## Behaviour <br> and Health

| Chapter <br> Contents |  |
| :--- | :--- |
| Key Findings | 1 |
| Introduction | 1 |
| Self-reported <br> Behaviour | 2 |
| Self-reported <br> Health | $\mathbf{1 9}$ |
| Self-reported <br> Health Utiliza- <br> tion | 23 |
| Definitions | 26 |
| Data Sources | 27 |
| References | 27 |

## Key Findings

The Canadian Community Health Survey (CCHS) collects information regarding health-related behaviours, health status and health care utilization from respondents 12 years and older. Results from the survey years 2000/2001 to $2007 / 2008$ were reported. Over this time period the following key findings were seen.

Saskatchewan respondents who reported heavy drinking episodes declined slightly, but not significantly, from 19.1 percent in to 18.5 percent.

Approximately 40 percent of respondents were within normal weight range. The percentage of respondents within the obese range increased significantly from 20.6 percent to 24.1 percent.

The proportion of respondents determined to have a moderate or active level
of physical activity increased, but not significantly, from 43.8 percent to 46.6 percent.

Adults (20 years and older) reporting that they are current smokers decreased, but not significantly, from 28.5 percent to 26.7 percent. The proportion of teens (12 -19 years) who are current smokers also decreased, but not significantly, from 20.4 percent to 16.6 percent.

The proportion of respondents reporting having good, very good or excellent health remained fairly constant at approximately 87 percent.

The proportion of respondents reporting having contact with a medical doctor decreased, but not significantly, from 83.2 percent to 79.3 percent.

## Introduction

This chapter describes self-reported health, health utilization and behaviours relevant to public health by the Saskatchewan population as collected via the Canadian Community Health Survey (CCHS).

The CCHS is a cross-sectional survey conducted by Statistics Canada to provide estimates of health determinants, health status and health system utilization for the health regions across Canada (Statistic Canada, 2004). The CCHS began collecting information in 2000 with a target population aged 12 years and older of household residents.

It must be noted that this survey does
not include homeless people or individuals living in institutions, First Nations people living on Reserves or members of the Armed Forces. It has been estimated that these populations represent less than three percent of the target population; however, for provinces such as Saskatchewan, the exclusion of First Nation Reserves can be a significant limitation for generalizing the CCHS results.

Throughout the document, the three northern health regions have been combined due to small numbers for survey response in each region.

Definitions and references are available at the end of the chapter.

## Self-Reported Behaviour

The Canadian Community Health Survey (CCHS), includes a number of questions on behaviours related to health. The health-related behaviours were grouped into the following categories: alcohol use, nutrition, physical activity and tobacco usage.

These four categories are considered modifiable health risk factors for chronic diseases.

## Alcohol use:

The CCHS self-reported alcohol use indicators were assessed; current drinkers, heavy drinking episodes and underage drinking. The indicator descriptions and detailed findings are presented on page 3 with Figures 10.1-10.3 for current drinkers, page 4 with Figures 10.4-10.6 for heavy drinking episodes and page 5 with Figures 10.7 10.8 for underage drinking.

The key findings are as follows:
The percentages for current drinkers were similar for Saskatchewan and Canada, and remained fairly constant over the survey time period from 2000/2001 to 2007/2008 (Figure 10.1). For those who engage in heavy drinking episodes, the Saskatchewan rate remained fairly constant and was significantly higher than the Canadian rate for all years except 2003 (Figure 10.4). Underage drinking was significantly higher for Saskatchewan adolescents compared to the national rate (Figure 10.7)

The age-specific percentages for the four age groups remained relatively constant over the sur-

Table 10-1: Age-specific percentages for current drinkers and heavy drinking episodes, 2007/08

| Age (years) | Current <br> Drinkers (\%) | Heavy drinking <br> Episodes (\%) |
| :--- | :--- | :--- |
| $12-19$ | 55.4 | 20 |
| $20-44$ | 87.3 | 29.1 |
| $45-64$ | 80.9 | 13.2 |
| $65+$ | 63 | 2.6 |

vey time period for both current drinkers and heavy drinking episodes, with those aged 20-44 years being the highest in both categories (Figure 10.2, 10.4 and Table 10-1). While those 65 years and over continue to report alcohol consumption, the percentage of those reporting heavy drinking was significantly lower from the other age groups.

For both current drinkers and heavy drinking episodes, male and female percentages stayed relatively constant over the survey period (Figure 10.3 and 10.6). The males rates were significantly higher than for females for both indicators; however, rates of heavy drinking episodes for males were over double the rates for females for all the survey years. There was no difference between the sexes for underage drinkers (Figure 10.8).

Current drinkers: From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported consuming a drink of any alcoholic beverage in the past year, termed "current drinkers", remained fairly constant for Canada (76 percent) and Saskatchewan ( 77 percent). The difference was not statistically significant (Figure 10.1).

Self-reported rates varied across age groups over the survey time period, but remained relatively constant within each group, except for a nonsignificant decline in the teen population (Figure 10.2). A significantly higher proportion of adults (20-44 years) were current drinkers.

In 2007/08, the age-specific percentages for Saskatchewan current drinkers were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-55.4 \% \\
& 20-44 \text { years }-87.3 \% \\
& 45-64 \text { years }-80.9 \% \\
& 65+\text { years }-63.0 \%
\end{aligned}
$$

Sex-specific percentages of Saskatchewan residents were significantly higher in males than females over the survey period. The proportions for males remained relatively stable over the survey time period; however the percentages for females decreased slightly but not significantly during that same time period (Figure 10.3).

In $2007 / 08$, the self-reported percentages of current drinkers was 77.0 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province with the exception of Heartland, Prince Albert Parkland and Sunrise, all being significantly lower.

