

Common or chronic disorders

Chronic diseases represent a major and growing burden in our population. The most common chronic diseases include cardiovascular disease, diabetes, cancer, chronic obstructive pulmonary disease (COPD), asthma and mental illness. This section of the report describes the comparative rates and mortality for some major chronic diseases, all of which have risk factors that may be modifiable through social, environmental, and lifestyle changes and many of which are preventable. It also presents information on conditions such as sexually transmitted infections and injuries, which are largely preventable.

Cardiovascular Disease: Heart Attack and Stroke

Cardiovascular disease, which includes heart attacks (acute myocardial infarction or AMI) and stroke, is one of the leading causes of death among Canadians and the underlying cause of death for one in three Canadians.²

Heart attack risk

factors:

- smoking
- stress
- diabetes
- high blood pressure
- abdominal obesity
- lack of exercise
- excessive alcohol intake
- low fruit and vegetable consumption
- blood lipoprotein ratio: APOA1:APOB.

While cardiovascular disease is a leading cause of death, it may be prevented or its onset delayed. Approximately 80 per cent of the population has at least one modifiable risk factor for cardiovascular disease². Sedentary lifestyles and a diet high in saturated fats are associated both with obesity and cardiovascular disease. Recent research has shown that nine key risk factors – most of which can be influenced by healthy living – are associated with nine out of 10 heart attacks (see text box)³.

Mortality rates for heart attack

In Manitoba in 2001, the age-standardized mortality rate for heart attack was 47.6 deaths per 100,000 population (Figure 5a). The rate for men was more than twice that for women (69.0 deaths/100,000 population for men compared to 30.9 for women).

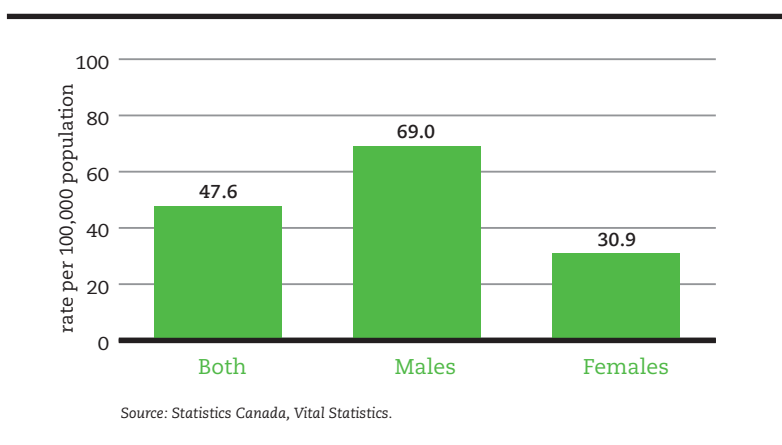


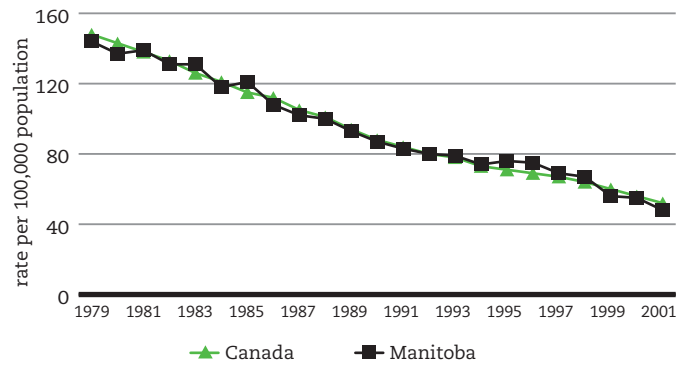
Figure 5a. Age-standardized Mortality Rate for AMI by Sex, Manitoba, 2001.

