundston area)	0.96	0.67	0.86	0.79	0.00	0.00
1306 Zone 6 (Bathurst area)	0.94	1.02	0.94	0.84	0.00	0.00
Quebec						
2401 Bas-Saint-Laurent	0.92	0.87	0.87	0.97		0.00
2402 Saguenay-Lac-Saint-Jean	1.00	0.99	1.03	1.04		0.98
2403 Capitale-Nationale	1.32	1.20	1.20	1.28		2.27
2404 Mauricie et Centre-du-Québec	0.89	1.00	0.98	0.95		0.00
2405 Estrie	1.09	0.65	0.61	1.03		1.74
2406 Montréal	1.41	1.75	1.68	1.59		2.84
2407 Outaouais	0.80	0.65	0.69	0.54		0.00
2408 Abitibi-Témiscamingue	0.98	0.81	1.03	1.04		0.00
2409 Côte-Nord2411 Gaspésie-Îles-de-la-Madeleine	0.77 0.73	0.58 0.65	0.60 0.74	0.65 0.59		0.00
2412 Chaudière-Appalaches	0.73	1.05	1.09	0.86		0.00
2413 Laval	0.80	0.36	0.50	0.73		0.00
2414 Lanaudière	0.70	0.64	0.64	0.68	**	0.00
2415 Laurentides	0.77	0.54	0.66	0.68		0.00
2416 Montérégie	0.78	0.62	0.67	0.73	**	0.00
Ontario						
3501 Erie St. Clair	0.89	0.87	0.90	0.89	0.50	0.00
3502 South West	1.08	0.97	0.99	1.10	1.13	1.47
3503 Waterloo Wellington	0.91	0.96	0.99	0.91	1.46	1.53
3504 Hamilton Niagara Haldimand Brant	1.00	0.99	0.94	1.05	0.98	1.07
3505 Central West	0.73	0.78 0.83	0.69	0.58 0.83	0.00	0.00
3506 Mississauga Halton 3507 Toronto Central	0.96 1.86	2.41	0.96 2.43	2.47	1.37 3.18	1.30 4.33
3508 Central	0.92	0.91	1.00	0.93	0.76	0.91
3509 Central East	0.84	0.77	0.91	0.79	0.46	0.00
3510 South East	0.93	0.96	1.01	1.00	0.98	0.95
3511 Champlain	1.11	1.04	1.00	1.11	1.15	1.41
3512 North Simcoe Muskoka	0.87	0.73	0.74	0.91	0.00	0.00
3513 North East	0.93	0.57	0.64	0.91	0.95	0.86
3514 North West	0.92	0.90	0.97	0.75	0.63	0.00
Manitoba						
4610 Winnipeg	1.40	1.67	1.60	1.58	1.88	1.93
4615 Brandon 4625 South Eastman	1.63	0.83	2.24	2.09	0.00	0.00
4625 South Eastman 4630 Interlake	0.60 0.52	0.00	0.00 0.00	0.32 0.16	0.00 0.00	0.00
4640 Central	0.76	0.84	0.64	0.38	0.00	0.00
4645 Assiniboine	0.75	0.00	0.00	0.08	0.00	0.00
	3.00					