Fig: 10.1
Current Drinkers: Percentage self-reported (12+ years of age) who had a drink of any alcoholic beverage in the last twelve months in Saskatchewan compared to Canada, CCHS, 2000/2001-2007/2008


Fig: 10.2 Current Drinkers: Proportion of people reported had a drink of any alcoholic beverage in the past twelve months in Saskatchewan by age, CCHS, 2000/2001-2007/2008


Fig: 10.3
Current Drinkers: Percentage self-reported (12+ years of age) who had a drink of any alcoholic beverage in the last twelve months in Saskatchewan by sex, CCHS, 2000/2001-2007/2008


Heavy drinking episodes: From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported having heavy drinking episodes consisting of five or more drinks on one occasion per month in the past 12 months was significantly higher in Saskatchewan than for Canada, with the exception of 2003. The proportions dropped slightly but not significantly over the survey years for Saskatchewan with the proportion of residents reporting heavy drinking episodes declining from 19.1 percent in 2000/01 to 18.5 percent in $2007 / 08$. During the same time period, the Canadian proportion increased from 15.5 percent to 16.7 percent (Figure 10.4).

Self-reported rates varied across age groups over the survey time period but remained relatively consant within each age group (Figure 10.5). A significantly higher proportion of adults aged 20-44 years reported engaging in heavy drinking. Consistently throughout the survey years, one in five teenagers (12-19 years) reported drinking more than five drinks on one occasion per month in the past twelve months.

In $2007 / 08$, the age-specific percentages for Saskatchewan residents reporting heavy drinking episodes were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-20.7 \% \\
& 20-44 \text { years }-29.1 \% \\
& 45-64 \text { years }-13.2 \% \\
& 65+\text { years }-2.6 \%
\end{aligned}
$$

Sex-specific percentages of Saskatchewan residents were significantly higher in males than found for females over the survey period. The rates fluctuated for both sexes over the time period but not significantly (Figure 10.6).

In 2007/08, the self-reported percentage was 18.5 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province with the exception of Sunrise, Cypress and Kelsey Trail health regions being significantly lower and Sun Country and the combined northern health regions being significantly higher. .

Fig: 10.4 Heavy Drinking Episodes: Self reported rates of people (12+ years of age) who had five or more drinks on one occasion per month in the last twelve months in Saskatchewan compared to Canada, CCHS, 2000/2001 - 2007/2008


Fig: 10.5 Heavy Drinking Episodes: Self reported rates of people (12+ years of age) who had 5 or more drinks on one occasion per month in the last twelve months in Saskatchewan by age, CCHS, 2000/2001-2007/2008


| $\square 2000 / 01$ |
| :--- |
| $\square 2003$ |
| $\square 2005$ |
| $\square 2007-08$ |

Fig: 10.6 Heavy Drinking Episodes: Self reported rates of people (12+ years of age) who had 5 or more drinks on one occasion per month in the last twelve months in Saskatchewan by sex, CCHS, 2000/2001-2007/2008


Underage drinking: From 2000/01 to 2007/08, the proportion of adolescent CCHS respondents (1218 years) who reported consuming alcohol in the past 12 months was significantly higher in Saskatchewan than that found for Canada. The proportions dropped significantly over the time period for Saskatchewan declining from 58.8 percent in $2000 / 01$ to 50.4 percent in $2007 / 08$. During the same time period, the Canadian proportion decreased from 48.7 percent to 44.2 percent (Figure 10.7).

Sex-specific percentages of Saskatchewan adolescent residents were similar for males and females and the rates significantly declined over the survey time period (Figure 10.8).

In 2007/08, the self-reported percentages for underage drinking was 50.4 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the provincial rate.

Fig: 10.7
Underage Alcohol Drinking: Proportion of self reported adolescent (1218 years of age) in the last twelve months in Saskatchewan compared to Canada, CCHS, 2000/2001-2007/2008


Fig: 10.8
Underage Alcohol Drinking: Proportion of self reported adolescent (1218 years of age) in the last twelve months in Saskatchewan by sex, CCHS, 2000/2001-2007/2008


Nutrition: BMI The CCHS Body Mass Index (BMI) indicators were assessed for adults and adolescents. BMI is a measure of body weight in relation to height for most people aged 20 to 65 years and is calculated as weight in kilograms divided by height in metres squared ( $\mathrm{Kg} / \mathrm{m} 2$ ). BMI has the following categories for adults:

Below 18.5 - Underweight
18.5-24.9 - Normal
25.0-29.9 - Overweight
30.0-39.9 - Obese

Above 40.0 - Very obese
The obese and very obese categories were combined to include BMI greater or equal to 30 .

It must be noted that the CCHS BMI indicators are based on self-reported height and weight.

The indicator descriptions and detailed findings are presented on pages 7-9 with Figures 10.9 10.14 for adults and page 9 with Figures 10.15 16 for adolescents.

The key findings are as follows:

The percentages for normal and overweight adults for Saskatchewan remained fairly constant over the survey period; however, for those adults classified as obese, the rates significantly increased (Figure 10.9). For adolescents, no significant changes were found in the overweight or obese categories (Figure 10.15).

The age-specific overweight or obese percentages for the five age groups remained relatively constant over the survey time period for both adults and adolescents, with those aged 45-64 years being the highest (Figure 10.13, 10.15 and Table 10-2).

Table 10-2: Age-specific percentages for overweight/ obese, 2007/08

| Age <br> (years) | Over- <br> weight (\%) | Obese (\%) | Overweight/ <br> Obese (\%) |
| :--- | :--- | :--- | :--- |
| $12-17$ | N/A | N/A | 18.8 |
| $18-34$ | 31.6 | 16.6 | 48.2 |
| $35-44$ | 34.6 | 25.0 | 59.6 |
| $45-64$ | 35.7 | 32.2 | 67.9 |
| $65+$ | 36.4 | 19.8 | 56.3 |

When age-specific percentages for overweight or obese respondents were analysed separately, the sampling variability for the adolescent category prohibited comparison. For those aged 18 years and over who were overweight, the percentages generally increased with each successive age category; however for those classified as obese, seniors aged 65 years and over tended to have significantly lower percentages than the previous age category (Figure 10.10).

For all age categories, males had higher overweight or obese percentages than females; however, for the obese category only the difference was not statistically significant (Figure 10.11 and Figure 10.16).

Adults: From 2003 to 2007/08, the proportion of Saskatchewan CCHS adult respondents (18 years and older) who were normal weight, underweight, overweight, or obese varied (Figure 10.9).

Approximately 40 percent of the respondents were within the normal weight category and that decreased slightly but not significantly, from 40.7 percent in 2003 to 39.2 percent in $2007 / 08$. The overall proportions of underweight adults ranged around 2 percent.

