CHAPTER 7

SUICIDAL BEHAVIOUR

Highlights

- **In 1998, 3,699 Canadians died as a result of suicide.**
- **Suicide accounts for 24% of all deaths among 15-24 year olds and 16% among 25-44 year olds.**
- **The mortality rate due to suicide among men is 4 times the rate among women.**
- **Individuals between 15-44 years of age account for 73% of hospital admissions for attempted suicide.**
- **Women are hospitalized in general hospitals for attempted suicide at 1.5 times the rate of men.**

What Is Suicidal Behaviour?

Suicidal behaviour is an important and preventable public health problem in Canada. While not in itself a mental illness, suicidal behaviour is highly correlated with mental illness and raises many similar issues. It usually marks the end of a long road of hopelessness, helplessness and despair. All people who consider suicide feel life to be unbearable.

Suicidal behaviour that does not result in death (attempted suicide) is a sign of serious distress and can be a turning point for the individual if he/she is given sufficient assistance to make the necessary life changes.[1] For some individuals, particularly those with borderline personality disorder, suicidal behaviour is one of the results of the illness.

Warning Signs
Suicidal behaviour
• **Repeated expressions of hopelessness, helplessness or desperation** • **Signs of depression (loss of interest in usual activities, changes in sleep pattern, loss of appetite, loss of energy, expressing negative comments about self)** • **Loss of interest in friends, hobbies or previously enjoyed activities** • **Giving away prized possessions or putting personal affairs in order** • **Telling final wishes to someone close** • **Expressing suicidal thoughts** • **Expressing intent to commit suicide and having a plan, such as taking pills or hanging oneself at a specific place and time**

How Common Is Suicidal Behaviour?

Suicide

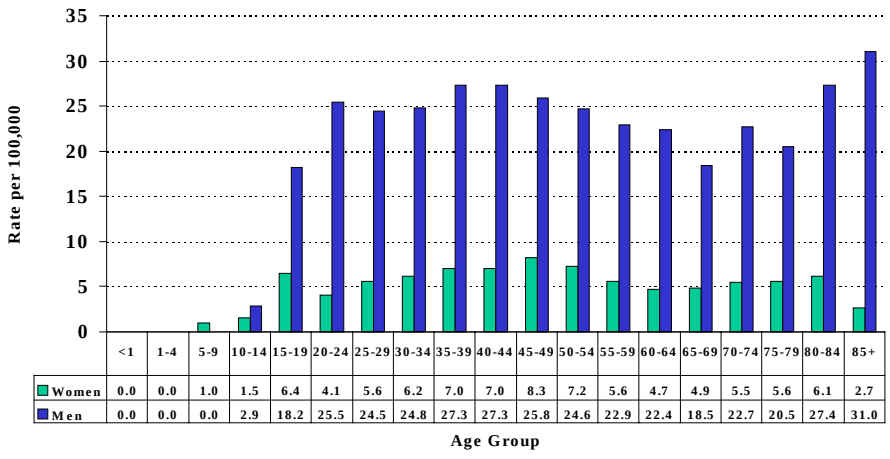
Early in 2002, Statistics Canada produced a detailed summary report on suicide deaths and attempted suicide in Canada.[2] According to the report, suicide is one of the leading causes of death in both men and women from adolescence to middle age.

In 1998, suicide caused the deaths of 3,699 Canadians (12.2 per 100,000): 46 individuals aged under 15 years; 562 aged 15-24 years; 1,596 aged 25-44 years; 1,038 aged 45-64 years; and 457 aged 65 years and over. This represented 2% of all deaths in Canada.

The actual number of suicide deaths may be considerably higher, however, either because information about the nature of the death may become available only after the original death certificate is completed, or because assessing whether the death was intentional may be difficult in some situations.[2] When a cause of death is uncertain, the coroner may initially code the death as "undetermined" and confirm the death as a suicide only after investigation. This additional information does not appear in the mortality database. The stigma about suicide also influences coding on the death certificate.

In 1998, as in most years, overall mortality rates due to suicide among men were nearly 4 times higher than among women (19.5 versus 5.1 per 1,000, respectively).

