

Health Indicators 2010





Canadian Institute for Health Information

Institut canadien d'information sur la santé

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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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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

	How healthy are C Health status can b including well-being	Canadians? e measured in a varie g, health conditions, c	ty of ways, lisability or death.
Well-being	Health conditions	Human function	Death
Ion-Medical	Determinants of Non-medical determ to affect our health and how we use hea	Health ninants of health are l and, in some cases, v alth care.	known when
Health behaviours	Living and working conditions	Personal resources	Environmental factors
lealth Syste	m Performance How healthy is the These indicators me of the quality of hea	e health system? easure various aspec Ith care.	ts
Acceptability	Accessibility	Appropriateness	Competence
Continuity	Effectiveness and Health Syste These measures pro	Efficiency m Characteristic	Safety CS al









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.¹ The World Health Organization (WHO), for example, articulated its number one target for the *Health for All* strategy as "equity in health"² for this very reason and proposed strategies for closing the gaps in a generation.³

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."¹

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 individuallevel 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 socioeconomic 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.^{24–26} Many studies have shown that unemployment and lower levels of education or income are related to higher rates of heart attacks.^{27–32} Differences in the rates of heart attacks among socio-economic groups are often attributed to differences in cardiovascular risk factors.^{27, 33–35} Studies have shown that, in Canada, the prevalence of risk factors such as hypertension, diabetes, obesity and smoking is higher in low-income groups.^{36–38} 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.³⁸ 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.²⁴

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 events¹ 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.



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





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.



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.

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			

Table 2

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.^{56–58} 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.ⁱⁱ 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.



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 ratesⁱⁱⁱ 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

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.⁷⁷ Conversely, some menstrual disorders—a possible reason for hysterectomy—may be more prevalent in lower-income groups.⁷⁸ 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.⁸⁰ 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).



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

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.

Age-Standardized Hysterectomy Rates by Indication and Urban/Rural

Figure 9



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.

Figure 11

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.^v About 92% of these readmissions were related to postoperative 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.

Risk-Adjusted Hysterectomy Readmission Rates by Neighbourhood Income Quintile, Canada, 2006–2007 to 2008–2009 1.8 1.36 1.6 1.4 Risk-Adjusted Rate (Percent 1.15 1.11 1.07 1.00 1.2 1.0 0.8 0.6 0.4 0.2 0.0 Q1 Q2 Q3 Q4 Q5 Least Affluent Most Affluent Neighbourhood Income Quintile

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: 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 caution

95% Cl 95% 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

			Population ('000)	Population Age 65+ (%)	Dependency Ratio
Map Code	Health Region	Legend Name	2008	2008	2008
Newfo	oundland 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	e Edward Island	P.E.I.	141	15.2	63.3
Nova	Scotia	N.S.	939	15.5	58.3
1211	South Shore District Health Authority	South Shore	59	19.7	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		415	12.3	51.3
New E	Jrunswick	N.B. Zana 1 (Manatan araa)	100	15.3	57.7
1301		Zone 1 (Moncion area)	199	10.2	04.7 61.7
1302		Zone 3 (Fredericton area)	174	14.9	574
1303	Zone 3	Zone 4 (Edmundston area)	50	15.9	55.0
1306	Zone 6	Zone 6 (Bathurst area)	79	16.5	55.4
Quebe	26	Que	7772	14 7	56 1
2401	ASSS du Bas-Saint-Laurent	Bas-Saint-Laurent	202	17.6	58.8
2402	ASSS du Saguenay-Lac-Saint-Jean	Saguenay-Lac-Saint-Jean	275	15.6	56.3
2403	ASSS de la Capitale-Nationale	Capitale-Nationale	680	16.0	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	Abitibi-Témiscamingue	146	13.6	58.8
2409	ASSS de la Cote-Nord	Cote-Nord	96	12.7	55.8
2411	ASSS de la Chaudière Appalachee	Chaudiàre Appalaches	90	18.0	57.0
2412		Laval	402 387	14.9	50.9 60.7
2414	ASSS de Lanaudière	Lanaudière	453	12.7	58.7
2415	ASSS des Laurentides	Laurentides	535	13.0	59.0
2416	ASSS de la Montérégie	Montérégie	1,415	13.5	58.7
Ontari	io	Ont.	12.977	13.5	58.5
3501	Erie St. Clair LHIN	Erie St. Clair	649	14.6	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	1,382	15.3	62.2
3505	Central West LHIN	Central West	812	10.1	57.3
3506	Mississauga Halton LHIN	Mississauga Halton	1,102	10.6	58.5
3507		Control	1,107	13.0	52.3
3500	Central East I HIN	Central Fast	1,004	13.7	58.0
3510	South East L HIN	South Fast	487	16.9	62.6
3511	Champlain LHIN	Champlain	1.217	13.3	56.0
3512	North Simcoe Muskoka LHIN	North Simcoe Muskoka	447	15.0	62.7
3513	North East LHIN	North East	569	16.7	61.8
3514	North West LHIN	North West	239	14.3	62.8
Manito	oba	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 KHA	Interlake	82	15.1	68.4
4040			105	13.6	77.8
4040		Assimpoine	70	18.9	/6.7

Mon			Population ('000)	Population Age 65+ (%)	Dependency Ratio
Code	Health Region	Legend Name	2008	2008	2008
Saska	tchewan	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
4705	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
Alberta	a	Alta.	3,611	10.4	53.2
4821	Area 1 (Chinook)	Area 1 (Chinook)	167	13.1	65.4
4822	Area 2 (Palliser)	Area 2 (Palliser)	110	13.5	61.4
4823	Area 3 (Calgary)	Area 3 (Calgary)	1,322	9.5	48.9
4824	Area 4 (David Thompson)	Area 4 (David Thompson)	324	11.1	56.9
4825	Area 5 (East Central)	Area 5 (East Central)	118	14.9	68.8
4826	Area 6 (Capital)	Area 6 (Capital)	1,126	10.9	51.5
4827	Area 7 (Aspen)	Area 7 (Aspen)	187	11.3	66.6
4828	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
British	Columbia	B.C.	4,406	14.6	57.5
5911	East Kootenay HSDA	East Kootenay	79	15.8	63.2
5912	Kootenay Boundary HSDA	Kootenay Boundary	/8	17.9	65.0
5913	Okanagan HSDA	Okanagan	345	20.1	69.4
5914	I nompson/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	189	13.9	33.8
5932	Varicouver HSDA	Vancouver	030	12.9	41.8
0933 5041	North Shore/Coast Galibaidi HSDA	North Vanaguyar Jaland	273	10.0	39.0 55.7
5941		Control Vancouver Island	304	17.4	55.7 60.0
5042	North Vancouver Island HSDA	North Vancouver Island	200	19.7	64.2
5945 5051		Northwest	75	10.0	64.2
5052	Northern Interior HSDA	Northern Interior	140	11.0	59.0
5952 5953	Northeast HSDA	Northeast	67	8.4	58.1
Yukon		Y.T.	33	7.6	48.4
Northy	vest Territories	N.W.T.	43	5.0	53.8
Nunav	ut	Nun.	32	2.8	83.5
Canad	la	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-Reported Conditions						
	Perceived F (Excellent	lealth (Age 12+) or Very Good)	Asthm	a (Age 12+)			
		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)			

	High Blood Pr 2	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)		

	Arthri	tis (Age 12+) 2008	Adult Body Mass Index (Age 18+) (30 and Greater) 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.