Approximately 36 percent of respondents were in the overweight range and that decreased slightly, but not significantly, over the survey period from 36.7 percent in 2003 to 34.5 percent in 2007/08. This was significantly higher for all survey years than for the Canadian population at approximately 34 percent.

Approximately 22 percent of adult respondents were in the obese weight range and that increased significantly from 20.6 in 2003 to 24.1 in 2007/08. This was significantly higher than for the Canadian population at approximately 16 percent.

Proportions of adults found to be overweight or obese tended to increase with advancing age (Figure 10.10). For both weight categories, the lowest percentages were found in the 18-34 year age group. The rates of overweight adults tended to generally increase significantly with advancing age. The proportions of obese adults tended to increase with the advancing age until the 45-64 year age group. The proportion in seniors (65+ years) fell between the highest and lowest percentages across the age groups.

In 2007/08, the age-specific overweight percentages of Saskatchewan adult residents were found for the following age groups:
$18-34$ years - $31.6 \%$
35-44 years - 34.6\%
45-64 years - 35.7\%
$65+$ years $-36.4 \%$

Obese age-specific percentages were found for the following age groups:

$$
\begin{aligned}
& 18-34 \text { years }-16.6 \% \\
& 35-44 \text { years }-25.0 \% \\
& 45-64 \text { years }-32.2 \% \\
& 65+\text { years }-19.8 \%
\end{aligned}
$$

Fig: $10.9 \quad$ Prevalence of self-reported normal weight (BMI 18.5-24.9), overweight (BMI 25.0-29.9), obesity (BMI $\geq 30.0$ ) in adults ( $18+$ years), Saskatchewan, CCHS Cycles, 2.1 (2003), 3.1 (2005), 4.1/5.1 (2007/2008).


Fig: 10.10 Prevalence of self-reported overweight (BMI 25.0-29.9), obesity (BMI $\geq$ 30.0) in adults (18+ years), Saskatchewan, by Age group, CCHS Cycles, 2000/01, 2003, 2007/2008.


Age group by Year

Fig: 10.11 Prevalence of self-reported overweight (BMI 25.0-29.9), obesity (BMI $\geq$


Sex-specific percentages varied by sex and weight category (Figure 10.11). Percentages of overweight adults were significantly higher in males than in females, and both sexes had slight, but not significant, decreases in percentages across the survey years. The proportions of obese adults tended to be higher in males than in females; however, the difference was only significant in 2005. The percentages slightly, but not significantly, increased over the survey years.

In 2007/08, the proportion found to be overweight in Saskatchewan was 34.5 percent. Most Regional Health Authority percentages did not differ significantly from the province with the exception of Regina Qu'Appelle and Saskatoon being significantly lower and Sun Country, Prince Albert Parkland and Prairie North being significantly higher.

In $2007 / 08$, the percent found to be obese in Saskatchewan was 24.1 percent. Most Regional Health Authority percentages did not differ significantly from the province with the exception of the combined northern regions being significantly higher.

When the categories of overweight and obese were combined, approximately 58 percent of Saskatchewan adults (18 years and older) fell into this combined category (Figure 10.12). Percentages increased slightly, but not significantly, over the survey years, from 57.2 percent in 2003 to 58.5 percent in 2007/08 and were significantly higher than the respective Canadian percentages, from 49.6 percent to 51.2 percent, respectively.

The combined overweight and obese category percentages varied across age groups over the survey time period 2003 to $2007 / 2008$. The age-specific rates remained relatively constant over the survey period (Figure 10.13). The lowest and highest rates were in the 18-34 and 45-64 year age groups, respectively with the proportions in seniors (65+ years) significantly lower than those in 45-64 year age group for all years.

In 2007/08, the age-specific percentages of Saskatchewan residents that were classified to be in the combined category of overweight or obese were found for the following age groups:

18-34 years - 48.2\%
35-44 years - $59.6 \%$

Fig: 10.12 Prevalence rates of overweight (BMI 25.0-29.9) or obesity (BMI $\geq 30.0$ ) in 18 year and older, Canada and Saskatchewan, CCHS 2003, 2005, 2007/2008.


CCHS year

Fig: 10.13 Prevalence of self-reported rates overweight or obese (BMI $\geq 25.0$ ) in adult (18+ years), Saskatchewan, by Age group, CCHS, 2003, 2005, 2007/2008.


Age group by Year(s)

Fig: 10.14 Prevalence of self-reported rates overweight or obese (BMI $\geq 25.0$ ) in adult (18+ years), Saskatchewan, by Sex, CCHS, 2003, 2005, 2007/2008.


$$
\begin{aligned}
& 45-64 \text { years }-67.9 \% \\
& 65+\text { years }-56.3 \%
\end{aligned}
$$

Sex-specific percentages were significantly higher in males than found for females over the survey period. The proportions fluctuated for both sexes over the time period but no significant changes were seen (Figure 10.14).

In $2007 / 08$, the proportion of adult residents classified to be in the combined overweight and obese category was 58.5 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of Sunrise Health Region being significantly lower and the combined northern health regions and Prince Albert Parkland being significantly higher.

Adolescents: The proportion of Saskatchewan adolescents (12-17 years) in the combined categories of overweight and obese decreased slightly but not significantly from 19.8 percent in 2005 to 18.8 percent in 2009/10 and were not significantly different from the Canadian percentages (Figure 10.15).

Sex-specific percentages of overweight or obese adolescents were higher in males than for females over the survey period, but not significantly (Figure 10.16). The rates fluctuated slightly for both sexes over the time period but no significant changes were seen.

Fig: $10.15 \quad$ Prevalence rates of overweight (BMI 25.0-29.9) or obesity (BMI $\geq 30.0$ ) in aldolescents (12-17), Canada and Saskatchewan, CCHS 2005, 2007/2008,


CCHS year

Fig: 10.16 Prevalence of adolescents (12-17) that are overweight or obese (BMI 225.0), Saskatchewan, CCHS, 2005, 2007/2008.


## Nutrition: Fruit and Vegetable Consumption

Determining fruit and vegetable consumption is a way of assessing diet. A diet high in fruits and vegetables is linked to good health. The CCHS did not include these questions in the 2005 survey.

