Suicide in Canada

HIGHLIGHTS

• Approximately 4% of Canadians reported having suicidal thoughts in the past 12 months.
• In the fiscal year of 1998/1999 in Canada, there were 23,225 hospitalizations for attempted suicide.
• Almost 10 Canadians commit suicide per day.
• Approximately four times as many males commit suicide than females.

INTRODUCTION

The data presented in this report have several limitations. National survey data presented on suicidal thoughts and attempts are based on self-reported or proxy information. Self-reported data may be subject to errors in recall, over or under-reporting because of social desirability, and errors from proxy reporting.

Another source of data for suicide attempts is the number of hospitalizations. Hospitalization data do not present a complete picture about suicide attempts, as not all patients who attempt suicide are admitted to hospital. In addition, the hospitalization data presented in this report do not include outpatient visits to emergency rooms or other medical facilities, or patients in psychiatric facilities.

Mortality data on suicide is collected nationally. It has been suggested that under-reporting of suicide deaths may occur for several reasons which are listed below:

• Reluctance of officials to certify a death as suicide. In one study in Ontario, 33% of coroners were reluctant to certify a death as suicide. Reasons for this included: emotional effects on the family; life insurance considerations; stigmatization of the deceased; as well as legal, religious and moral considerations. In addition, 38% of coroners also indicated that they would certify a probable suicide death as undetermined or would not indicate the manner of death.
• Difficulty in determining whether a death is in fact a suicide.

For more details about data contained in this report, please refer to the section entitled Data Sources, Methods and Limitations (see page 29).
**Suicidal Thoughts**

In Canada in 2002, almost 920,000 people (3.7%) aged 15 years and older (3.8% of women and 3.6% of men) reported having suicidal thoughts in the past 12 months. Overall, young people aged 15–24 years had the highest self-reports of suicidal thoughts in the past 12 months (6%) compared to those aged 25–64 (3.6%) and 65 years and older (1.7%).

Reported suicidal thoughts in the past 12 months were higher among women aged 15–24 years than men (7.3% compared to 4.7% respectively). Suicidal thoughts were comparable by sex for the other age groups.

**Suicide Attempts and Hospitalizations**

Hospitalizations for suicide attempts in Canada increased between 1987 and 1994, peaked in 1995 and have declined slightly since that time (data not shown).

In the fiscal year of 1998/1999 in Canada, there were 23,225 reported hospitalizations related to suicide and intentional self-inflicted injuries. Persons who attempt suicide stay in hospital for an average of seven days. Whereas males are more likely to commit suicide, females are more likely to attempt suicide. Males are more likely to die from their first suicide attempt than are females.

Individuals who attempt suicide and are treated in hospital tend to use less lethal methods than those who commit suicide. In the fiscal year of 1998/1999, poisoning accounted for 83% of all suicide hospitalizations.

**Suicide Deaths**

Suicide accounted for approximately 2% of all deaths in Canada in 1998. In 1998, approximately 3,700 Canadians aged 10 years and older committed suicide for an age-standardized rate of 14 deaths per 100,000. An average of 10 people per day commit suicide in Canada.

Figure 1 (see following page) shows rates of suicide mortality for the years 1979–1998. Suicide mortality rates have declined for both Canada and Ontario since 1979. Suicide mortality rates in Ontario are lower than those for Canada. This difference between Canada and Ontario may be attributed to variations in coding practices for causes of death, timeliness of reporting mortality data and the percentage of deaths classified as undetermined. In Ontario in 1998, the number of undetermined deaths divided by the number of suicides was 16%. The only other province with a higher ratio of undetermined deaths to suicides was Manitoba at 24%. Other provinces such as New Brunswick and Quebec had ratios of 1% and 3% respectively.

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† Use data with caution
Overall, almost four times as many Canadian males commit suicide as females. In 1998, there were 2,925 deaths due to suicide in males compared to only 773 deaths in females. This trend is consistent across all age groups as shown in Figure 2 (see following page). Males are also more likely to die from their first suicide attempt than are females.

Suicide mortality increases substantially by age 15–19 years, and is highest among males aged 80 years and older, followed by males aged 35–44 years. For females, mortality rates increase at age 15–19 years, and are highest among women aged 45–49 years.

Suicide has a tremendous impact on potential years of life lost (PYLL) in young people, and in particular, in young men. Overall, in Canada in 1997, the rate of PYLL was 431.4 per 100,000 (683.7 per 100,000 for males and 177.1 per 100,000 for females) (data not shown).

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**Figure 1: Mortality from Suicide by Year, Canada and Ontario, 1979–1998**

Note: Rates age-standardized using 1991 Canadian population aged 10 years or older, adjusted for net-census undercoverage and non-permanent residents.


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Suicide mortality rates in males are high across all age groups; however, suicide mortality as a proportion of all causes of death is the highest in males and females aged 15–24 years as shown in Table 2 (see below).

**Table 2—Proportion of Deaths Due to Suicide by Age Group and Sex, Canada, 1998**

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>&lt;15</th>
<th>15–24</th>
<th>25–44</th>
<th>45–64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1.8</td>
<td>26.3</td>
<td>19.3</td>
<td>4.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Female</td>
<td>1.3</td>
<td>16.9</td>
<td>9.3</td>
<td>1.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Total</td>
<td>1.6</td>
<td>23.8</td>
<td>15.9</td>
<td>3.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Methods of Suicide Deaths

In Canada in 1998, the most common method of suicide deaths was suffocation, hanging and strangulation (39%); followed by poisoning (26%); and use of firearms (22%). Between 1978 and 1998, male suicides by firearms declined from 41 to 26 per cent, while suicide by suffocation, hanging and strangulation increased from 24 to 40 per cent.\(^7\)

The methods of committing suicide vary greatly for males and females as males tend to choose more violent methods of committing suicide. A much higher proportion of males choose the use of firearms (26%) compared to females (7%). In comparison, a higher proportion of females choose poisoning (41%) compared to males (22%) (data not shown). This may explain why there are more suicide deaths for males than for females.

The Cost of Suicide

There have been many studies conducted about the cost of suicide. A Canadian study that included direct and indirect costs was conducted in New Brunswick in 1996. The findings from this study estimated that the average cost per suicide was $849,878.\(^8\)

Direct costs related to suicides included ambulance, hospital, physician, autopsy, and funeral/cremation services as well as police investigations. Indirect costs included a calculation of potential years of life lost and discounted future earnings.\(^8\)