² The Growing Burden of Heart Disease and Stroke in Canada, 2003

³ Effects of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study" Yusuf et al, Lancet 2004, 346(9437)

Since 1979, the age-standardized mortality rate for heart attack, in both Manitoba and Canada, has declined dramatically from about 140 deaths per 100,000 to about 50 (Figure 5b).

Figure 5b.
Age-standardized Mortality Rate for AMI, Manitoba and Canada, 1979 - 2001.

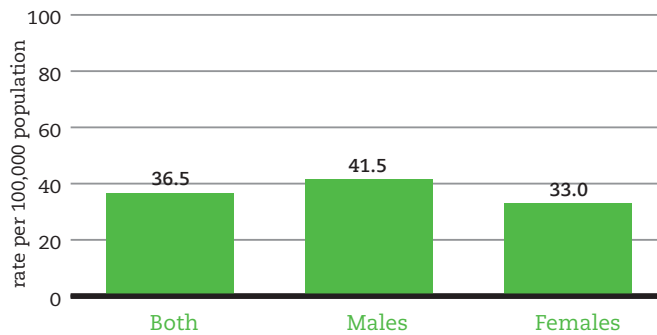


Source: Statistics Canada, Vital Statistics.

Mortality rates for stroke

In 2001, Manitoba's age-standardized mortality rate for stroke was 36.5 deaths per 100,000 population (Figure 6a). Unlike the mortality rate of heart attack, deaths due to stroke are not more common among men; male and female mortality rates are relatively similar.

Figure 6a.
Age-standardized Mortality Rate for Stroke by Sex, Manitoba, 2001.



Source: Statistics Canada, Vital Statistics.

As observed for heart attack, the standardized mortality rate for stroke has declined over time from about 65 deaths due to stroke per 100,000 population in 1979, to about 35 deaths per 100,000 population in 2001 (Figure 6b).

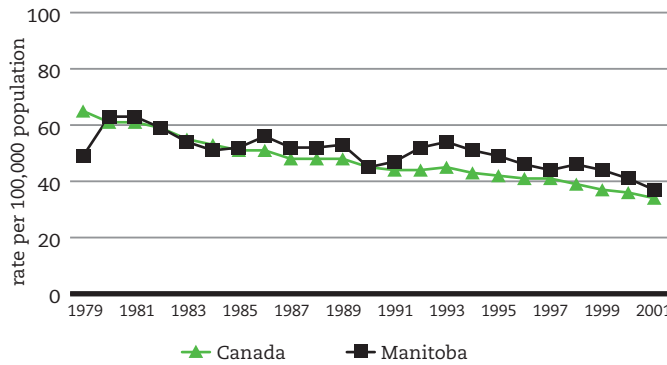


Figure 6b. Age-standardized Mortality Rate for Stroke Manitoba and Canada, 1979-2001.

Source: Statistics Canada, Vital Statistics

Cancer

Lung cancer incidence and mortality

Lung cancer is among the most common forms of cancer in Canada, and the most frequent cause of cancer deaths with 18,900 deaths in 2004⁴. In Manitoba, about 60 new cases of lung cancer are diagnosed every year per 100,000 population (Figure 7a). This rate is much higher for men than women (76.7 new cases per 100,000 population for men compared to 46.6 for women), with the male rate about 1.6 times higher than that for females.

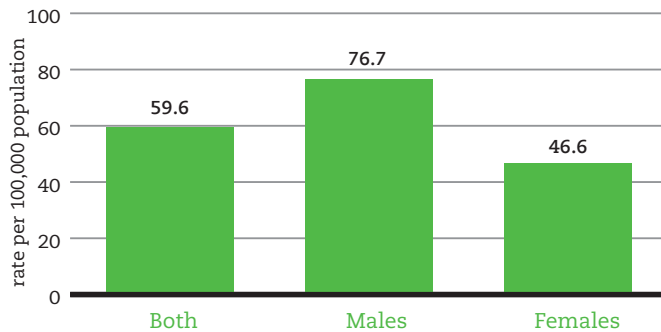


Figure 7a. Age-standardized Incidence of Lung Cancer, by Sex, Manitoba 2000.