			Inflow/Outflow	Ratio, 2008–2009		
Map Code Health Region	Overall	Hip Replacement	Knee Replacement	Hysterectomy	Percutaneous Coronary Intervention	Bypass Surgery
Saskatchewan						
4701 Sun Country	0.59	0.00	0.00	0.31	0.00	0.00
4702 Five Hills	0.83	0.40	0.50	0.63	0.00	0.00
4704 Regina	1.23	1.45	1.48	1.28	2.03	2.01
4705 Sunrise	0.79	0.00	0.00	1.14	0.00	0.00
4706 Saskatoon	1.40	1.96	2.06	1.65	1.82	1.68
4709 Prince Albert	0.84	0.64	0.52	0.49	0.00	0.00
4710 Prairie North	1.04	0.00	0.00	1.27	0.00	0.00
Alberta		**				
4821 Area 1 (Chinook)	0.93	0.87	1.06	1.10	0.00	0.00
4822 Area 2 (Palliser)	0.97	1.21	1.28	0.77	0.00	0.00
4823 Area 3 (Calgary)	1.07	1.15	1.05	1.04	1.47	1.54
4824 Area 4 (David Thompson)	0.88	0.69	0.68	0.72	0.00	0.00
4825 Area 5 (East Central)	0.62	0.70	0.60	0.55	0.00	0.00
4826 Area 6 (Capital)	1.26	1.27	1.29	1.25	1.80	1.83
4827 Area 7 (Aspen)	0.69	0.45	0.68	0.34	0.00	0.00
4828 Area 8 (Peace Country)	*	*	*	*	0.00	0.00
4829 Area 9 (Northern Lights)	0.87	0.00	0.00	0.81	0.00	0.00
British Columbia						
5911 East Kootenay	0.83	0.72	0.68	0.79	0.00	0.00
5912 Kootenay Boundary	0.86	0.74	0.89	0.80	0.00	0.00
5913 Okanagan	1.01	0.92	1.02	1.02	0.00	0.00
5914 Thompson/Cariboo/Shuswap	0.92	0.59	0.59	1.03	0.00	0.00
5921 Fraser East	0.89	0.74	0.84	0.89	0.00	0.00
5922 Fraser North	1.04	0.71	0.94	0.85	2.25	2.15
5923 Fraser South	0.79	0.49	0.58	0.67	0.00	0.00
5931 Richmond	0.96	1.59	2.80	0.95	0.00	0.00
5932 Vancouver	1.66	3.64	2.80	2.25	5.01	5.32
5933 North Shore	0.86	0.76	0.89	0.79	0.00	0.00
5941 South Vancouver Island	1.17	0.96	0.95	1.05	2.44	2.83
5942 Central Vancouver Island	0.86	0.79	0.82	0.88	0.00	0.00
5943 North Vancouver Island	0.85	0.96	1.07	1.04	0.00	0.00
5951 Northwest	0.85	0.37	0.64	0.95	0.00	0.00
5952 Northern Interior	0.91	0.79	0.72	0.65	0.00	0.00
5953 Northeast	0.85	0.95	1.07	0.83	0.00	0.00
Yukon	0.85	0.00	0.60	0.91	0.00	0.00
Northwest Territories	0.99	0.95	1.00	1.08	0.00	0.00
Nunavut	0.46	0.00	0.00	0.29	0.00	0.00
Canada						

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 graft 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.

Note: The PCI inflow/outflow ratios for Quebec are not available due to the differences in data collection.

Sources: Discharge Abstract Database and National Ambulatory Care Reporting System, Canadian Institute for Health Information; Alberta Ambulatory Care Database, Alberta Health and Wellness; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

	General/Family 200		Specialist Pl 2009	
Map Code Health Region	Rate per 100,000	95% CI	Rate per 100,000	95% CI
Newfoundland and Labrador	115	(105–124)	104	(95–113)
1011 Eastern	118	(105–130)	135	(122–148)
1012 Central	103	(83–124)	60	(44–75)
1013 Western	110	(86–133)	70	(52–89)
Prince Edward Island	102	(85–118)	64	(51–78)
Nova Scotia	119	(112–126)	115	(108–121)
1211 South Shore	124	(96–153)	60	(40–79)
1212 South West Nova1213 Annapolis Valley	85 99	(61–108)	46 77	(29–64)
1214 Colchester East Hants	110	(78–120) (86–134)	52	(58–96) (35–68)
1218 Cape Breton	107	(89–125)	82	(66–97)
1219 Capital	138	(126–149)	176	(163–188)
New Brunswick	107	(100–115)	87	(80–94)
1301 Zone 1 (Moncton area)	110	(96–125)	113	(99–128)
1302 Zone 2 (Saint John area)	102	(87–117)	101	(86–116)
1303 Zone 3 (Fredericton area)	98	(83–113)	63	(51–75)
1304 Zone 4 (Edmundston area)	136 109	(104–168)	62 75	(40–84)
1306 Zone 6 (Bathurst area)		(86–132)		(56–94)
Quebec 2401 Bas-Saint-Laurent	113 139	(111–115)	107 89	(104–109)
2401 Bas-Saint-Laurent 2402 Saguenay-Lac-Saint-Jean	113	(122–155) (101–126)	74	(76–102) (64–84)
2403 Capitale-Nationale	153	(144–162)	174	(164–183)
2404 Mauricie et Centre-du-Québec	96	(87–104)	71	(64–79)
2405 Estrie	140	(127–154)	123	(111–136)
2406 Montréal	128	(123-133)	198	(191–204)
2407 Outaouais	97	(86–107)	50	(43–57)
2408 Abitibi-Témiscamingue2409 Côte-Nord	136	(117–155)	68	(55–81)
2411 Gaspésie–Îles-de-la-Madeleine	133 179	(110–156) (153–206)	57 75	(42–72) (58–92)
2412 Chaudière-Appalaches	105	(95–116)	66	(58–74)
2413 Laval	87	(78–97)	69	(61–77)
2414 Lanaudière	81	(73–90)	51	(45–58)
2415 Laurentides	88	(80–96)	46	(40-52)
2416 Montérégie	94	(89–99)	59	(55–63)
Ontario	86	(84–88)	92	(91–94)
3501 Erie St. Clair	61	(55–67)	53	(47–58)
3502 South West 3503 Waterloo Wellington	82 76	(76–88) (70–83)	101 57	(94–107) (52–63)
3504 Hamilton Niagara Haldimand Brant	76	(72–81)	92	(87–98)
3505 Central West	57	(52–62)	41	(37–46)
3506 Mississauga Halton	74	(69–79)	60	(55–64)
3507 Toronto Central	149	(142–156)	278	(269–288)
3508 Central	82	(77–86)	67	(63–71)
3509 Central East 3510 South East	66	(62–70) (93–111)	55 104	(51–59) (05–113)
3510 South East 3511 Champlain	102 110	(93–111) (104–116)	127	(95–113) (121–133)
3512 North Simcoe Muskoka	84	(75–92)	51	(44–57)
3513 North East	88	(80–96)	61	(54–67)
3514 North West	97	(85–110)	59	(50–69)
Manitoba	95	(90–101)	88	(83-94)
4610 Winnipeg	101	(93–108)	143	(134–152)
4615 Brandon	155	(121–190)	88	(62–113)
4625 South Eastman	64	(45–83)	*	* *
4630 Interlake 4640 Central	72 85	(54–90) (67–102)	15 15	(6–23) (8–23)
4645 Assiniboine	92	(69–114)	0	(0-0)
	<u> </u>	(55 111)		(5 5)