From 2000/01 to 2007/08, the proportion of CCHS respondents ( 12 years and older) who reported consuming fruits and vegetables five or more times daily increased significantly for Canada and Saskatchewan. The Saskatchewan proportion increased from 30.1 percent to 39.2 percent and the Canadian proportion increased from 37.5 percent to 43.7 percent, with the difference between Saskatchewan and Canadian proportions being significant all years (Figure 10.17).

Self-reported percentages varied across age groups over the survey time period. The proportions were high in the 12-19 year age group, followed by a decrease in the 20-44 year age group, then increased to the 45 years and over age groups, with the 65 years and older age group having the highest proportions (Figure 10.18).

In 2007/08, the age-specific percentages of Saskatchewan residents who reported consuming fruits and vegetables five or more times daily were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-43.4 \% \\
& 20-44 \text { years }-36.7 \% \\
& 45-64 \text { years }-37.8 \% \\
& 65+\text { years }-45.1 \%
\end{aligned}
$$

Sex-specific percentages of residents increased significantly over the time period and were significantly higher in females than for males (Figure 10.19).

In $2007 / 08$, the self-reported proportion of residents who reported consuming fruits and vegetables five or more times daily was 39.2 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of Cypress Health Region which was lower.

Fig: 10.17 Prevalence of self-reported fruit and vegetable consumption five or more times daily in 12+ year olds, Canada and Saskatchewan, CCHS 2000/01, 2003, 2007/2008.


CCHS year

Fig: 10.18 Prevalence of self-reported consumption of vegetables and fruits five or more times daily in the population (12+ years), Saskatchewan, by Age group, CCHS, 2000/01, 2003, 2007/2008).


Age group by Year(s)

Fig: 10.19 Prevalence of self-reported consumption of vegetables and fruits five or more times daily in the population (12+ years), Saskatchewan, by Sex, CCHS, 2000/01, 2003, 2007/2008.


Physical Activity: Physical activity is a behaviour that is generally accepted to reduce the risk of premature morbidity and mortality.

From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) classified to have a moderate or active level of physical activity during leisure time increased from 2000/01 to 2003, after which the proportions tended to decline for both Canada and Saskatchewan. The Saskatchewan proportion increased from 43.8 percent in 2000/01 to 46.8 percent in 2007/08 and the Canadian proportion increased from 42.7 percent to 49.8 percent, with the difference between Saskatchewan and Canadian proportions not being significant for all years except 2007/08 (Figure 10.20).

Self-reported proportions varied across age groups over the survey time period with the proportions being highest in the 12-19 year age group, followed by a decrease with increasing age groups. (Figure 10.21).

In 2007/08, the age-specific percentages for Saskatchewan were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-65.1 \% \\
& 20-44 \text { years }-51.1 \% \\
& 45-64 \text { years }-42.4 \% \\
& 65+\text { years }-31.0 \%
\end{aligned}
$$

Sex-specific percentages varied over the time period with the difference between males and females only being significant in 2007/08 (Figure 10.22).

In $2007 / 08$, the self-reported proportion was 46.8 percent for Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of Heartland Health Region which was lower.

Fig: $10.20 \quad$ Prevalence of 12+ year old self-reported physical activity during leisure time


CCHS year

Fig: 10.21 Prevalence of 12+ year old self-reported physical activity during leisure time (active or moderate level), Saskatchewan, CCHS 2000/01,


Age group by Year(s)

Fig: 10.22 Prevalence of 12+ year old self-reported physical activity during


Tobacco Usage: Smoking is linked to increased risk of poor general health and frequent hospitalization. Passive exposure to tobacco smoke also presents a health risk.

The CCHS self-reported tobacco usage indicators were assessed; adult current smokers, teen current smokers, adult former smokers, adult abstinence from smoking, teen abstinence from smoking, and home exposure to tobacco smoke. The indicator descriptions and detailed findings are presented on page 13 with Figures 10.23-10.25 for adult current smokers, page 14 with Figures 10.26-10.27 for teen current smokers, page 15 with Figures 10.28-10.30 for adult former smokers, page 16 with Figures 10.31-10.33 for adult abstinence from smoking, page 17 with Figures 10.34-10.35 for teen abstinence from smoking, page 17 with Figure 10.36 for refraining from smoking in the house, and page 18 with Figures 10.37-39 for home exposure to tobacco smoke.

The key findings are as follows:
The percentages for current smokers both adult and adolescent) were significantly higher for Saskatchewan than Canada in 2007/08 and decreased, but not significantly, over the survey time period from 2000/2001 to 2007/2008 (Figure 10.23, 10.26 and Table 10-3).

The percentages of former smokers were similar for Saskatchewan and Canada in 2007/08 and re-

Table 10-3: Percentages for tobacco usage indicators, 2007/08

| Indicators | Sask <br> (\%) | Can <br> (\%) |  |
| :--- | :--- | :--- | :--- |
| Current <br> Smokers | Adult | 26.7 | 22.9 |
|  | Adolescent | 16.6 | 11.4 |
| Former <br> Smokers | Adult | 41.0 | 40.9 |
|  | Adolescent | N/A | N/A |
| Abstinence <br> from <br> Smoking | Adult | 32.1 | 35.8 |
|  | Adolescent | 71.7 | 77.9 |
| House <br> Tobacco <br> Smoke <br> Exposure | Refrain from <br> Smoking in <br> House | 79.2 | 77.7 |
|  | Tobacco Smoke <br> Regular Expo- <br> sure in House | 9.1 | 7.1 |

mained relatively consistent over the survey time period (Figure 10.28). The Saskatchewan percentages for those who abstain from smoking for both adults and adolescents were significantly lower than the Canadian percentages; however, the percentages increased significantly over the survey period (Figure 10.31 and 10.34).

The age-specific percentages indicated that adults aged 20-44 years had the highest percentages of current smokers, the seniors had the highest percentages of former smokers and the adolescents had the highest percentages of abstainers (Figure $10.24,10.27,10.29,10.32,10.34$ and Table 10-4).

Adult males had significantly higher current and former smoker percentages for 2007/08; whereas, adult females had significantly higher smoking abstinence percentages. There was no sex-specific predilection for teen current smokers and abstinence (Figure 10.25, 10.27, 10.30, 10.33, and 10.35).