	Injury Hosp 2008–	italization 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	(4/4-585)
1213 Annapolis Valley	408	(414-503)
1214 Colonester Last Harits	*580	(509-617)
1219 Capital	*425	(406–445)
New Brunswick	+592	(100 110)
1301 Zone 1 (Moncton area)	+475	(445–504)
1302 Zone 2 (Saint John area)	517	(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-Temiscamingue	*830	(783-877)
2409 Cote-Nord	1091 1700	(638-744)
2411 Gaspesie-lies-de-la-madelellie	540	(000-774)
2412 Chaudiere-Appaiaches	*460	(139-180)
2414 Lanaudière	*509	(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 Fast	*304	(296–312)
2510 South East	300 + 412	(347-300) (205-420)
3511 Champlain	*426	(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)

	Injury Ho 2001	spitalization 8–2009
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.

	Hospitalized Acute M 200	yocardial Infarction Event 8–2009	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	
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	319	(289–349)	129	(110–148)	
1219 Capital	180	(166–193)	106	(95–116)	
New Brunswick	*269	(257–281)	* 138	(130–147)	
1301 Zone 1 (Moncton area)	263	(240–285)	129	(113–144)	
1302 Zone 2 (Saint John area)	261	(237–286)	133	(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)	••		
	229	(212-247)			
2408 Abitibi-Temiscamingue	*293	(264-322)			
2409 Cole-Nord	200 + 217	(231-301)			
2411 Gaspesie-lies-de-la-Madeleine	317 +100	(284-331)			
2412 Chaudiere-Appaiaches	192 +170	(176-200)			
2415 Lavai 2/11/ Lanaudiàre	+288	(100–193) (272–305)			
2415 Laurentides	200	(272-303)			
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	* 160	(153–168)	131	(124–138)	
3508 Central	* 165	(158–171)	* 122	(116–128)	
3509 Central East	*206	(198–213)	* 122	(116–127)	
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)	1 70	(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)	
4030 Interlake	283	(246-320)	128	(103–153)	
4040 Certifal	249	(210 - 282)	119	(97-141)	
4040 ASSIIIDUITE	213	(200-010)	101	(100-100)	

	Hospitalized Acute My 200	yocardial Infarction Event 8–2009	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	1//	(162–191)	113	(101–125)	
5943 North Vancouver Island	1//	(154–201)	127	(107-147)	
5951 Northwest	225	(186–264)	1/9	(143-215)	
5952 Northern Interior	219	(191–246)	15/	(133–181)	
5953 Northeast	2/6	(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.

	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								
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 nonmedical 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.

	Hospitalized Acute Myocardial Infarction Event, 2008–2009								
		Neighbou	rhood Income	Quintile ⁺					
	Q1 95% CI	Q2 95% CI	Q3 95% CI	Q4 95% CI	Q5 95% CI	Disparity Rate Ratio 95% Cl	Potential Rate Reduction (%) 95% Cl		
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		
	(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						
		Neighbourh	lood Income Q	uintile ⁺			
	Q1 95% CI	Q2 95% CI	Q3 95% CI	Q4 95% CI	Q5 95% CI	Disparity Rate Ratio 95% Cl	Potential Rate Reduction (%) 95% Cl
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 Co	efficient, 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 Health Behaviours				
	Smoking (Age 12+) 2008		Heavy Dri	nking (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 (5+	Consumption (Age 12+) 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- (At 2	Hand Smoke (Age 12+) Home) 008	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 nonmedical 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.

Man -		Low Income Rate (2005 Income)	Unemployment Rate 2008	Housing Owned 2006
Code	Health Region	%	%	%
Newfo	oundland 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	13.9	8.6	74.2
1214	Colchester East Hants	11.1	6.6	77.2
1218	Cape Breton	16.7	13.1	76.2
1219	Capital	14.1	5.3	64.8
New E	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	/5.0
1306	Zone o (Balnurst area)	10.3	13.0	/9.1
Quebe		17.2	7.2	60.1
2401	Bas-Saint-Laurent	12.6	8.8	70.2
2402	Saguenay-Lac-Saint-Jean	12.6	8.5	66.7
2403	Capitale-Nationale	16.2	4.5	58.3
2404	Mauricie et Centre-du-Quebec	15.0	8.1	64.0
2405	Estrie	14.7	5.9	61.4
2406	Nontreal	29.0	8.7	37.9
2407		14.4	5.4	69.3
2408	Abilibi-Temiscamingue	12.1	7.0	00.U 71.9
2409	Gaanásia, Îlas de la Madeleine	9.0	17.2	71.0
2411	Chaudiàra-Appalachas	10.0	5.0	73.3
2412	Laval	16.0	6.7	68.9
2414	Lanaudière	12.1	72	76.0
2415	Laurentides	11.7	7.3	73.2
2416	Montérégie	12.5	6.6	69.1
Ontari	0	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 Wellington	9.8	5.6	72.1
3504	Hamilton Niagara Haldimand Brant	13.8	6.6	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	13.8	5.0	69.1
3512	North Simcoe Muskoka	9.7	6.2	80.8
3513	North West	12.8	0.1 70	/1.0
Manit		10.7	1.3	70.0
4610	Winnipeg	10.7 10.0	4.Z A A	7 0.3 65.6
4615	Brandon	15.8	3.1	63.7
4625	South Fastman	8.6	4 Q	82.5
4630	Interlake	9.4	4 7	85.0
4640	Central	12.0	3.7	79.8
4645	Assiniboine	12.1	2.7	82.5