Source: Statistics Canada, Canadian Cancer Registry.

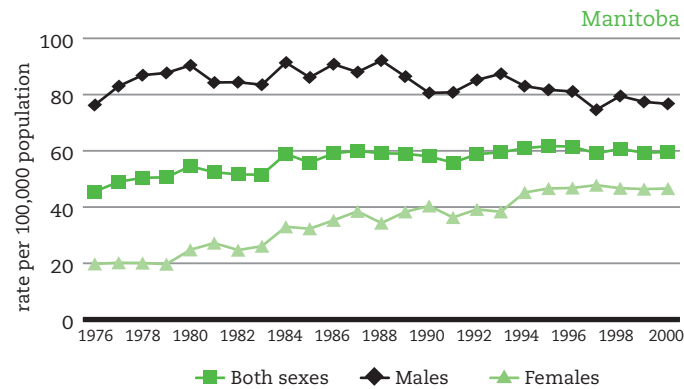
⁴ Canadian Cancer Statistics, 2004

Although the time trend in Figure 7b shows an increase in the number of newly diagnosed cases of lung cancer between 1976 and 2000, the number of new cases of lung cancer, both in Canada and Manitoba, has leveled off since the mid-1980s.

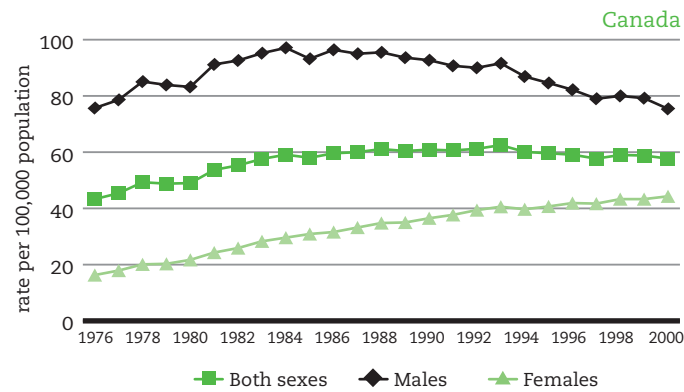
In any given year, more men than women will be diagnosed with lung cancer. However, looking at the number of new cases by gender over time, there is a large increase in lung cancer diagnoses among women (both nationally and provincially), from about 15 to 20 per 100,000 new cases a year in 1976 to approximately 45 per 100,000 new cases per year in 2000.

Readers should be cautious when interpreting these data. See data clarification (page 61).

Figure 7b.
Age-standardized Incidence of Lung Cancer, by Sex, Manitoba and Canada, 1976-2000.

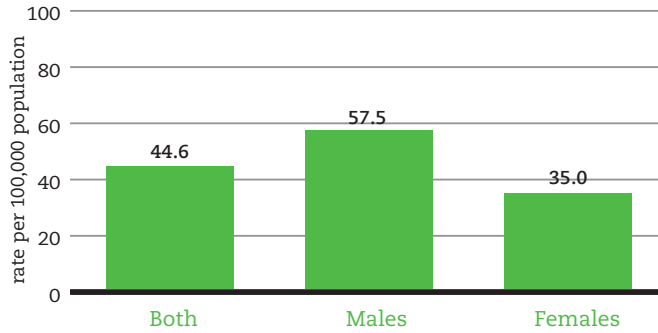


Source: Statistics Canada, Canadian Cancer Registry.