In 2007/08, the percentages of Saskatchewan households with children that refrained from smoking in the house was not significantly different than the Canadian percentage; however, the proportion of Saskatchewan nonsmoking respondents indicating regular exposure to tobacco in their home was significantly higher than the Canadian percentage (Figures 10.36, 10.37 and Table 10-3).

Table 10-4: Age-specific percentages for tobacco usage indicators, 2007/08

| Age <br> (years) | Current <br> smoker (\%) | Former <br> smoker (\%) | Abstinence <br> (\%) |
| :--- | :--- | :--- | :--- |
| $12-19$ | 16.6 | N/A | 71.7 |
| $20-44$ | 31.0 | 32.0 | 37.0 |
| $45-64$ | 28.7 | 46.3 | 24.8 |
| $65+$ | 13.4 | 51.7 | 34.4 |

Adult Current Smokers: From 2000/01 to 2007/08, the proportion of CCHS respondents (20 years and older) classified to be current smokers (based on self-reported smoking on a daily or occasional basis) decreased in both Saskatchewan and Canada, although the change was not significant in Saskatchewan. The Saskatchewan proportion decreased from 28.5 percent to 26.7 percent, while the Canadian proportion decreased from 27.0 percent to 22.9 percent (Figure 10.23). The difference between the Saskatchewan and Canadian rates was significant in 2005 and 2007/08.

Self-reported proportions of current smoking varied across age groups over the survey time period 2000/01 to 2007/2008. The proportions decreased significantly from the 20-44 year age group to the 65 years and older age group which had the lowest proportions. (Figure 10.24).

In 2007/08, the age-specific percentages for Saskatchewan residents were found for the following age groups:

$$
\begin{aligned}
& 20-44 \text { years }-31.0 \% \\
& 45-64 \text { years }-28.7 \% \\
& 65+\text { years }-13.4 \%
\end{aligned}
$$

Sex-specific percentages varied over the time period and were higher in males than females for most years, but only significantly different in 2007/08, (Figure 10.25).

In 2007/08, the self-reported proportion of current smokers was 26.7 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of the combined northern health region which was higher.

Fig: 10.23


Fig: 10.24 Prevalence of self-reported current smoking in adults ( $20+$ years), by age group, Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


Age group by Year(s)

Fig: 10.25 Prevalence of self-reported current smoking of adults (20+ years), by Sex, Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


Teen Current Smokers: From 2000/01 to 2007/08, the proportion of adolescent CCHS respondents (12-19 years) classified to be current smokers (based on self-reported smoking on a daily or occasional basis) decreased in both Saskatchewan and Canada, although the change was not significant in Saskatchewan. The Saskatchewan proportion decreased from 20.4 percent to 16.6 percent while the Canadian proportion decreased from 18.7 percent to 11.4 percent, with the difference between Saskatchewan and Canadian proportions being only significant for 2007/08 (Figure 10.26).

Sex-specific proportions of Saskatchewan adolescent residents reporting current smoking varied over the time period and the difference was not significant for any of the years (Figure 10.27).

In 2007/08, the self-reported proportion was 16.6 percent in Saskatchewan. Most Regional Health Authority percentages had high sampling variability and should be interpreted with caution.

Fig: 10.26


Fig: 10.27 Prevalence of self-reported current smoking in adolescents (12-19


Sex by Year(s)

Adult Former Smokers: From 2000/01 to 2007/08, the proportion of CCHS respondents (20 years and older) who reported to be former smokers remained relatively stable for Saskatchewan and Canada. The Saskatchewan proportion decreased slightly from 42.9 percent to 41 percent while the Canadian proportion was approximately 40 percent (Figure 10.28).

Self-reported proportion varied across age groups over the survey time period and increased with age from the 20-44 year age group to the 65 years and older age group. (Figure 10.29).

In 2007/08, the age-specific percentages of former smokers were found for the following age groups:

$$
\begin{aligned}
& 20-44 \text { years }-32.0 \% \\
& 45-64 \text { years }-46.3 \% \\
& 65+\text { years }-51.7 \%
\end{aligned}
$$

Sex-specific percentages remained relatively stable over the time period and were significantly higher in males over all the survey years (Figure 10.30).

In 2007/08, the self-reported proportion of former smokers was 41 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of the combined northern health region which had a lower proportion.


CCHS year

Fig: 10.29 Prevalence of self-reported former smokers in adults (20+ years), by age group, Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


Age group by Year(s)

Fig: 10.30 Prevalence of self-reported former smokers in adults (20+ years), by Sex, Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


Sex by Year(s)

Adult Abstinence from Smoking: From 2000/01 to 2007/08, the proportion of CCHS respondents (20 years and older) who reported having abstained from smoking increased significantly for Saskatchewan and Canada. The Saskatchewan proportion increased from 28.6 percent to 32.1 percent while the Canadian proportion increased from 32.9 percent to 35.8 percent (Figure 10.31). The Saskatchewan percentage was significantly lower for all years except 2003.

Self-reported percentages varied across age groups over the survey time period. In each year the proportion was lowest in the 45-65 year age group. (Figure 10.32).

In 2007/08, the age-specific percentages of Saskatchewan residents that abstained from smoking were found for the following age groups:

$$
\begin{aligned}
& 20-44 \text { years }-37.0 \% \\
& 45-64 \text { years }-24.8 \% \\
& 65+\text { years }-34.4 \%
\end{aligned}
$$

Sex-specific proportions of those reporting to have abstained from smoking increased, but not significantly, over the time period and were significantly higher in females over all the survey years (Figure 10.33).

In 2007/08, the self-reported proportion was 32.1 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of the Prairie North Health Region which was lower.

Fig: 10.31 Prevalence of self-reported complete abstaining from smoking in their life time in adults (20+ years), Canada and Saskatchewan, CCHS 2000/01, 2003, 2005,


CCHS year

Fig: 10.32 Prevalence of self-reported smoking abstinence in adults ( $20+$ years), by age group, Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


Age group by Year(s)

Fig: 10.33 Prevalence of self-reported smoking abstinence in adults (20+ years), by Sex, Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


Teen Abstinence from Smoking: From 2000/01 to 2007/08, the proportion of adolescent CCHS respondents (12-19 years) who reported abstaining from smoking increased significantly for Saskatchewan and Canada. The Saskatchewan proportion increased from 63.8 percent to 71.7 percent while the Canadian proportion increased from 66.2 percent to 77.9 percent (Figure 10.34). The Saskatchewan percentage was significantly lower than the Canada in 2007/08.