10		Low Income Rate (2005 Income)	Unemployment Rate 2008	Housing Owned 2006
map Code	Health Region	%	%	%
Saska	tchewan	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
Albert	a	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	n 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
North	west Territories			53.2
Nunav	/ut			22.7
Canad	la	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 Fracture Event 2008–2009		In-Hospital Hip 2006–2007 to 20	Fracture 108–2009
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Risk-Adjusted Rate per 1,000 Discharges	95% CI
Newfo	undland 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	Colchester East Hants	47 <i>2</i> 50 <i>4</i>	(307-570) (387-620)	*	* *
1214	Cape Breton	468	(385–551)	10	(0.5 - 1.4)
1219	Capital	476	(420–532)	1.1	(0.8–1.4)
New E	runswick	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)	528	(445–612)	* 1.3	(1.0–1.7)
1303	Zone 3 (Fredericton area)	491	(409-574)	1.2	(0.8–1.6)
1304	Zone 4 (Edmundston area)	607	(443–771)	*	* *
1306	Zone 6 (Bathurst area)	*284	(198–370)	*	* *
Quebe	ec.	* 418	(407–429)		
2401	Bas-Saint-Laurent	427	(365–489)		
2402	Saguenay-Lac-Saint-Jean	* 327	(275 - 379)		
2403	Capitale-Nationale Mauricia et Centre-du-Québec	437	(401-474)		
2404	Fstrie	439	(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	(284-454)		
2412	Chaudière-Appalaches	*384	(338–430)		
2413	Laval	* 399	(349–449)		
2414	Laurentides	393 458	(342-444) (408-507)		
2416	Montérégie	+421	(393–449)		
Ontari	0	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 Brant	474	(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 Fast	430 * 414	(404–457) (389–440)	0.5	(0.3 - 0.6) (0.5 - 0.9)
3510	South Fast	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)
Manito	bba	* 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	4/8	(326-631)	*	* *
4640	Central	<u>1</u> 22 496	(40∠−043) (391_601)	*	* *
4645	Assiniboine	* 601	(482–720)	*	* *

		Hospitalized Hip Fracture Event 2008–2009		In-Hospital Hip 2006–2007 to 20	Fracture 108–2009
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)	*	* *
Albert	a	* 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)
4825	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)
4827	Area 7 (Aspen)	392	(311–473)	*1.4	(1.0–1.8)
4828	Area 8 (Peace Country)	*	* *	*	* *
4829	Area 9 (Northern Lights)	335	(102–567)	*	* *
British	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	North Vancouver Island	471	(410-020)	1.0	(0.7-1.3)
5945	Northwest	405	(412-007)	*	* *
5951	Northern Interior	490 *675	(530 - 004) (546 - 804)	*	* *
5953	Northeast	650	(435–865)	*	* *
Yukon		650	(286–1,014)	*	* *
North	vest Territories	691	(332–1,049)	*	* *
Nunav	ut	*	* *	*	* *
Canad	a	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.

		Wait Time for Hip Fracture Surgery			
		(Proportion With S or Next D	urgery Same ay)	(Proportion With Same, Next or Da	Surgery ay After)
Map Code	Health Region	2008–20 Risk-Adjusted Rate (%)	95% CI	2008–200 Risk-Adjusted Rate (%)	9 95% CI
Newfo	oundland and Labrador	⁺ 69.0	(64.3-73.7)	*88.2	(84.7–91.7)
1011	Eastern	66.7	(60.5–72.8)	87.3	(82.7–92.0)
1012	Central	*82.7	(71.8–93.7)	* 93.5	(85.3–100.0)
1013	Western	70.6	(59.0-82.1)	86.4	(77.9–95.0)
Prince	Edward Island	63.6	(55.5–71.7)	84.9	(78.9–90.9)
Nova	Scotia	62.9	(59.6-66.3)	* 81.3	(78.8-83.8)
1211	South Shore	63.7	(52.1–75.3)	* 73.3	(64.5-82.0)
1212	South West Nova	73.8	(60.5-87.1)	89.6	(79.7–99.5)
1213	Annapolis Valley	*88.8	(78.1–99.5)	* 98.1	(90.2–100.0)
1214	Colchester East Hants	55.0	(44.0-66.0)	78.0	(69.7-86.2)
1218	Cape Breton	*80.9	(72.4-89.4)	*93.9	(87.6–100.0)
1219	Capital	47.3	(41.6–53.1)	• 72.5	(68.2–76.8)
New E	Brunswick	*68.8	(64.9–72.6)	*88.0	(85.1–90.9)
1301	Zone 1 (Moncton area)	•74.9	(67.4-82.5)	*93.1	(87.4–98.8)
1302	Zone 2 (Saint John area)	49.6	(41.9 - 57.4)	80.8	(75.0-86.6)
1303	Zone 3 (Fredericton area)	72.7	(64.3-81.1)	85.6	(79.3–91.9)
1304	Zone 4 (Edmundston area)	/0.3 *00.5	(62.7-90.0)	91.4	(81.1 - 100.0)
1300	Zone o (Dathuist alea)	02.0	(07.3-97.0)	00.0	(77.0-99.7)
Queb	ec Rea Saint Lourant				
2401	Saguonay, Lac Saint- Joan				
2402	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				
2410	Monteregie	00.0		04.0	(00.4.05.0)
2501	IO Frie St. Clair	64.6	(60 5 69 9)	84.2	(83.4-85.0)
3502	South West	• 4.0	(00.3-00.8) (11.2-51.2)	*74.5	(71 9_77 2)
3503	Waterloo Wellington	*84.1	(79.6–88.7)	*94.9	(91 5–98 4)
3504	Hamilton Niagara Haldimand Brant	* 66.4	(63.6–69.3)	85.3	(83.1–87.4)
3505	Central West	61.4	(55.7–67.1)	80.7	(76.4–85.0)
3506	Mississauga Halton	64.7	(60.4–69.1)	82.8	(79.6–86.1)
3507	Toronto Central	*58.8	(55.4–62.2)	*80.9	(78.3–83.4)
3508	Central	* 67.6	(64.5-70.7)	*87.8	(85.5–90.2)
3509	Central East	65.6	(62.5-68.7)	85.4	(83.0-87.7)
3510	South East	66.3	(61.8–70.8)	*89.1	(85.7–92.5)
3511	Champlain	62.1	(58.8–65.3)	86.6	(84.2-89.1)
3512	North Simcoe Muskoka	51.0	(45.8–56.3)	74.5	(70.5–78.4)
3513	North East	⁺ 68.0	(63.5-72.5)	85.5	(82.1-88.9)
3514	INORTH VVest	49.9	(43.1–56.7)	80.4	(75.2-85.6)
Manit	oba	63.5	(60.6-66.5)	84.1	(81.9-86.3)
4610	winnipeg	62.4	(58.5-66.2)	84.3	(81.4-87.2)
4015	South Fastman	/4.8 67.9	(520 027)	91.0	(0.001-0.00) (68 7 00 2)
4630	Interlake	54.7	(42 4-66 9)	83.0	(74.8 - 92.3)
4640	Central	54.9	(44.5-65.3)	77.8	(70.0-85.6)
4645	Assiniboine	*72.9	(63.3–82.6)	88.7	(81.6–95.9)
		Wait Time for Hip Fracture Surgery			
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Man		(Proportion With Su or Next Da 2008–200	irgery Same ay) J9	(Proportion With Same, Next or Da 2008–200	Surgery ay After) 19
Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saska	tchewan	⁺ 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)
Albert	a	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)
4826	Area 6 (Capital)	*57.2	(53.4-61.0)	84.1	(81.2-87.0)
4827	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)
4829	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		42.8	(25.9-59.7)	86.2	(73.5-98.9)
5952	Northern Interior	/2.3	(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		*	* *	*	* *
North	west Territories	*	* *	83.0	(64.4–100.0)
Nunav	rut	*	* *	*	* *
Canac	la	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 Se 2008–	nsitive Conditions 2009	Caesarean Section 2008–2009	
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	%	95% CI
Newfo	undland 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 E	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)
Quebe	ec.	*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)
Ontari	0	*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 Brant	*333	(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	Ioronto Central	*232	(223–240)	29.5	(28.7–30.3)
3508	Central	183	(177–190)	29.2	(28.6–29.9)
3509	Central East	268	(260–277)	31.0	(30.3–31.8)
3510	South East	*340	(324–356)	27.6	(26.3–28.9)
3511	Champlain	257	(248–267)	29.1	(28.3–29.9)
3512	North Simcoe Muskoka	*353	(336–371)	31.0	(29.6–32.4)
3513	North East	*525	(506–543)	28.3	(27.1–29.5)
3514	North West	*548	(518–577)	24.1	(22.5–25.8)
Manito	bba	*347	(336–357)	20.2	(19.6–20.9)
4610	winnipeg	* 243	(231-255)	20.4	(19.5–21.3)
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)