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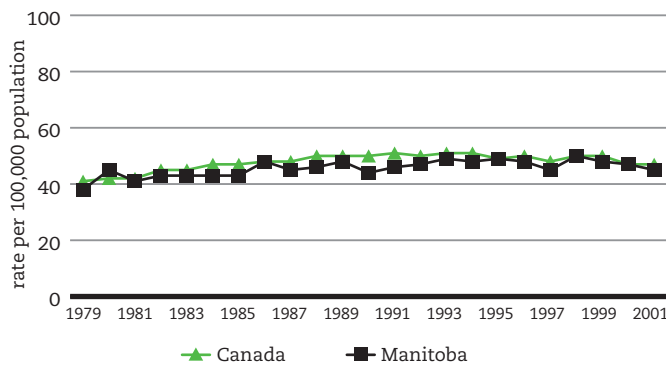
As with the number of newly diagnosed lung cancer cases, the age-standardized mortality rate for lung cancer is higher for men than women (Figure 7c). In 2001, there were 58 deaths from lung cancer per 100,000 population among Manitoba males compared to 35 deaths per 100,000 population for females.



Source: Statistics Canada, Vital Statistics.

Figure 7c.
Age-standardized Mortality Rate for Lung Cancer, by Sex, Manitoba, 2001.

Looking at deaths due to lung cancer over time, since the mid-1980s, the age-standardized mortality rate for lung cancer has leveled off for both Canada and Manitoba at approximately 45 deaths per 100,000 population (Figure 7d).



Source: Statistics Canada, Vital Statistics.

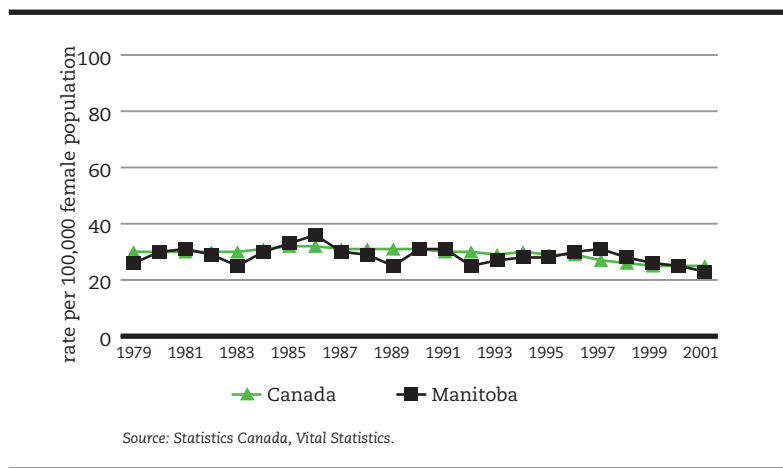
Figure 7d.
Age-standardized Mortality Rate for Lung Cancer, Manitoba and Canada, 1979-2001.

Breast cancer

Breast cancer is the most common cancer affecting women in Canada and has the second highest mortality rate, behind lung cancer⁵. In 2001, the age-standardized mortality rate for female breast cancer was 23 deaths per 100,000 Manitoban women (25 deaths per 100,000 for Canadian women).

Over time, from a national perspective, deaths due to breast cancer in women have declined slightly from about 30 deaths per 100,000 population in 1979 to about 25 in 2001 (Figure 8). The Manitoba rate has been more variable.

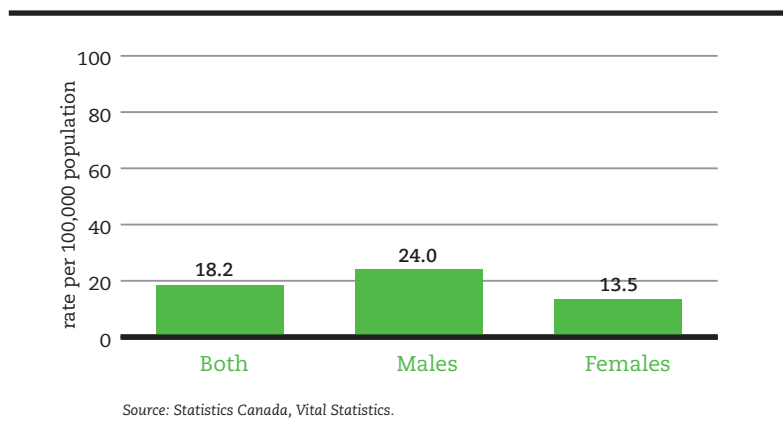
Figure 8.
Age-standardized Mortality Rate for Female Breast Cancer, Manitoba and Canada, 1979-2001.