	General/Family 200		Specialist Ph 2008	
Map Code Health Region	Rate per 100,000	95% CI	Rate per 100,000	95% CI
Saskatchewan	93	(87-99)	70	(65-75)
4701 Sun Country	66	(44-88)	*	* *
4702 Five Hills	77	(54-101)	26	(13-40)
4704 Regina	100	(87-112)	83	(72 - 95)
4705 Sunrise	63	(42-84)	30	(15-44)
4706 Saskatoon	116	(104-128)	138	(125-151)
4709 Prince Albert	102	(79-125)	37	(23-50)
4710 Prairie North	80	(59–101)	19	(8-29)
Alberta	112	(109–115)	91	(88-95)
4821 Area 1 (Chinook)	104	(88-119)	54	(43-66)
4822 Area 2 (Palliser)	91	(73-109)	44	(31–56)
4823 Area 3 (Calgary)	120	(114-126)	115	(109-121)
4824 Area 4 (David Thompson)	90	(79-100)	32	(26-38)
4825 Area 5 (East Central)	89	(72-106)	14	(7-20)
4826 Area 6 (Capital)	124	(117–130)	128	(121-134)
1827 Area 7 (Aspen)	93	(79-107)	5	(2-9)
4828 Area 8 (Peace Country)	90	(74-105)	27	(18-35)
4829 Area 9 (Northern Lights)	74	(55–92)	15	(7–24)
British Columbia	114	(110-117)	93	(90-96)
5911 East Kootenay	148	(121–175)	29	(17-41)
5912 Kootenay Boundary	148	(121–175)	52	(36-68)
5913 Okanagan	109	(98–120)	84	(74–94)
5914 Thompson/Cariboo/Shuswap	103	(89–116)	54	(45-64)
5921 Fraser East	84	(74–95)	44	(36-52)
5922 Fraser North	83	(75–90)	72	(65-79)
5923 Fraser South	76	(70-83)	49	(44-54)
5931 Richmond	86	(73–99)	63	(52–75)
5932 Vancouver	162	(152–172)	261	(248-273)
5933 North Shore	128	(115–142)	65	(55–74)
5941 South Vancouver Island	155	(142–167)	124	(113–136)
5942 Central Vancouver Island	115	(102–128)	63	(54–73)
5943 North Vancouver Island	136	(115–156)	66	(51–80)
5951 Northwest	142	(115–168)	25	(14–37)
5952 Northern Interior	120	(102–138)	54	(42–66)
5953 Northeast	105	(80–129)	10	(3–18)
Yukon	205	(156–254)	24	(7–41)
Northwest Territories	76	(50-102)	35	(17–52)
Nunavut	32	(12–52)	*	* *
Canada	101	(100-102)	95	(94-96)