Health System Performance

		Ambulatory Care Se 2008–2	nsitive Conditions	Caesarea 2008-	Caesarean Section 2008–2009	
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	%	95% CI	
Saska	tchewan	* 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)	
Albert	a	* 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	(100 - 218)	34.U	(32.2 - 35.7)	
5042	North Vancouver Island	290	(2/4-310) (204-269)	20.0	(24.1 - 27.0)	
5051	Northwest	330 *525	(304-300)	3U.U 24 0	(21.2-02.0) (21.5.070)	
5052	Northern Interior	+/Q1	(402-309) (454-527)	24.2 27.6	(25.5-20.8)	
5953	Northeast	*484	(429–539)	30.5	(27.8–33.3)	
Yukon		⁺ 453	(377–530)	23.3	(19.0–27.6)	
North	vest Territories	* 713	(614–813)	21.3	(18.3–24.4)	
Nunav	ut	^ 1,181	(992–1,371)	6.9	(5.1-8.7)	
Canad	la	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 Stroke In-Hospital Mortality 2006–2007 to 2008–2009	
Map Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfo	oundland 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	e 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	7.6	(4.8–10.4)	⁺ 22.6	(18.1–27.2)
1212	South West Nova	9.7	(7.1–12.3)	21.1	(16.6–25.6)
1213	Annapolis Valley	*5.2	(2.5-7.8)	*28.0	(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 E	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)	* 12.5	(9.3–15.7)	14.6	(9.2–19.9)
1306	Zone 6 (Bathurst area)	9.4	(6.8–12.0)	17.5	(13.0–22.0)
Queb	90				
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	Monteregie		()		
Ontar	Frie St. Clair	9.0	(8.8–9.2)	17.6	(17.3-18.0)
3501	Ene St. Clair	9.0	(0.7-10.4)	10.0	(10.0 - 10.4)
3502	Waterlag Wallington	0.9	(0.1 - 9.7)	19.0 *00.6	(10.2 - 20.9)
2504	Hamilton Niegere Heldimend Prent	0.2	(7.2-9.2)	20.0	(10.9 - 22.3)
2505	Control Woot	0.7	(0.1 - 9.3)	17.9 +17.1	(10.0 - 19.0)
2506	Mississauga Halton	0.1	(7.0-9.1)	14.1	(12.4 - 13.0)
2507	Toronto Control	0.9	(0.0-9.0)	16.0	(17.0-20.0)
2500	Control	◆0 7	(0.3 - 9.0)	10.9 *16.2	(15.7 - 10.2)
3500	Contral Fact	9.7	(9.0-10.4) (9.7 10.1)	10.5	(10.2 - 17.4)
3510	South Fast	+10.0	(0.7 - 10.1)	*20.6	(10.4 - 10.0)
3511	Champlain	+7 8	(71.8.6)	17.0	(15.0 - 22.4)
3512	North Simcoo Muskoka	8.0	(7.1-0.0)	17.2	(15.9 - 10.5)
3513	North Fast	*10 5	(9.7–10.0)	18.9	(17.3 - 20.5)
3514	North West	7.7	(6.5-8.9)	*14.1	(11.7–16.5)
Manit	oba	+7.8	(7 2-8 5)	17.3	(16 1–18 5)
4610	Winnipeg	* 6.5	(5.7–7.4)	16.5	(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)

Mon		30-Day Acute Myocardial Infarction In-Hospital Mortality 2006–2007 to 2008–2009		30-Day Stroke In-Hospital Mortality 2006–2007 to 2008–2009	
Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saska	tchewan	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)
Albert	a	* 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	(0.7-9.1)	17.5	(15.7-19.3)
5933	North Shore	9.4	(7.8-11.1)	10.1	(13.6 - 18.5)
5040	South Vancouver Island	9.8	(0.3 - 11.3)	19.1	(10.9 - 21.2)
5042	North Vancouver Island	6.0	(1.0 - 10.1)	20.2	(15.0 - 20.0)
5051	Northwost	10.0	(4.0-9.0)	20.0	(10.4-24.2)
5957	Northern Interior	10.0	(8.3_13.5)	20.9	(15.0-20.3) (16.5-24.4)
5953	Northeast	+14.7	(10.3–19.2)	20.4	(13.8 - 27.8)
Yukon		*	* *	19.7	(10.7–28.7)
North	west Territories	*	* *	9.1	(4.1–18.9)
Nunav	rut	*	* *	*	**
Canac	la	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.