Colorectal cancer

Colorectal cancer is the second leading cause of cancer deaths in Canada.⁵ Figure 9a shows the age-standardized mortality rates for colorectal cancer in Manitoba. The mortality rate is almost twice as high for men as it is for women – 24 deaths due to colorectal cancer per 100,000 population for men compared to 13.5 deaths for women. This rate has decreased steadily over time, both nationally and provincially, from 24 to 26 deaths per 100,000 population in 1979, to about 18 deaths in 2001 (Figure 9b).

Figure 9a.
Age-standardized Mortality Rate for Colorectal Cancer, by Sex, Manitoba, 2001.



⁵ National Cancer Institute of Canada: Canadian Cancer Statistics, 2004

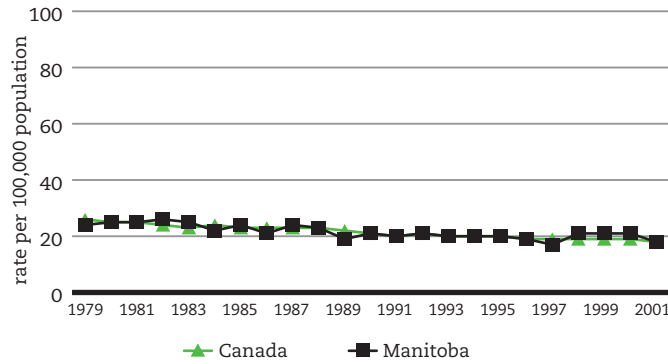


Figure 9b. Age-standardized Mortality Rate for Colorectal Cancer, Manitoba and Canada, 1979-2001.

Source: Statistics Canada, Vital Statistics.

Diabetes

When considering progress with respect to health conditions, there is a tendency to focus on incidence (the number of newly diagnosed cases) and mortality rates (the number of people dying from a condition). However, the number of people living with a condition (prevalence) is also an important indicator.

A high prevalence of a chronic disease does not necessarily mean more people are getting the disease. It may mean that we are doing a better job of identifying people who have the disease and/or treating the disease so that those who have it are living longer. Regardless of the reason, information on prevalence is important to determine the need for health services aimed at addressing a specific health condition.

Figure 10a shows the age-standardized prevalence of diabetes in Manitoba and Canada, by gender. Almost six per cent of Manitoba males over the age of 20 are living with diabetes and about five per cent of Manitoba women. The comparable Canadian values are 5.2 per cent of Canadian males and 4.4 percent of Canadian females.