Sex-specific proportions increased, but not significantly, over the time period with no significant differences between males and females over the survey years (Figure 10.35).

In 2007/08, the self-reported proportion was 71.7 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of the combined northern health region which was lower and the Cypress Health Region which was higher.

Refraining from Smoking in House: Passive exposure to tobacco smoke presents a health risk. Numerous studies have linked environmental tobacco smoke to lung cancer, heart disease and other illnesses.

From 2000/01 to 2007/08, the proportion of CCHS respondent households with children aged 12 years or less in which smokers were asked to refrain from smoking in the house had significantly increased for Saskatchewan and Canada. The Saskatchewan proportion increased from 42.5 percent to 79.2 percent while the Canadian proportion increased from 46.9 percent to 77.7 percent (Figure 10.36). The difference between the Saskatchewan and Canadian percentages was not significant except for 2000/01.

Fig: 10.34 Prevalence of self-reported complete abstaining from smoking cigarrette in adolescents (12-19 years), Canada and Saskatchewan, CCHS 2000/01, 2003, 2005, 2007/2008.


CCHS year

Fig: 10.35 Prevalence of self-reported smoking abstinence in adolescents (12-19 years), by Sex, Saskatchewan, CCHS Cycles, 1.1 (2000/01), 2.1 (2003),


Sex by Year(s)

Fig: $\mathbf{1 0 . 3 6}$


Regular Home Exposure to Tobacco Smoke: From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported regular exposure to tobacco smoke in their home decreased for Saskatchewan and Canada. The Saskatchewan proportion decreased, but not significantly, from 10.6 percent to 9.1 percent while the Canadian proportion decreased significantly from 10.9 percent to 7.1 percent during the same time period (Figure 10.37). The Saskatchewan percentage was significantly lower than the Canada in 2007/08.

Self-reported proportions varied across age groups over the survey time period with the proportions decreasing with the increasing age categories. The highest rate was in the 12-19 year age group. (Figure 10.38).

In 2007/08, the age-specific percentages of Saskatchewan residents who reported regular exposure to tobacco smoke in their home were found for the following age groups:

12-19 years - 20.9\%
20-44 years - 5.7\%
45-64 years - 5.8\%
$65+$ years $-2.5 \%$
Sex-specific proportions decreased, but not significantly, over the time period and were not significantly different between the sexes over all the survey years (Figure 10.39).

In 2007/08, the proportion who reported regular exposure to tobacco smoke in their home was 9.1 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province; however, there was high sampling variability so the results should be interpreted with caution.

Fig: 10.37


Fig: 10.38
Prevalence of self-reported non-smokers' exposure to second hand smoking in home, by age group, Saskatchewan, CCHS 2003, 2005, 2007/2008.


Fig: 10.39 Prevalence of self-reported non-smokers' (12+ years) exposure to second hand smoking in home, by Sex, Saskatchewan, CCHS 2003, 2005, 2007/2008.


## Self-Reported Health

Self-rated health is used as a predictor of the overall health status of the population. The Canadian Community Health Survey (CCHS) asks respondents to rate his/her health as "excellent, very good, good, fair or poor".

The CCHS self-reported health indicators were assessed; good, very good and excellent health, very good and excellent health, and fair and poor health. The indicator descriptions and detailed findings are presented on page 20 with Figures 10.40-10.42 for good, very good and excellent health, page 21 with Figures 10.43-10.45 for very good and excellent health and page 22 with Figures 10.46-10.48 for fair and poor health.

The key findings are as follows:
In 2007/08, the percentages of Saskatchewan residents rating their health as "good, very good or excellent", "very good or excellent" and "fair or poor" were similar to that found for Canada, and all indicators remained fairly constant over the survey time period from 2000/2001 to 2007/2008 (Figure 10.40, 10.43 and 10.46).

The age-specific percentages for the three age groups, as well as, the detailed age analysis for "good, very good and excellent health" indicated that as age increases, ratings decreased for good, very good and excellent health and a corresponding increase in fair and poor health was seen (Figure 10.41, 10.44, 10.47 and Table 10-5). The drop in ratings began at age 40-49 years; however it should be noted that over 30 percent of seniors indicated that their health was "very good or excel-
lent" (Figure 10.41).
For all self rated health status indicators, male and female percentages were similar and stayed relatively constant over the survey period (Figure $10.42,10.45$ and 10.48).

Table 10-5: Age-specific percentages for self-rated health status, 2007/08

| Age (years) | Good, Very <br> Good and <br> Excellent | Very Good <br> and Excellent <br> Health (\%) | Fair and <br> Poor Health <br> (\%) |
| :--- | :--- | :--- | :--- |
| $20-44$ | 94.3 | 65.7 | 5.7 |
| $45-64$ | 85.7 | 51.8 | 14.2 |
| $65+$ | 70.6 | 30.4 | 29.3 |

Self-rated good, very good and excellent health: From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported having good, very good or excellent health remained fairly constant for Canada and Saskatchewan. The Saskatchewan proportion remained around 87 percent and the Canadian proportion remained around 88 percent, with the difference between Saskatchewan and Canada being significant only for 2005 (Figure 10.40).

Self-reported proportions varied across age groups over the survey time period. The proportions remained relatively stable up to and including the age group 35-39 years and then began to decline with advancing age, with proportions falling to below 80 percent in people aged 60 years and older (Figure 10.41).

In 2007/08, the age-specific percentages of Saskatchewan residents that reported good, very good or excellent health were found for the following age groups:

30-34 years - $95.1 \%$
35-39 years - 93.8\%
40-44 years - 91.9\%
45-49 years - 86.3\%
50-54 years - 87.6\%
55-59 years - 86.7\%
60-64 years - 79.6\%
65-69 years - 78.7\%
70-74 years - 75.7\%
$75+$ years - 63.3\%

Sex-specific proportions of Saskatchewan residents remained relatively similar and stable for both sexes (Figure 10.42).

In $2007 / 08$, the proportion was 87.2 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province, with the exception of Sunrise Health Region which was lower.