Mor		Acute Myocardial Infarctio 2006–2007 to 200	on Readmission 18–2009	Asthma Readmi 2006–2007 to 200	ssion 8–2009
Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfo	oundland 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	e 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	4.3	(2.1–6.5)	*	* *
1212	South West Nova	4.7	(2.5-6.9)	т Х	* *
1213	Annapolis Valley	4.4	(2.4-6.3)	*	* *
1214 1010		7.9 A 1	(3.9 - 9.8)	*	* *
1210	Capital	4.1	(2.0-5.7) (3.0-5.3)	*	* *
New F	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)	3.9	(2.4–5.4)	*	* *
1303	Zone 3 (Fredericton area)	5.2	(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)	*	* *
Queb	ec				
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	Gaspesie-Iles-de-la-Madeleine				
2412	Chaudiere-Appalaches				
2413	Laval				
2414	Lanaudiere				
2415	Montérégie				
Ontar	in	4.6	(1 1 1 8)	/ 1	(3.6-4.6)
3501	Frie St. Clair	* 6.2	(5.5–7.0)	2.5	(0.2 - 4.8)
3502	South West	4.6	(3.9–5.2)	3.5	(1.4–5.6)
3503	Waterloo Wellington	4.0	(3.1-4.8)	3.6	(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	4.2	(3.5-4.9)	3.8	(2.1–5.4)
3509	Central East	4.5	(3.9–5.1)	3.9	(2.6-5.3)
3510	South East	4.8	(3.9-5.7)	5.0	(3.4 - 7.8)
3011	Champiain North Simooo Muskoka	3.4	(2.7 - 4.0)	4.7	(2.9-0.0)
3512	North Fast	4./ +7 Q	(0.0-0.7)	3 /	(16-52)
3514	North West	5.3	(4.2–6.4)	*	(1.0-0.2) * *
Manit	oba	5.1	(4.5–5.7)	*7.2	(5.8-8.6)
4610	Winnipeg	4.2	(3.4–5.0)	*	* *
4615	Brandon	*	* *	*	* *
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 Infarctic 2006–2007 to 200	on Readmission 18–2009	Asthma Readmi 2006–2007 to 200	ssion 8–2009
Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saska	tchewan	5.0	(4.3-5.7)	4.0	(2.5-5.5)
4701	Sun Country	*	* *	*	* *
4702	Five Hills	*	* *	*	* *
4704	Regina	*3.1	(1.6-4.5)	*	* *
4705	Sunrise	4.3	(1.7-6.8)	*	* *
4706	Saskatoon	4.8	(3.5-6.2)	*	* *
4709	Prince Albert	4.8	(2.6-6.9)	*	* *
4710	Prairie North	7.1	(4.6-9.6)	*	* *
Albert	a	*3.7	(3.2-4.1)	3.5	(2.5-4.5)
4821	Area 1 (Chinook)	4.2	(2.4-5.9)	*	* *
4822	Area 2 (Palliser)	5.4	(3.3-7.5)	*	* *
4823	Area 3 (Calgary)	*3.2	(2.5-3.9)	4.1	(2.1-6.0)
4824	Area 4 (David Thompson)	4.2	(2.9-5.4)	*	* *
4825	Area 5 (East Central)	4.7	(2.7-6.6)	*	* *
4826	Area 6 (Capital)	*2.9	(2.1–3.7)	*2.1	(0.1-4.1)
4827	Area 7 (Aspen)	5.6	(3.9–7.3)	*	* *
4828	Area 8 (Peace Country)	6.4	(4.4-8.5)	*	* *
4829	Area 9 (Northern Lights)	*	* *	*	* *
British	n Columbia	4.8	(4.4-5.2)	4.7	(3.8–5.5)
5911	East Kootenay	4.7	(2.5-6.9)	*	* *
5912	Kootenay Boundary	*7.9	(5.7–10.2)	*	* *
5913	Okanagan	5.5	(4.4-6.6)	*	* *
5914	Thompson/Cariboo/Shuswap	6.1	(4.7–7.5)	*	* *
5921	Fraser East	3.3	(1.8-4.9)	*	* *
5922	Fraser North	3.9	(2.7–5.2)	*	* *
5923	Fraser South	4.8	(3.7–5.8)	4.2	(2.0-6.4)
5931	Richmond	3.3	(1.1–5.6)	*	* *
5932	Vancouver	4.1	(2.9-5.2)	*	* *
5933	North Shore	3.8	(2.3-5.3)	*	* *
5941	South Vancouver Island	*2.9	(1.5-4.3)	*	* *
5942	Central Vancouver Island	•6.1	(4.8–7.4)	*	* *
5943	North Vancouver Island	6.0	(3.9–8.1)	*	* *
5951	Northwest	6.4	(3.6–9.2)	*	* *
5952	Northern Interior	5.8	(4.0-7.7)	*	* *
5953	Northeast	6.9	(4.0–9.8)	*	* *
Yukon		*	* *	*	* *
North	west Territories	*	* *	*	* *
Nunav	/ut	*	* *	*	* *
Canac	la	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

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

		Prostatectomy Read 2006–2007 to 200	lmission 8–2009	Hysterectomy Readmission 2006–2007 to 2008–2009	
Map Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Newfo	undland 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	*	* *	*	* *
1211	Scotla South Shore	2.8 *	(2.1–3.6)	1.2	(0.9–1.6)
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 E	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 (Federicion area)	*	* *	*	* *
1306	Zone 6 (Bathurst area)	*	* *	*	* *
Quebe	20				
2401	Bas-Saint-Laurent				
2402	Saguenay-Lac-Saint-Jean				
2403	Capitale-Nationale				
2404	Mauricie et Centre-du-Québec				
2405	Estrie				
2406	Montreal				
2407	Abitibi-Témiscaminque				
2409	Côte-Nord				
2411	Gaspésie-Îles-de-la-Madeleine				
2412	Chaudière-Appalaches			**	
2413	Laval				
2414	Lanaudière				
2415	Montérégie				
Ontori		0.6	(2,4, 2,0)	4.4	(10, 10)
3501	Frie St. Clair	1.8	(2.4-2.9)	0.9	(0.5-1.2)
3502	South West	2.4	(1.5–3.3)	* 1.6	(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)
3509	Central East	2.5	(2.1-3.4)	*0.7	(0.4 - 1.0)
3510	South East	3.2	(2.0-4.4)	1.1	(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)
Manito	bba	1.5	(0.6-2.5)	1.5	(1.1–1.8)
4610	winnipeg Brandon	*1.2	(U.5-2.4) * *	*1.9	(1.4–2.4)
4625	South Fastman	*	* *	*	* *
4630	Interlake	*	* *	*	* *
4640	Central	*	* *	*	* *
4645	Assiniboine	*	* *	*	* *