Physicians

Number of general/family physicians (family medicine and emergency medicine specialists) and specialist physicians (medical, surgical and laboratory specialists) on December 31 of the reference year, per 100,000 population. The data includes active physicians in clinical practice and those not working in a clinical practice. Active physicians are defined as physicians who have an MD degree, are registered with a provincial or territorial medical college and have a valid mailing address. The data excludes residents and non-licensed physicians who requested that their information not be published in the *Canadian Medical Directory* as of December 31 of the reference year. Generally, specialist physicians include certificants of the Royal College of Physicians and Surgeons of Canada (RCPSC) and/or the Collège des médecins du Québec (CMQ) with the exception of Saskatchewan, Newfoundland and Labrador, Nova Scotia, New Brunswick and the Yukon, where specialists 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, non-certified specialists are counted as general practitioners. With the exception of the criteria just noted, all other physicians are counted as family practitioners, including certificants of the College of Family Physicians of Canada. For further methodological information please see *Supply, Distribution and Migration of Canadian Physicians* (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, due to differences in data collection, processing and reporting methodology, CIHI results may differ from provincial and territorial data. Readers are cautioned to avoid inferences regarding the adequacy of provider resources based on supply ratios alone.

Note: Rates are produced using the most recent Statistics Canada population estimates and may differ slightly from those in previous CIHI publications.

Source: Scott's Medical Database, Canadian Institute for Health Information, extracted October 2009.

	Selected Health Professionals,† 2008										
	Nurs RNs		Pharmacists	Dentists	Dental Hygienists	Dietitians	Occupational Therapists	Physio- therapists	Chiro- practors	Optometrists	Psychologists
N.L.	1,127	498	112	35	23	30	30	39	10	10	39
P.E.I.	1,058	451	115	50	51	43	29	38	6	13	20
N.S.	945	346	116	56	58	49	38	61	12	11	49
N.B.	1,038	365	93	39	48	43	39	60	8	15	41
Que.	846	253	93	54	61	**	51	48	15	17	95
Ont.	718	212	76	63	81	22	32	48	30	13	25
Man.	903	216	103	51	50	29	40	55	21	9	17
Sask.	868	247	112	37	40	28	24	53	18	12	45
Alta.	795	174	99	54	62	26	41	54	25	13	67
B.C.	682	153	86	67	63	23	34	59	23	11	24
Y.T.	1,008	187	121	142	75		21		27	15	
N.W.T.	1,633	217	46	113	51	22	33	**		0	180
Nun.	1,033]		73	156	6		10			25	60
Canada	786	223	88	58	67		38	51	23	14	47

[†] Rates per 100,000 population.

					Health Ex	penditure					
					Total Health	Expenditure					
	Curre	nt Dollars (\$ '0	00,000)	GDP Public By Use of Funds (%) Sector (%) (Percentage Distribution of \$ '000,000), 20							
	Actual 2007	Forecast 2008	Forecast 2009	2007	2007	Institutional Services	Professional Services	Drugs	Public Health	Capital and Other Health	
N.L.	2,565	2,810	3,029	8.7	75.2	51.7	18.1	16.5	3.4	10.3	
P.E.I.	660	731	809	14.5	71.0	45.0	20.0	16.2	4.6	14.2	
N.S.	4,816	5,165	5,490	14.6	70.8	45.4	21.7	17.8	3.5	11.6	
N.B.	3,742	3,983	4,119	13.9	70.9	45.7	20.7	16.9	3.3	13.4	
Que.	33,497	36,072	38,103	11.3	71.5	42.0	20.7	20.0	4.0	13.3	
Ont.	64,184	68,710	72,260	11.0	67.3	35.9	25.9	17.0	7.3	13.9	
Man.	6,279	6,717	7,058	12.9	74.7	42.9	21.6	13.8	6.8	14.9	
Sask.	5,104	5,583	5,894	9.9	76.1	40.9	21.6	14.5	9.6	13.4	
Alta.	18,537	20,775	22,013	7.2	72.0	36.0	24.5	13.2	9.5	16.8	
B.C.	20,603	22,012	23,273	10.7	71.9	35.3	27.8	13.4	6.3	17.2	
Y.T.	231	251	266	13.1	77.6	39.3	16.6	10.1	17.7	16.3	
N.W.T.	398	414	434	8.3	82.9	50.8	16.5	6.4	9.3	17.0	
Nun.	355	364	373	25.6	94.2	39.9	13.7	5.2	11.7	29.5	
Canada	160,974	173,585	183,121	10.5	70.3	38.4	24.1	16.5	6.6	14.4	

