

Report summary

Tracking heart disease and stroke in Canada 2009

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Introduction

Tracking Heart Disease and Stroke in Canada 2009 provides the most current and comprehensive picture of cardiovascular diseases (CVD), including heart diseases and stroke, in Canada. Written in collaboration with the Canadian Institute for Health Information (CIHI), Canadian Stroke Network (CSN), Heart and Stroke Foundation of Canada and Statistics Canada, it is the first report on CVD surveillance to be published by the Public Health Agency of Canada.

The main purpose of the report is to provide the Canadian government and CVD stakeholders with current knowledge to enable policy making decisions that improve the outcome of these diseases, and to increase the awareness of Canadians so that they can act to reduce their risk of developing CVD. The information presented in the report complements the Canadian Heart Health Strategy and Action Plan (CHHS-AP), which recommends increased gathering and dissemination of national data on CVD.

The report covers a broad range of topics, including the current prevalence and hospitalization and mortality rates of heart disease and stroke, the economic impact of CVD, the major risk factors and prevention. It also compares CVD rates between provinces and highlights health inequalities.

The report shows that, while mortality rates have declined, risk factors remain widespread, with nine in ten Canadians having at least one risk factor for CVD.

With the rise in diabetes and obesity and the aging of the Canadian population, CVD rates will likely increase in the future unless preventative action is taken.

Highlights

CVD has a major impact on individuals and their families, with many people reporting fair or poor perceived health and restricted activity levels which necessitated the need for help in daily activities. The development or resurfacing of anxiety disorders and depression associated with CVD may influence coping and health outcomes.

In 2005, overall one in three deaths was from CVD. While most of the deaths were in the older age-group, one in four people aged 45 to 64 years died from CVD. The pattern of mortality rates across the country is similar to the pattern of risk factors, with higher rates of risk factors and mortality for CVD in the Atlantic provinces compared to British Columbia.

In 2005/06, CVD was the most common diagnosis for hospitalization, accounting for 16.9% of all hospitalizations. Further, an estimated 65.7 million prescriptions were dispensed for the treatment of CVD, and Canadians made 34.6 million visits to community physicians (10.3% of all visits) for the management of these diseases. The second largest contributor to total health costs, only slightly behind musculoskeletal conditions, CVD cost Canadians \$22.2 billion in 2000, which

included \$7.6 billion in direct costs and \$14.6 billion in indirect costs.

Stroke

Approximately 300 000 Canadians are living with the effects of stroke. In the 75 plus age group, 7.1% of Canadians reported living with the effects of a stroke. A significant burden is placed on patients who experience stroke, as well as on their families and caregivers and on the healthcare system. More than half of all stroke survivors require some form of formal rehabilitation services.

Mortality rates due to stroke are on the decline and hospitalization rates for acute stroke have decreased since 1995, likely due to a reduction in risk factors and better treatment. In addition, the ability of health care professionals to diagnose stroke has improved significantly over the past twenty years with the increased availability of computed tomography (CT) and magnetic resonance imaging (MRI).

Heart disease

In 2007, 1.3 million Canadians (4.8% of the total population) reported living with heart disease. The proportion was 14.8% among those aged 65 to 74 years, and rose to 22.9% among seniors 75 years and older.

The rates of hospitalization for and deaths from ischemic heart disease and heart attack have been decreasing since 1970, and hospitalization and mortality rates for congestive heart failure have also begun to decrease. Between 1996 and 2005, 1564 heart transplantations and

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58 re-transplantations were carried out in Canada. Other surgical procedures for heart disease included coronary artery bypass grafting, coronary angioplasties, valve surgery and pacemaker implantation, with more of these surgeries performed on men than on women, particularly in those aged 70 to 79 years, reflecting in part that more men than women have heart disease in this age group.

Key risk factors

A genetic susceptibility, combined with unhealthy behaviours and environment, increases the risk of CVD.

Behavioural risks

The risk of CVD can be greatly reduced by not smoking, by exercising regularly, by managing stress effectively, by eating well and maintaining a healthy weight, and by the early recognition and treatment of high blood pressure, high cholesterol and diabetes. However, unhealthy behaviours which permeate our society continue to put Canadians at risk. According to the 2007 Statistics Canada Canadian Community Health Survey and the 2004 Statistics Canada Nutrition Survey:

- Almost one in six Canadians aged 15 or over smoked every day.
- About half of the population (49.5%) did not follow the recommended guidelines to be physically active for at least 30 minutes per day during leisure time, and this proportion of the population increased with age.
- Over half of the population aged 12 or over (56.2%) reported consuming less than five daily servings of vegetables and fruit, with the highest proportion in the 35 to 44 year age group.
- Of Canadians aged 31 to 50 years, 27.7% ate a high fat diet, consuming more than 35% of their total calories in the form of fat.
- More than half of Canadians aged 18 or more years (51%) reported weight in the overweight or obese range, with the 55 to 64 year age group having the highest proportion of individuals (62.2%) who were overweight or obese.

- Diabetes, a significant risk factor for CVD, was self-reported by 7.1% of adults, with the highest proportion with this condition in the 75 to 84 year age group, where it occurred among 23.6% of men and 19.2% of women. (from 2005 PHAC National Diabetes and Chronic Disease Surveillance System).
- High blood pressure was diagnosed by a health care professional in 18.8% of women and 17.3% of men, and the proportion of the population with this condition increased with age.

Socio-economic inequalities

- Diabetes was four times higher and the prevalence of daily smoking and high blood pressure was about twice as high for women in the lower income quintile compared to women in the highest income quintile.
- Several risk factors, including smoking, physical inactivity during leisure time, inadequate consumption of vegetables and fruits, high blood pressure and diabetes, were more common among both men and women in the lowest income quintile compared to those in the highest income quintile. The opposite was true for being overweight or obese or suffering from stress, which increased with increasing income.

Aboriginal populations

- First Nations adults were more likely to have diabetes, to smoke and to be overweight or obese than the general population.
- Inuit adults also had a much higher proportion of smokers than the general population.
- Individuals who self-identified as Métis were also more likely to smoke and to be overweight or obese compared to the general population.

Summary

This report provides a comprehensive look at progress in preventing CVD and their outcomes. The mortality rate for CVD has been decreasing for the past 30 years, probably due to both improved prevention and improved management. Lower rates of smoking, increased physical activity, healthier diets and better control of hypertension and blood cholesterol have all contributed to reducing the risk of developing heart disease and stroke.

However, we should not be complacent: Canadians still run a high risk of developing CVD. Nine out of ten individuals over the age of 20 years have at least one of the following risk factors: smoking, physical inactivity during leisure time, less than the recommended daily consumption of vegetables and fruit, stress, excess weight or obesity, high blood pressure, or diabetes. Two in five Canadians have three or more of these risk factors. In addition, socio-economic inequalities and high rates of smoking and obesity among First Nations, Inuit and Métis are of concern.

The risk of CVD increases with age, and our population is aging. In addition, we have increasing rates of obesity and diabetes, two conditions that greatly increase the risk of developing CVD. As a result, over the next two decades we expect to see an increase in the number of individuals developing heart disease or stroke among aging baby boomers. This will put a strain on the health care system, compromising the health of Canadians overall, and have a major economic impact. Prevention is the key to reversing this trend.

Tracking Heart Disease and Stroke in Canada 2009 is now available on the Public Health Agency of Canada website at:

<http://www.phac-aspc.gc.ca/publicat/2009/cvd-avc/index-eng.php>