Mon		Prostatectomy Read 2006–2007 to 2005	Imission 8–2009	Hysterectomy Read 2006–2007 to 200	lmission 8–2009
Code	Health Region	Risk-Adjusted Rate (%)	95% CI	Risk-Adjusted Rate (%)	95% CI
Saska	tchewan	2.0	(1.1–2.9)	*1.8	(1.5–2.1)
4701	Sun Country	*	* *	*	* *
4702	Five Hills	*	* *	*	* *
4704	Regina	*	* *	*	* *
4705	Sunrise	*	* *	*	* *
4706	Saskatoon	*	* *	*2.0	(1.3–2.6)
4709	Prince Albert	*	* *	*	* *
4710	Prairie North	*	* *	*	* *
Albert	a	2.0	(1.5–2.5)	1.0	(0.8–1.2)
4821	Area 1 (Chinook)	*	* *	*	* *
4822	Area 2 (Palliser)	*	* *	*	* *
4823	Area 3 (Calgary)	2.4	(1.6–3.2)	1.3	(1.0–1.7)
4824	Area 4 (David Thompson)	1.2	(0.5-2.9)	0.8	(0.3–1.4)
4825	Area 5 (East Central)	*	* *	*	* *
4826	Area 6 (Capital)	1.9	(0.9–2.9)	0.8	(0.4–1.1)
4827	Area 7 (Aspen)	*	* *	*	* *
4828	Area 8 (Peace Country)	*	* *	*	* *
4829	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./	(1.1–2.4)
5933	North Shore	^ 1 0		^ 1 7	(11 0 0)
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)	0.0	(0.3-1.2)
5943 5051	Northweat	*	* *	*	* *
5050	Northern Interior	*	* *	*	* *
5952	Northeast	*	* *	*	* *
Yukon		*	* *	*	* *
North	west Territories	*	* *	*	* *
Nunav	vut	*	* *	*	* *
Canac	la	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–	acement 2009	Knee Repla 2008–2	acement 2009
Map Code Health Region		Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfoundland and Labrado	r	* 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	3	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	a)	101	(87–115)	136	(120–153)
1302 Zone 2 (Saint John ar	ea)	108	(92–123)	1/0	(150–190)
1303 Zone 3 (Frederiction a	rea)	94	(78-109)	105	(144–185)
1304 Zone 4 (Edimundston	area)	// *57	(03-100)	102	(75-129)
)	+66	(40-73)	• 0 7	(05-102)
Quepec		+70	(61 94)	•115	(101 120)
2401 Bas-Saint-Laureni	loop	12 *70	(01-04)	+120	(101 - 130)
2402 Saguenay-Lac-Saint-	Jean	*68	(62-75)	130 + 07	(90_105)
2404 Mauricie et Centre-du	-Québec	*60	(53–67)	*105	(96–114)
2405 Estrie	Quebee	* 63	(54–71)	*90	(79–101)
2406 Montréal		* 64	(60–68)	*82	(78–86)
2407 Outaouais		*76	(66–86)	*118	(105–130)
2408 Abitibi-Témiscamingu	e	*62	(48–76)	*85	(69–101)
2409 Côte-Nord		* 77	(58–97)	134	(109–158)
2411 Gaspésie-Îles-de-la-l	Vadeleine	*50	(36-63)	* 132	(111–153)
2412 Chaudière-Appalache	S	*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 *000	(186–191)
3501 Effe St. Clair		123	(110-132)	22Z	(210-234)
2502 Waterlee Wellington		140 +105	(137-133)	224 *196	(214-234)
3504 Hamilton Niagara Hal	dimand 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)	*122	(115–129)
3508 Central		*87	(82–92)	154	(147–160)
3509 Central East		101	(96–107)	* 196	(188–203)
3510 South East		* 139	(128–149)	* 241	(228–254)
3511 Champlain		* 114	(108–121)	* 210	(201–218)
3512 North Simcoe Muskol	ka	*116	(106–126)	*184	(171–197)
3513 North East		* 119	(110–128)	* 208	(197–220)
3514 North West		* 156	(139–172)	* 208	(189–227)
Manitoba		* 116	(109–123)	199	(190–208)
4610 Winnipeg		*114	(105–123)	*199	(187–210)
4615 Brandon		106	(/5-138)	129	(96–163)
4020 South Eastman		128	(95–161)	236	(191 - 280)
4030 Intellake		120 110	(100-149)	104 +107	(104−∠14) (167,007)
4645 Assiniboine		110	(85-135)	*201	(168 - 235)
			(00 100)		(100 200)