	Public-Sector Health Expenditure by Use of Funds (\$ per Capita), 2007					Private-Sector Health Expenditure by Use of Funds (\$ per Capita), 2007				
	Institutional Services	Professional Services	Drugs	Public Health	Capital and Other Health	Institutional Services	Professional Services	Drugs	Public Health	Capital and Other Health
N.L.	2,382	615	255	171	386	234	303	581	0	136
P.E.I.	1,791	581	213	218	588	360	374	559	0	92
N.S.	2,045	668	308	179	441	293	448	608	0	156
N.B.	2,017	635	241	166	502	279	404	606	0	169
Que.	1,613	519	382	176	427	219	385	490	0	146
Ont.	1,474	748	316	367	472	326	552	538	0	225
Man.	1,956	701	300	356	619	299	437	426	0	166
Sask.	1,832	706	320	491	537	258	396	420	0	144
Alta.	1,685	722	251	500	644	218	572	446	0	242
B.C.	1,538	762	237	302	596	150	567	405	0	224
Y.T.	2,149	781	376	1,257	943	642	397	342	0	207
N.W.T.	3,909	1,180	303	853	1,336	736	333	281	0	215
Nun.	4,366	1,389	341	1,328	3,288	176	172	251	0	62
Canada	1,616	684	310	320	507	261	496	495	0	198

Health professionals

Number of health professionals (selected health professions) per 100,000 population. Registered nurses (RNs), licensed practical nurses (LPNs), pharmacists (with the exception of Quebec, Manitoba, the Yukon and Nunavut), physiotherapists and occupational therapists (with the exception of Quebec): rates reflect health professionals registered with active-practising status and who are employed in these health professions. For other health professionals, data reflects personnel regardless of employment status and includes the number of active registered dentists, registered dental hygienists, registered dietitians, registered chiropractors, active registered optometrists and active registered psychologists.

Notes: Data on occupational therapists for Quebec may include different membership categories for registrants due to differences in data collection. Data on RNs for the territories includes secondary registrations. Personnel-per-population rates are revised annually using the most recent Statistics Canada population estimates and therefore may differ slightly from previously published figures. Rates may differ from data published by provincial or territorial regulatory authorities due to the CIHI collection, processing and reporting methodology. Please consult Canada's Health Care Providers, 1997 to 2006: A Reference Guide and the HPDB Technical Report for more detailed methodological notes, data quality issues and profession-specific information.

Sources: Health Personnel Database, Canadian Institute for Health Information; population estimates from Statistics Canada, CANSIM Table 051-0001.

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 affect health. For example, funds aligning with housing and income support policies that 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.

Health expenditure by use of funds

Percentage distribution of health expenditure by health-spending category. Institutional services includes hospitals and residential care types of facilities that are approved, funded or operated by provincial or territorial governments. Professional services includes 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 includes 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 includes expenditure on construction, machinery, equipment and some software for hospitals, clinics, firstaid 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); and, 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.

General Notes

- The methodology used for the indicators was designed to maximize inter-regional, interprovincial and interterritorial 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 includes 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 which health region a patient belongs to, postal codes are first mapped to census geography using Statistics Canada's Postal Code Conversion File (Vintage March 2009) 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 is reported. This
 threshold ensures stability in rates and reduces the risk of suppression
 stemming from privacy and confidentiality issues.
- Records with invalid, missing or partial postal codes cannot be mapped
 to a health region and therefore are not included in the regional rates.
 However, they are included in the provincial rates when possible. NonCanadian residents are excluded from Canada rates; they are identified
 by mini-postal codes relating to one of the U.S. states or by a postal code
 value indicating out-of-country residents.
- With the exception of in-hospital hip fracture rates, indicator data is
 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 and 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.
- 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.
- Alberta has changed to a new health care structure; the data for Alberta in this publication reflects the previous regional boundaries. However, the naming of the former regions has been changed.
- Hospitalization data for 2008–2009 for Area 8 (Peace Country) in Alberta
 was incomplete. As a result, several indicators—including hip and knee
 replacement, hospitalized acute myocardial infarction, stroke, hip fracture
 events, injury hospitalization, ambulatory care sensitive conditions and
 hysterectomy, as well as inflow/outflow ratios for hip and knee replacement,
 hysterectomy and overall—could not be reported for this area.
- Due to the differences in data submission, the same Manitoba resident treated in and outside of the province could not be identified as one individual. This may affect a small number of cases for indicators that require tracking patients beyond one hospitalization.
- See the Health Indicators e-publication (www.cihi.ca/indicators or www.statcan.gc.ca) for diagnosis and procedure codes used to extract the indicator data, detailed definitions and technical notes. Indicator rates for years prior to those appearing in this publication are also available in the e-publication.