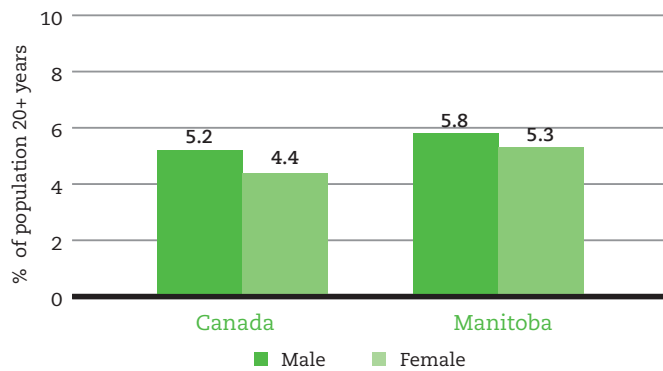
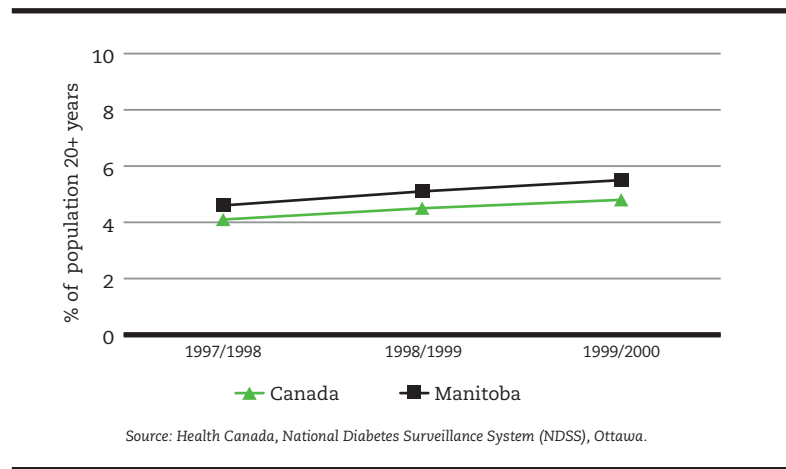


Figure 10a. Age-standardized Per cent of Adult Population who have Diabetes, by Sex, Manitoba and Canada, 1999/2000.

Source: Health Canada, National Diabetes Surveillance System (NDSS), Ottawa.

Over the relatively brief three-year period from 1997-1998 to 1999-2000, the proportion of adults with diabetes increased from 4.1 per cent to 4.8 per cent in Canada and from 4.6 per cent to 5.5 per cent in Manitoba (Figure 10b). This higher prevalence of diabetes in Manitoba compared to Canada may be due to the higher proportion of First Nations people in Manitoba (approximately 14 per cent compared to about three per cent for Canada⁶), as this group tends to have an increased rate of diabetes. Readers should be cautious when interpreting these data. See data clarification (page 61).

Figure 10b.
Age and Sex-
standardized
Per cent of
Adult
Population
who have
Diabetes,
Manitoba and
Canada,
1997/98 -
1999/00.



Mental Health

Mental health is fundamental to an individual's overall health and the health of communities. It is essential to personal well-being and the ability to lead a healthy, balanced and productive life. Mental disorders often occur in younger people and their frequency and chronic course make them a notable cause of disability.

According to the World Health Organization, five of the 10 leading causes of disability are related to mental disorders. It predicts that in less than 20 years, depression will be the second-leading cause of disability in the world⁷. Two major areas of concern, depression and suicide, are discussed below.

Depression

Figure 11a shows an estimate of the prevalence of depression in Manitoba. These data were derived from the Canadian Community Health Survey (2000). In the 12 months preceding the survey, significantly more women than men were likely to be depressed (eight per cent of women and five per cent of men).

⁶ Data from 2001 Census

⁷ World Health Organization. *Setting the WHO agenda for mental health*. Bull World Health Organ 2000; 78:500 [LO]Census population 0-74: 1,078,901. Overall rate: 375.4/100,000

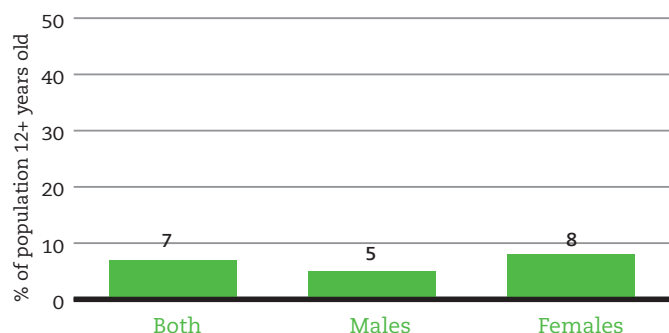


Figure 11a. Per cent who are Likely Depressed, Manitoba, 2000.

Source: Statistics Canada, Canadian Community Health Survey, 2000.