		Hip Replac 2008–2	cement 2009	Knee Replac 2008–21	Knee Replacement 2008–2009	
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	
Saska	tchewan	* 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)	
Albert	а	⁺ 109	(105–113)	⁺ 166	(161–171)	
4821	Area 1 (Chinook)	*176	(153–198)	*312	(282–342)	
4822	Area 2 (Palliser)	99	(79–120)	174	(147–202)	
4823	Area 3 (Calgary)	112	(105–119)	162	(154–171)	
4824	Area 4 (David Thompson)	*124	(110–138)	*189	(172–207)	
4825	Area 5 (East Central)	105	(86–124)	168	(144–193)	
4826	Area 6 (Capital)	96	(90–103)	142	(133–150)	
4827	Area 7 (Aspen)	92	(76–108)	*192	(169–214)	
4828	Area 8 (Peace Country)	*	* *	*	* *	
4829	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)	129	(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	Northeast	12/	(100 - 148)	205	(1/9-231)	
5953	Northeast	129	(94–164)	181	(141-222)	
Yukon		156	(96–216)	172	(108–235)	
North	west Territories	84	(42–126)	*84	(50–119)	
Nuna	vut	59	(15–103)	* 358	(227–489)	
Canad	la	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 2008–2	nary Intervention 2009	Coronary Artery Bypa 2008–20	ss Graft Surgery
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI
Newfo	undland 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 E	Srunswick	196	(186–206)	*86	(79–93)
1202	Zone 2 (Saint John area)	1// +027	(158-190)	73	(60-85)
1302	Zone 3 (Fredericton area)	+232	(214 - 200) (208 - 256)	•Q2	(08–90)
1304	Zone 4 (Edmundston area)	*	(200 200) * *	*	* *
1306	Zone 6 (Bathurst area)	151	(125–177)	77	(59–96)
Quebe	ec.			* 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	Montreal			65 + E1	(61-69)
2407	Abitibi Támiscamingua			51	(43-60)
2400	Côte-Nord			88	(68–108)
2411	Gaspésie–Îles-de-la-Madeleine			85	(68–101)
2412	Chaudière-Appalaches			65	(57–73)
2413	Laval			65	(57–74)
2414	Lanaudière			* 61	(54–69)
2415	Laurentides			* 61	(54–68)
2416	Montérégie			*78	(73–83)
Ontari	0	⁺ 166	(163–168)	*74	(73–76)
3501	Erie St. Clair	*139	(130–149)	*89	(81–97)
3502	South West	*102	(108-122)	* 79 * c1	(73-85)
3503	Hamilton Niagara Haldimand Brant	103	(94–111) (164–178)	+02	(33-08) (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	(205–231)	* 106	(98–115)
3511	Champlain	*184	(176–192)	* 64	(59–69)
3512	North Simcoe Muskoka	168	(156–181)	*91	(82–100)
3513	North West	*232	(220–245) (217–258)	·5/ +111	(57–63) (97 <u>–</u> 125)
Manit	ha	+1/19	(217-230)	+ <u>81</u>	(75-27)
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	ary Intervention	Coronary Artery Bypass Graft Surgery 2008–2009		
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	
Saska	tchewan	* 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)	
Albert	a	172	(167–177)	* 53	(50–56)	
4821	Area 1 (Chinook)	*132	(113–151)	* 46	(35–58)	
4822	Area 2 (Palliser)	153	(127–179)	*48	(34–63)	
4823	Area 3 (Calgary)	* 157	(149–165)	*46	(41–50)	
4824	Area 4 (David Thompson)	*187	(170–204)	* 56	(46–65)	
4825	Area 5 (East Central)	181	(156–207)	\$52	(38–66)	
4826	Area 6 (Capital)	*178	(169–187)	*56	(51–61)	
4827	Area 7 (Aspen)	196	(174–219)	71	(57–85)	
4828	Area 8 (Peace Country)	*227	(196–259)	74	(55–92)	
4829	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)	
5931	Richmond	*129	(111–146)	* 52	(41-63)	
5932	Vancouver	120	(111–130)	45	(39-51)	
5933	North Shore	144	(130–158)		(51-70)	
5941	South vancouver Island	102	(149-175)	60	(52-08)	
5942	Central vancouver Island	1/0	(160-191)	02	(53 - 71)	
5945	Northweat	101	(107 - 200)	70	(60-90)	
5951	Northern Interior	165	(140-210) (140-199)	70 70	(56-88)	
5952	Northeast	181	(142-100)	78	(52–104)	
Vukon	Hormouot	161	(107, 214)	21	(12_120)	
North	uget Territoriae	101	(107-214)	01	(42-120)	
North		144	(93–195)	03	(22-104)	
Nunav	ut	105	(41–168)	66	(4–129)	
Canad	a	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.

		Cardiac Revası 2008-2	cularization 009	Hysterectomy 2008–2009		
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	
Newfo	oundland and Labrador	244	(230–257)	+ 421	(392–450)	
1011	Eastern	*259	(240–278)	* 399	(363–435)	
1012	Central	258	(228–288)	* 435	(367–503)	
1013	Western	* 173	(146–201)	* 508	(425-592)	
Prince	Edward Island	⁺ 210	(186–235)	⁺ 512	(449–576)	
Nova	Scotia	*221	(211–231)	⁺ 416	(395–437)	
1211	South Shore	254	(216–291)	356	(272–441)	
1212	South West Nova	247	(208–285)	* 604	(506–701)	
1213	Annapolis Valley	* 178	(150–206)	* 534	(447–621)	
1214	Colchester East Hants	261	(224–298)	* 583	(492–673)	
1218	Cape Breton	247	(220–273)	* 546	(474–618)	
1219	Capital	* 201	(186–216)	*244	(220–267)	
New E	Brunswick	* 274	(262–286)	* 379	(356–402)	
1301	Zone 1 (Moncton area)	249	(227–271)	* 439	(392–487)	
1302	Zone 2 (Saint John area)	*319	(291–346)	*240	(203–276)	
1303	Zone 3 (Fredericton area)	*323	(294–351)	344	(298–389)	
1304	Zone 4 (Edmundston area)	*	* *	331	(245-418)	
1306	Zone 6 (Bathurst area)	228	(196–259)	* 443	(363–523)	
Queb	ec			*319	(312–325)	
2401	Bas-Saint-Laurent			*394	(348–441)	
2402	Saguenay-Lac-Saint-Jean			*589	(538–639)	
2403	Capitale-Nationale			*277	(257–297)	
2404	Mauricie et Centre-du-Québec			*395	(364–425)	
2405	Estrie			477	(436–518)	
2406	Montréal			*229	(218–240)	
2407	Outaouais			258	(232–285)	
2408	Abitibi-Témiscamingue			*583	(516–650)	
2409	Côte-Nord			353	(291–416)	
2411	Gaspésie-Iles-de-la-Madeleine			438	(367–510)	
2412	Chaudière-Appalaches			*398	(365–431)	
2413	Laval			*276	(250-301)	
2414	Lanaudiére			*299	(274–324)	
2415	Laurentides			323	(299–346)	
2416	Monteregie		(007.044)	* 322	(307–337)	
Ontar 2501	Erio St. Clair	238	(235-241)	*330	(325-335)	
3501	Elle St. Clali	227 *100	(210-239)	439	(412-400)	
2502	Waterlee Wellington	192	(100-201)	400	(302-423)	
2504	Hamilton Niagara Haldimand Brant	+262	(100 - 170) (054 - 071)	405	(301-429)	
2505	Control Woot	202	(234 - 271)	401 *262	(304 - 410)	
3505	Mississauga Halton	240	(230 - 201)	203 * 000	(240-201)	
2507	Toronto Control	+204	(224-243)	230 +170	(224 - 232)	
3502	Contral	+203	(190-213)	+245	(100-109)	
3500	Central Fast	235	(207_242)	230	(316-344)	
3510	South East	* 321	(227-240)	* 100	(302_453)	
3511	Champlain	246	(236_255)	+255	(338-372)	
3512	North Simcoe Muskoka	*258	(243-273)	*398	(368-420)	
3513	North Fast	*288	(274_302)	*577	(542-611)	
3514	North West	*346	(322–371)	375	(333–418)	
Manit	oba	229	(219–238)	*374	(356–392)	
4610	Winnipeg	*224	(211–236)	336	(313–358)	
4615	Brandon	*182	(141–223)	399	(308–490)	
4625	South Eastman	233	(189–277)	* 469	(379–558)	
4630	Interlake	226	(192–259)	388	(315–460)	
4640	Central	* 193	(164–223)	* 458	(389–527)	
4645	Assiniboine	210	(177–243)	* 472	(383–562)	