Appendix: Defining Neighbourhood Income Quintile

Assigning Patients to Neighbourhood Income Quintiles

Each patient was assigned to a neighbourhood income quintile using Statistics Canada's Postal Code Conversion File Plus (PCCF+).¹ This software links the six-character postal codes to the standard Canadian census geographic areas (such as dissemination areas, census tracts and census subdivisions). By linking postal codes to the census geography, the file facilitates extraction of the relevant census information (for example, income) for each geographic area.

The dissemination area (DA) is the smallest geographical unit available for analysis in the Canadian census, with a targeted population size of 400 to 700 persons.² Using PCCF+ (Version 5E),³ the postal code of the patient's place of residence at the time of hospitalization was mapped to the corresponding 2006 census DA, and the neighbourhood income quintile of that DA was assigned to the patient.

In the PCCF+, for postal codes that map to more than one DA (14% of all postal codes), probabilistic assignment based on population size is used, meaning that the same postal code can be mapped to a different DA if the program is run more than once. To ensure that the same patient with the same postal code was always assigned to the same DA, a unique combination of encrypted health card number, birthdate and postal code was assigned to the same DA.

Construction of Income Quintiles for Dissemination Areas

The neighbourhood income quintiles available in the PCCF+ were constructed according to the methods developed at Statistics Canada.⁴ A short description of the method is provided below.

Neighbourhood income quintiles were based on the average income per single-person equivalent in a DA obtained from the 2006 census. This measure uses the person weights implicit in the Statistics Canada low-income cut-offs to derive "single-person equivalent" multipliers for each household size.³ For example, a single-person household received a multiplier of 1.0, a two-person household received a multiplier of 1.24 and a three-person household received a multiplier of 1.53. To calculate average income per

single-person equivalent for each DA, total income of the dissemination area was divided by the total number of single-person equivalents. Income quintile for DAs with a household population of less than 250 was imputed based on the neighbouring DAs (where possible), because census data on income for these DAs was suppressed.

Next, quintiles of population by neighbourhood income were constructed separately for each census metropolitan area, census agglomeration or residual area within each province. DAs within each such area were ranked from the lowest average income per single-person equivalent to the highest, and DAs were assigned to five groups, such that each group contained approximately one-fifth of the total non-institutional population of each area. The quintile data was then pooled across the areas. Quintiles were constructed within each area before aggregating to the national or provincial level to minimize the potential effect of the differences in income, housing and other living costs across different areas in the country.