Fig: 10.40 Prevalence of self-rated good, very good and excellent health in all ages (12+


Fig: 10.41 Prevalence of self-rated good, very good or excellent health in all ages (12+), Saskatchewan, CCHS Cycles, 1.1 (2000/01), 2.1 (2003), 3.1 (2005), 4.1 and 5.1 (2007/2008).


Age group years by Survey years

Fig: 10.42 Prevalence of self-rated good, very good and excellent health in 12+ year olds by Sex, Saskatchewan, CCHS Cycles, 1.1 (2000/01), 2.1 (2003), 3.1 (2005), 4.1


Self-rated very good and excellent health: As expected, the proportion of very good or excellent self -reported health (two combined categories) was significantly lower than those seen for self-reported good, very good or excellent health (three combined categories).

From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported having very good or excellent health declined slightly. The Saskatchewan rate was significantly lower than the Canadian proportion in 2000/01, 2005 and 2007/08 (Figure 10.43). The Saskatchewan proportion declined from 57.0 to 55.3 percent but the decline was not statistically significant, while the Canadian proportion decreased significantly from 61.5 to 59.2 percent.

Self-reported proportions varied across age groups over the survey time period and the proportions declined significantly with advancing age (Figure 10.44).

In 2007/08, the age-specific percentages of Saskatchewan residents that reported very good or excellent health were found for the following age groups:

$$
\begin{aligned}
& 20-44 \text { years }-65.7 \% \\
& 45-64 \text { years }-51.8 \% \\
& 65+\text { years }-30.4 \%
\end{aligned}
$$

Sex-specific proportions remained relatively similar for both sexes (Figure 10.45). The proportions tended to decline from 2003 to 2007/08, but the difference was not statistically significant.

In 2007/08, the self-reported proportions of very good or excellent health was 55.3 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province with the exception of Kelsey Trail and the combined northern region being lower and Heartland being higher.

Fig: 10.43 Prevalence of self-rated very good and excellent health in all ages (12+ years), Canada and Saskatchewan, CCHS, 2000/01, 2003, 2005, 2007/2008.


CCHS year

Prevalence of self-rated very good and excellent health in 12+ year olds, by age group, Saskatchewan, CCHS Cycles, 1.1 (2000/01), 2.1 (2003), 3.1 (2005), 4.1


Fig: $10.45 \quad$ Prevalence of self-rated very good and excellent health in 12+ olds, by Sex, Saskatchewan, CCHS Cycles, 1.1 (2000/01), 2.1 (2003), 3.1 (2005), 4.1 and 5.1


Self-rated fair and poor health: As expected the proportions of fair or poor self-reported health were significantly lower than those seen for self-reported good, very good or excellent health.

From 2000/01 to 2007/08, the proportion of CCHS respondents ( 12 years and older) who reported having fair or poor health remained fairly constant for Canada and Saskatchewan. The proportion for residents of Saskatchewan remained around 12 percent and the Canadian proportion remained around 11 percent, with the difference between Saskatchewan and Canada being significant only for 2005 (Figure 10.46).

Self-reported proportions varied across age groups over the survey time period and increased significantly as age groups advanced (Figure 10.47).

In 2007/08, the age-specific percentages of Saskatchewan residents that reported fair or poor health were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-7.4 \% \\
& 20-44 \text { years }-5.7 \% \\
& 45-64 \text { years }-14.2 \% \\
& 65+\text { years }-29.3 \%
\end{aligned}
$$

Sex-specific proportions relatively stable for both sexes (Figure 10.48). Females had higher proportions from 2000/01 to 2005; however, the difference was not significant.

In 2007/08, the self-reported proportion for fair or poor health was 12.6 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province with the exception of Sunrise Health Region being lower.


CCHS year

Fig: $10.47 \quad$ Prevalence of self-rated fair or poor health in 12+ year olds, by age group, Saskatchewan, CCHS Cycles, 1.1 (2000/01), 2.1 (2003), 3.1 (2005), 4.1 and 5.1 (2007/2008).


Fig: 10.48


## Self-Reported Health Utilization

The Canadian Community Health Survey (CCHS), includes questions regarding health services utilization and screening.

Contact with medical doctor: From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported having contact with a medical doctor in the past 12 months was slightly higher in Saskatchewan than that found for Canada, with the exception of $2007 / 08$. The difference was significant in the years 2000/01 and 2005. The proportions dropped slightly over the survey years declining from 83.2 percent in 2000/01 to 79.3 percent in 2007/08 and the Canadian proportion dropping from 81.5 percent to 79.5 percent. (Figure 10.49).

Self-reported rates varied across age groups over the survey time period with the proportions increasing as the age groups advanced (Figure 10.50).

In 2007/08, the age-specific percentages of Saskatchewan residents that reported having contact with a medical doctor in the past 12 months were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-73.2 \% \\
& 20-44 \text { years }-74.9 \% \\
& 45-64 \text { years }-81.7 \% \\
& 65+\text { years }-89.7 \%
\end{aligned}
$$

Sex-specific proportions were significantly higher in females than males over the survey period. The rates decreased significantly for both sexes over the time period (Figure 10.51).

In 2007/08, the self-reported proportion was 79.3 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province with the exception of Sunrise Health Region and the combined northern health regions which were lower.

Fig: 10.49 Contact with Medical Doctor: Proportion of self reported people (12+ years of age) who contacted with a medical doctor in the past 12 months in Saskatchewan compared to Canada, CCHS, 2000/2001-2007/2008


Fig: 10.50
Contact with Medical Doctor: Proportion of self reported people (12+ years of age) who contacted with a medical doctor in the past 12 months in Saskatchewan by age, CCHS, 2000/2001-2007/2008


Fig: 10.51
Contact with Medical Doctor: Proportion of self reported people (12+ years of age) who contacted with a medical doctor in the past 12 months in Saskatchewan by sex, CCHS, 2000/2001-2007/2008


Visits to a dentist: From 2000/01 to 2007/08, the proportion of CCHS respondents (12 years and older) who reported visiting a dentist in the past 12 months was significantly lower in Saskatchewan than that found for Canada. The proportions increased significantly over the survey years for both Canada and Saskatchewan with the proportion for Saskatchewan increasing from 50.5 percent in 2000/01 to 56.6 percent in 2007/08 while the Canadian proportion increased from 60.1 percent to 64.4 percent (Figure 10.52).