Notes:

1. The percentage for males was statistically significantly different than the percentage for females

Again, it is important to note that the CCHS gathers information on a representative sample of individuals aged 12 years and older who live in private households. However, this sample excludes some important groups of individuals and may have implications for interpretation of the data. Not included in the survey are Manitobans who live on First Nations reserves and Crown lands, residents of institutions (such as personal care homes), full-time members of the Canadian Armed Forces and residents of some remote regions.

Potential years of life lost is the number of years of life lost when a person dies prematurely.

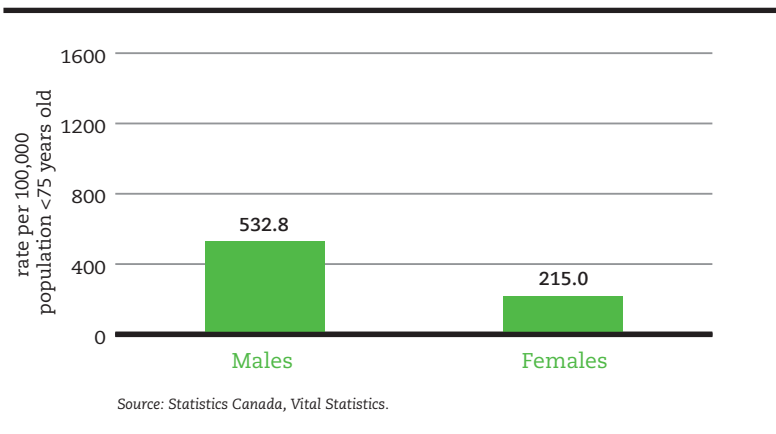
The value is large for those conditions that are common and that affect younger people.

Potential years of life lost due to suicide

Potential years of life lost (PYLL) is a way of looking at the impact of a condition on the population. PYLL is the number of years of life lost when a person dies prematurely (a premature death is defined as one occurring before 75 years of age). The value for potential years of life lost is large for those conditions that are common and that affect younger people. For rare conditions, or those that affect older individuals, the number of potential years of life lost is smaller.

The most extreme outcome of depression is suicide. Figure 11b shows the rate of potential years of life lost in Manitoba, due to suicide, in 2001. The overall rate of PYLL was 375 years (for both genders). In other words, about 4,028 potential years of life were lost in Manitoba in 2001 due to suicide. The PYLL rate for males is more than double that for females: 533 years per 100,000 population for Manitoba males younger than 75 years of age, females 215. This higher rate of PYLL due to suicide for males suggests that either more males commit suicide, or that they do so at a younger age than do females.

Figure 11b.
Rate of Potential Years of Life Lost due to Suicide, Manitoba, 2001.



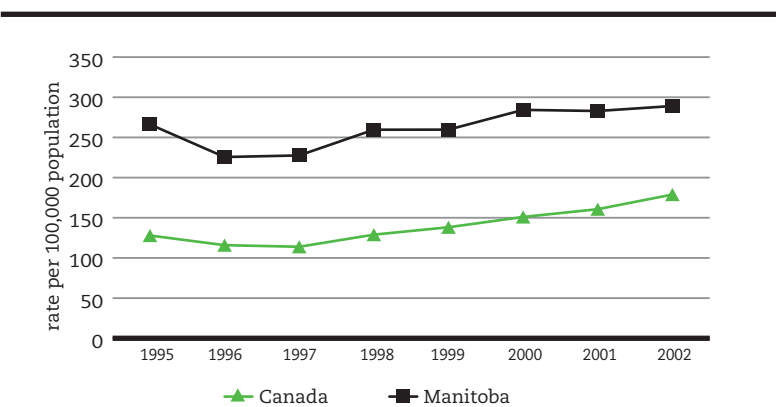
Sexually Transmitted Infections

Sexually transmitted infections include diseases such as gonorrhea, chlamydia, syphilis and HIV. These are important disease prevention targets as the diseases and their complications (such as infertility, pelvic inflammatory disease or other serious illness) are serious. This report includes only chlamydia.