		Cardiac Revaso 2008–2	ularization 009	Hysterectomy 2008–2009		
Map Code	Health Region	Age-Standardized Rate per 100,000	95% CI	Age-Standardized Rate per 100,000	95% CI	
Saska	tchewan	* 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)	
Albert	a	* 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	1 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)	
North	west Territories	208	(142–273)	371	(267–476)	
Nunav	/ut	⁺ 132	(61–204)	⁺ 185	(72–299)	
Canad	la	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
Newfo	undland and Labrador						
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	Colchester Fast Hants	0.53	2.41	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 E	Brunswick						
1301	Zone 1 (Moncton area)	1.11	1.33	1.27	1.26	0.00	0.00
1302	Zone 2 (Saint John area)	1.17	0.93	0.98	0.85	3.73	4.45
1303	Zone 3 (Fredericton area)	0.92	1.10	1.07	0.99	0.00	0.00
1304	Zone 4 (Edmundston area)	0.96	0.67	0.86	0.79	0.00	0.00
1306	Zone 6 (Balhurst area)	0.94	1.02	0.94	0.84	0.00	0.00
Queb	Boo Soint Louropt	0.00	0.97	0.97	0.07		0.00
2401	Saquenav-Lac-Saint-Jean	1.00	0.87	1.03	1.04		0.00
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	Cole-Inord Gaspásia Îlas-da la Madalaina	0.77	0.58	0.60	0.00		0.00
2411	Chaudière-Appalaches	0.73	1.05	1.09	0.39		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
Ontar	0						
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	Hamilton Niagara Haldimand Brant	1.00	0.90	0.99	1.05	0.98	1.03
3505	Central West	0.73	0.78	0.69	0.58	0.00	0.00
3506	Mississauga Halton	0.96	0.83	0.96	0.83	1.37	1.30
3507	Toronto Central	1.86	2.41	2.43	2.47	3.18	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
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
Manite	oba						
4610	Winnipeg	1.40	1.67	1.60	1.58	1.88	1.93
4615	Brandon	1.63	0.83	2.24	2.09	0.00	0.00
4625	South Eastman	0.60	0.00	0.00	0.32	0.00	0.00
4630	Control	0.52	0.00	0.00	U.16	0.00	0.00
4645	Assiniboine	0.55	0.04	0.04	0.08	0.00	0.00

				Inflow/Outflow	Ratio, 2008-2009		
Map Code	Health Region	Overall	Hip Replacement	Knee Replacement	Hysterectomy	Percutaneous Coronary Intervention	Bypass Surgery
Saska	Itchewan						
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
Albert	a						
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
Britisł	n 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	Northeast	0.91	0.79	U.72 1.07	0.83	0.00	0.00
0900 Value	numeasi	0.00	0.90	1.07	0.00	0.00	0.00
Yukor		0.85	0.00	0.60	0.91	0.00	0.00
North	west l'erritories	0.99	0.95	1.00	1.08	0.00	0.00
Nuna	/ut	0.46	0.00	0.00	0.29	0.00	0.00
Canad	da				••		

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 2008	y Physicians B	Specialist Physicians 2008		
Map Code	Health Region	Rate per 100,000	95% CI	Rate per 100,000	95% CI	
Newfo	oundland 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 Nova	85	(61–108)	46	(29-64)	
1213 1217	Colchester East Hants	99 110	(78–120) (86–134)	52	(35–68)	
1214	Cape Breton	107	(89–134)	82	(66–97)	
1219	Capital	138	(126–149)	176	(163–188)	
New E	3runswick	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	(104–168)	62	(40-84)	
1306	Zone 6 (Bathurst area)	109	(86–132)	75	(56–94)	
Queb	ec	113	(111–115)	107	(104–109)	
2401	Bas-Saint-Laurent	139	(122–155)	89	(76–102)	
2402	Saguenay-Lac-Saint-Jean	113	(101–126)	74	(64-84)	
2403	Capitale-Nationale	153	(144-162)	174	(164-183)	
2404	Fotrie	90 140	(127–154)	123	(04–79)	
2406	Montréal	128	(123–133)	198	(191–204)	
2407	Outaouais	97	(86–107)	50	(43–57)	
2408	Abitibi-Témiscamingue	136	(117–155)	68	(55–81)	
2409	Côte-Nord	133	(110–156)	57	(42-72)	
2411	Gaspésie-Îles-de-la-Madeleine	179	(153–206)	75	(58–92)	
2412	Chaudière-Appalaches	105	(95–116)	66	(58–74)	
2413	Laval	87	(78–97)	69	(61–77)	
2414	Lanaudiere	81	(73-90)	51	(45-58)	
2410	Montérégie	88 07	(80-90)	40	(40-52)	
Ontor	inonteregie	94	(09-99)	00	(01-04)	
3501	Frie St. Clair	80 61	(84-88)	92	(91–94) (17. 59)	
3502	South West	82	(76_88)	101	(94–107)	
3503	Waterloo Wellington	76	(70-83)	57	(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	66	(62–70)	55	(51-59)	
3510	South East	102	(93–111)	104	(95-113)	
3512	North Simcoe Muskoka	84	(104-110) (75_02)	I∠/ 51	(121-133) (AA=57)	
3513	North Fast	88	(80-96)	61	(54-67)	
3514	North West	97	(85–110)	59	(50–69)	
Manit	oba	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	72	(54–90)	15	(6–23)	
4640	Central	85	(67–102)	15	(8–23)	
4645	Assiniboine	92	(69–114)	U	(0-0)	

		General/Family 2008	r Physicians B	Specialist Physicians 2008		
Map Code	Health Region	Rate per 100,000	95% CI	Rate per 100,000	95% CI	
Saska	tchewan	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)	
Albert	a	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)	
4827	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	n 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	/6	(70-83)	49	(44-54)	
5931	Richmond	86	(73-99)	63	(52-75)	
5932	Vancouver	102	(152-172)	261	(248-273)	
5933	North Shore	128	(110-142)	104	(33-74)	
5040		100	(142 - 107)	124	(113-130)	
5042	North Vancouver Island	126	(102-120)	66	(54-73)	
5051	Northwest	140	(115 169)	00	(31-80)	
5957	Northern Interior	190	(102_138)	20 57	(14-07)	
5953	Northeast	105	(80–129)	10	(3–18)	
Yukon		205	(156-254)	24	(7-41)	
North	west Territories	76	(50–102)	35	(17–52)	
Nuna	/ut	32	(12–52)	*	* *	
Canad	da	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	es LPNs	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 6 2 2	217	46	113	51	22	33			0	180
Nun.	1,000		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	Current Dollars (\$ '000,000)			Public Sector (%)	By Use of Funds (Percentage Distribution of \$ '000,000), 2007			2007	
	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 (\$ per	re by Use o 007	of Funds	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 (other health).

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. Non-Canadian 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.

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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. **Sources**

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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