Limitations

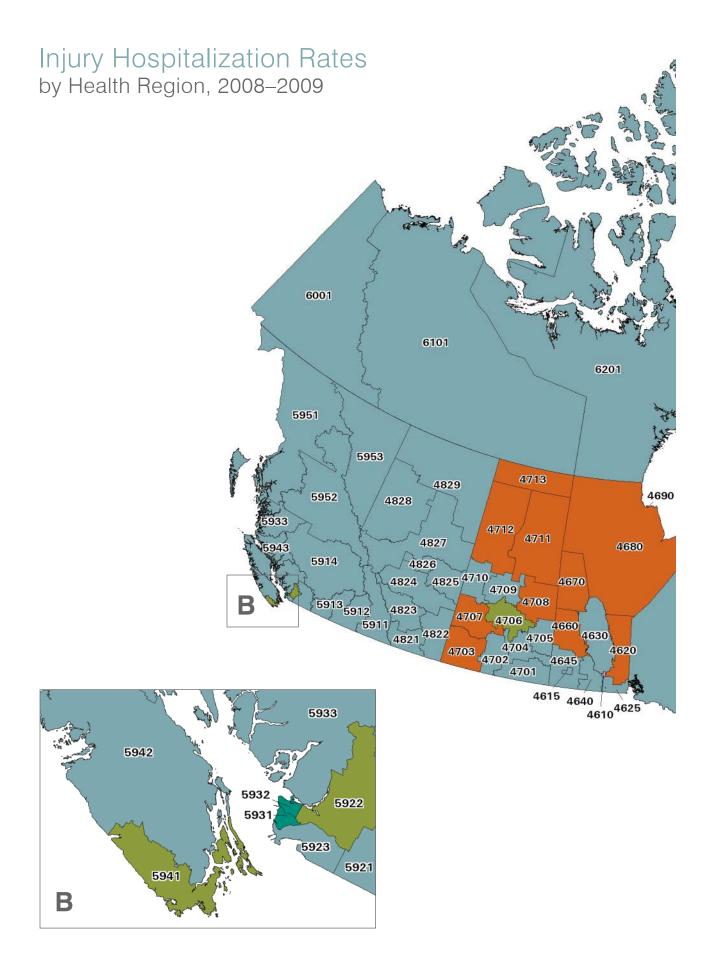
Neighbourhood income quintiles derived from linking postal codes to the census are less accurate in rural areas because rural postal codes cover larger geographical areas. Another limitation is that the measure excludes people living in long-term care facilities because income data from the 2006 Canadian census is only available for non-institutional residents. As a result, not all people can be included in the rates by neighbourhood income quintile.

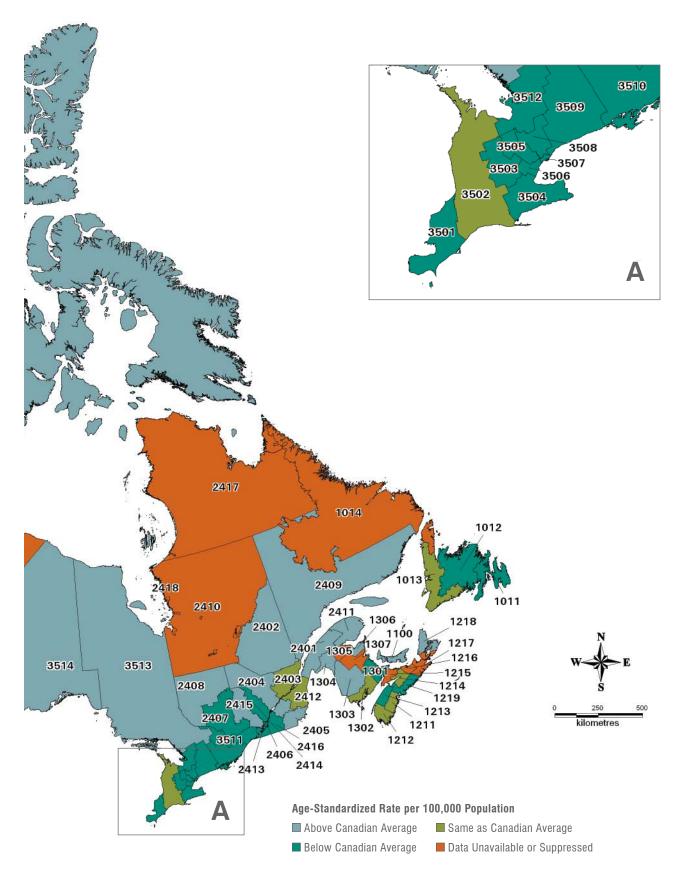
References

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- 2. Statistics Canada, 2006 Census Dictionary (Ottawa, Ont.: Statistics Canada, 2007), catalogue no. 92-566-XWE.
- 3. R. Wilkins, PCCF+ Version 5E User's Guide. Automated Geographic Coding Based on the Statistics Canada Postal Code Conversion Files, Including Postal Codes Through March 2009 (Ottawa, Ont.: Statistics Canada, Health Analysis Division, 2009), catalogue no. 82F0086-XDB.
- 4. R. Wilkins et al. "Trends in Mortality by Neighbourhood Income in Urban Canada From 1971 to 1996," *Health Reports* 13, Suppl. (2002): pp. 1–27, catalogue no. 82-003-SIE.

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Note

For Prince Edward Island (1100), the Yukon (6001), the Northwest Territories (6101) and Nunavut (6201), the data on the map represents the entire province or territory.

National Trauma Registry, Canadian Institute for Health Information; Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux.

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