Chlamydia

Figure 12 shows the incidence of chlamydia, a common sexually transmitted infection, for Manitoba and Canada between 1995 and 2002. Incidence rates are increasing both provincially and nationally; the Manitoba incidence in 2002 was 289 new cases⁸ per 100,000 (the Canadian rate, approximately 179 per 100,000). Over time, the Manitoba rate has consistently been higher than the national rate. The difference between the Manitoba and national rates may in part be due to differing age distributions, and levels of diagnosis and reporting.

Figure 12.
Chlamydia Incidence (Crude Rates), Manitoba and Canada, 1995 - 2002.



Source: Source: Sexual Health and Sexually Transmitted Infections Section, Community Acquired Infections Division, Centre for Infectious Disease Prevention and Control, Health Canada.

Notes:

1. 2001 and 2002 rates are considered preliminary.

⁸ These represent cases not individuals. An individual may be tested and test positive more than once for chlamydia. Each test would be identified as a case.

Unintentional Injuries

The final category of conditions presented is unintentional injury (that is, injuries that do not include suicide or violence inflicted by others). As with suicide, injury data is commonly represented using potential years of life lost (PYLL). Figure 13 shows the PYLL due to unintentional injuries for Manitoba and Canada in 2001. Males in Manitoba and Canada appear to have a much higher PYLL rate due to unintentional injury than females – almost three times higher. Manitoba's unintentional injury PYLL is higher than the Canadian values both for males and females, as well as overall (938 vs. 585 years per 100,000 population aged less than 75 years).

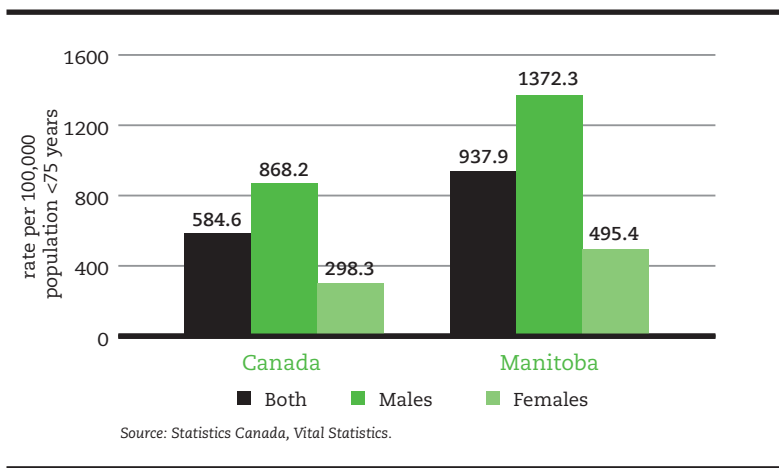


Figure 13. Rate of Potential Years of Life Lost due to Unintentional Injury, Manitoba and Canada, 2001.

Activities that can prevent or delay the onset of chronic disease include:

- eating healthy foods
- stopping smoking
- drinking less alcohol
- being more active.

For families:

- watching less television
- going for walks or bike rides
- preparing and eating meals together.

Maintaining good health

With most diseases, modifiable risk factors play an important role. A considerable portion of chronic diseases can be prevented or their onset delayed by choosing certain activities or behaviours over others. Recent international research has provided even stronger evidence that stopping smoking, eating healthy foods and being physically active can greatly lower the risk of heart attacks, diabetes and some cancers.

Previously, this report examined the health of Manitoba's population as a whole by looking at life expectancy, infant mortality and low birth weight. The following indicators also can be used to gauge the overall health and well-being of Manitobans. These three indicators are largely influenced by social and other environmental factors, as well as by personal behaviours:

- Body Mass Index (BMI)
- physical activity
- smoking