Self-reported proportions varied across age groups over the survey time period. The proportions steadily decreased as the age groups advanced (Figure 10.53). The percentage gradually and significantly for those in the 20-44 years age group. For the 12-19 and 45-64 year olds, the proportions also increased over the same period; however, a drop occurred in 2007-2008 compared to the previous survey years.

In 2007/08, the age-specific percentages of Saskatchewan residents that reported having contact with a dentist in the past 12 months were found for the following age groups:

$$
\begin{aligned}
& 12-19 \text { years }-72.1 \% \\
& 20-44 \text { years }-59.6 \% \\
& 45-64 \text { years }-57.6 \% \\
& 65+\text { years }-36.1 \%
\end{aligned}
$$

Sex-specific proportions were higher in females than in males over the survey period with the proportions increasing significantly for both sexes (Figure 10.54).

In $2007 / 08$, the self-reported proportion was 56.6 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the province with the exception of being significantly higher in Regina Qu'Appelle Health Region and significantly lower in the regions of Five Hills, Prairie North, Kelsey Trail and the combined northern health regions.

Fig: 10.52 Visits to Dentist: Proportion of self reported people (12+ years of age) who consulted a dentist in past year in Saskatchewan compared to Canada, CCHS, 2000/2001-2007/2008


Fig: 10.53 Visits to Dentist: Proportion of self reported people (12+ years of age) who consulted a dentist in past year in Saskatchewan by age, CCHS, 2000/2001 2007/2008


## $\square$ 2000/01 <br> $\square 2003$ <br> $\square 2005$ <br> $\square$ 2007-08

Fig: 10.54
Visits to Dentist: Proportion of self reported people (12+ years of age) who consulted a dentist in past year in Saskatchewan by sex, CCHS, 2000/2001 2007/2008


Mammography breast cancer screening: From 2000/01 to 2005, the proportion of female CCHS respondents aged 50 to 69 years who reported being screened by mammography was similar between Saskatchewan and Canada. The Canadian proportion for 2007/2008 was not presented due to lack of data from several provinces; however, the Saskatchewan proportion for 2007/2008 was 74.8 percent (Figure 10.55).

The proportions increased significantly over the survey years for Saskatchewan from 67.2 percent in 2000 /01 to 74.8 percent in $2007 / 2008$. The proportions for the Regional Health Authorities were not compared due to small numbers of respondents.

PAP test cervical cancer screening: From 2000/01 to 2005, the proportion of female CCHS respondents aged 20 to 69 years who reported being screened by a PAP test was higher for Saskatchewan residents than that Canada, with the proportions being significantly higher in 2000/01 and 2005. The proportions for 2007/2008 are not presented as the Canadian proportion for 2007/2008 were not complete due to lack of data from several provinces. The Saskatchewan proportion was 81.3 percent (Figure 10.56) and remained fairly constant over the survey years from 81.6 percent in 2000/01 to 81.3 percent in 2007/2008.

Self-reported proportions varied across age groups over the survey time period (Figure 10.57). The proportions were similar in the age groups, throughout the survey years.

In $2007 / 08$, the age-specific percentages of Saskatchewan residents that reported being screened by a PAP test were found for the following age groups:

20-44 years - 83.4\%
45-64 years - 79.5\%
65-69 years - 72.3\%

In 2007/08, the self-reported proportion was 81.3 percent in Saskatchewan. Most Regional Health Authority percentages did not differ significantly from the provincial rate.

Fig: $\mathbf{1 0 . 5 5}$ Prevalence of self-reported mammogram screening in 50 to 69 year old
Fig: 10.55


Fig: 10.56
Prevalence of self-reported PAP Test in 20 to 69 year old women, Canada and Saskatchewan, CCHS, 2000/01, 2003, 2005


CCHS year

Fig: 10.57


## Definitions

Morbidity - Illness.
Mortality - Death.
Peer groups - Groupings of health regions with similar socio-economic characteristics. After the effects of the various social and economic characteristics known to influence health status have been removed it is then possible to compare regions by measures of health status and compare the relative effectiveness of health promotion and prevention activities across regions. (Statistics Canada, 2002)

Rates - The rate is the proportion of a group affected over a period of time (such as a year). For example, it expresses the number of hospital separations or deaths, usually per 100,000 population. Hospital separations rates are calculated using Saskatchewan Ministry of Health Covered Population in the denominator whereas Statistics Canada's estimated population is used for mortality rate calculations. To compare rates in populations or of the same population in different years, standardization for age factor using the 1991 census population of Canada is applied as a standard population.

- The crude rate is the ratio of the total number of hospital separations or deaths for selected causes of injury relative to the total population and is usually expressed per 100,000 population.
- The age-specific rate is the ratio of the total number of hospital separations or deaths for selected causes of injury in a given age group per population in the age group to the total population in that age group and is usually expressed per 100,000 population.
- The age-standardized rate is the number of hospital separations or deaths for selected causes of injury per 100,000 population that would occur in the population if it had the same age distribution as the 1991 Canadian census population. It is defined as the weighted average of the age-specific rates where the weights are taken from the standard population. Confidence intervals for the agestandardized rates were calculated using the
gamma method. (See: Fay PM and Feuer EJ. Confidence intervals for directly standardized rates - A method based on gamma distribution. Stat Med 1997;16:791-801).
- The sex-specific rate is the ratio of the total number of hospital separations or deaths for selected causes of injury for a given sex to the total population of that sex and is usually expressed per 100,000 population.
- The age-sex specific rate is the ratio of the total number of hospital separations or deaths for selected causes of injury in a given age-sex group to the total population of the age-sex group and is usually expressed per 100,000 population.

Statistically significant - The difference is probably true and not due to chance. The Confidence Intervals (CIs) may be used as a test of statistical significance when comparing rates. If the CIs overlap, then the difference between the estimates is not considered to be statistically significant.

## Data Sources

## Canadian Community Health Survey (CCHS)

Statistics Canada CANSIM tables (Population and Demography) CANSIM Population estimates were used from Statistics Canada for 1996 to 2009

## References

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