Figure 7-1 Mortality rates due to suicide per 100,000 by age and sex, Canada, 1998

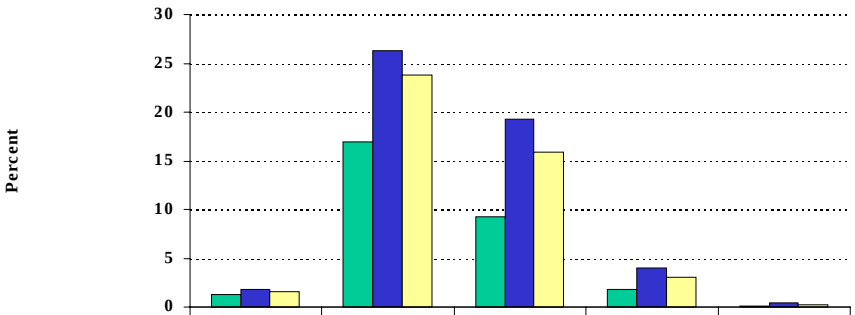


	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Women	0.0	0.0	1.0	1.5	6.4	4.1	5.6	6.2	7.0	7.0	8.3	7.2	5.6	4.7	4.9	5.5	5.6	6.1	2.7
Men	0.0	0.0	0.0	2.9	18.2	25.5	24.5	24.8	27.3	27.3	25.8	24.6	22.9	22.4	18.5	22.7	20.5	27.4	31.0

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from the Mortality File, Statistics Canada

Rates among women showed three peaks: in the late teens (15-19 years), in middle age (45-59 years) and among older seniors (80-84 years) (Figure 7-1). Mortality rates among men rose dramatically in the late teens (15-19 years) and early twenties (20-24 years,) and continued high until middle age (40-44 years), when they started to decrease. Rates started to increase among 70-74 year olds and were highest among men 80 years of age and over.

Figure 7-2 Proportion of all deaths due to suicide by age and sex, Canada, 1998



	<15 years	15-24 years	25-44 years	45-64 years	65+ years
Women	1.3	16.9	9.3	1.8	0.1
Men	1.8	26.3	19.3	4.0	0.4
Women & Men	1.6	23.8	15.9	3.1	0.2

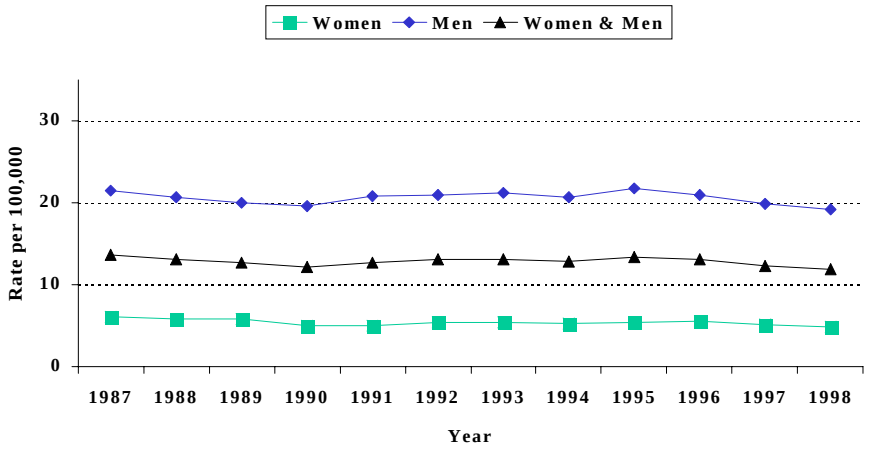
Age Group

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from the Mortality File, Statistics Canada

Suicide is a major cause of death in young people. Among individuals aged between 15 and 24 years, nearly one-quarter (23.8%) of all deaths in 1998 were due to suicide (Figure 7-2). Among young men (15-24 years), suicide accounted for 26.3% of all deaths. Among all 25-44 year-olds, the proportion of deaths due to suicide was 15.9% overall and 19.3% for men.

From the 1950s to the mid-1980s suicide rates increased dramatically among men.[3] This phenomenon was observed to a lesser degree among women. Between 1987 and 1998, however, mortality rates due to suicide changed very little, with perhaps a slight decrease among both men and women (Figure 7-3). Given minor variations in suicide rates from year to year, additional years' data will be required to determine whether suicide rates are, in fact, decreasing.

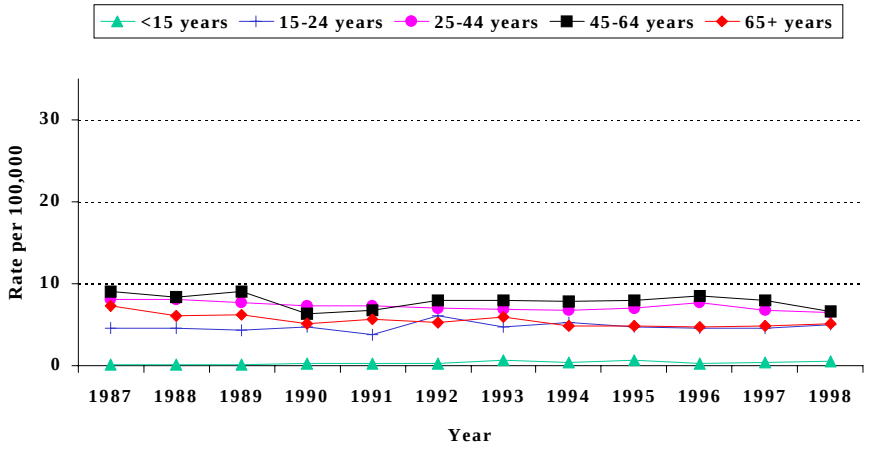
Figure 7-3 Mortality rate per 100,000 due to suicide by sex, Canada, 1987-98 (standardized to 1991 Canadian population)



Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from the Mortality File, Statistics Canada

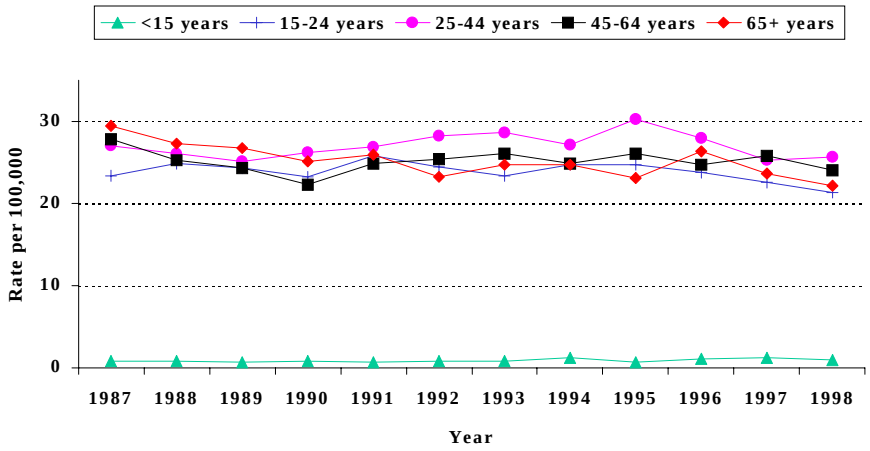
In the later 1990s, mortality rates due to suicide among women in the 45-64 year age group appear to have decreased (Figure 7-4). Rates may have increased among younger women aged 15-24 years. Between 1987 and 1998, there was no consistent pattern in mortality rates due to suicide in the various age groups of men (Figure 7-5). The small number of deaths results in instability of the rates, making it difficult to interpret differences in the age groups.

Figure 7-4 Mortality rate per 100,000 due to suicide among women by age, Canada, 1987-98 (standardized to 1991 Canadian population)



Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from the Mortality File, Statistics Canada

Figure 7-5 Mortality rate per 100,000 due to suicide among men by age, Canada, 1987-98 (standardized to 1991 Canadian population)



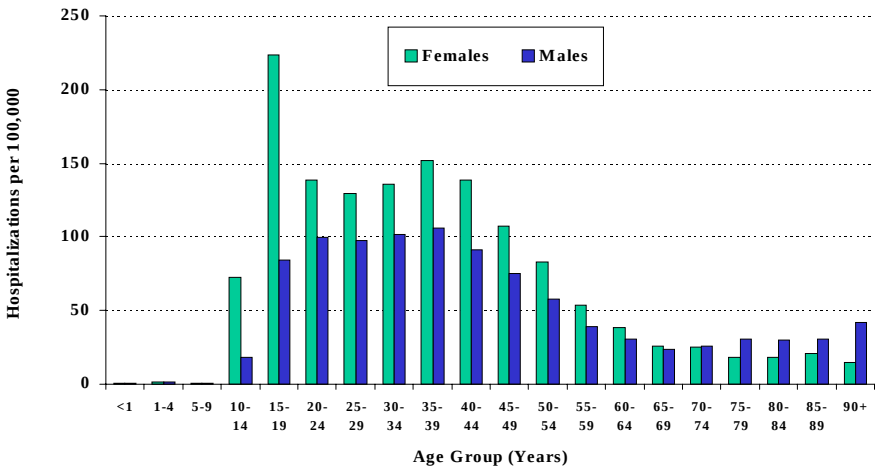
Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from the Mortality File, Statistics Canada

Attempted Suicide

Attempted suicide that does not result in serious injury is usually treated in the community. In fact, many individuals do not see health professionals, but are helped by family or friends, or perhaps by no one at all. Assessing the incidence of attempted suicide is, therefore, very difficult. Individuals are sometimes hospitalized for their own protection and to address the underlying factors that precipitated the crisis. Hospitalization data provide some insight into suicide attempts, but must be interpreted with caution because they only provide part of the picture.

In 1999, women were 1.5 times more likely than men to be hospitalized because of attempted suicide (Figure 7-6). This relationship was apparent in all except those 70 years of age and older, where men were hospitalized at higher rates than women. Young women between 15 and 19 years of age had much higher hospitalization rates than any other age group of either sex. After the age of 50, hospitalization rates decreased markedly among both men and women.

Figure 7-6 Hospitalizations for attempted suicide* in general hospitals per 100,000 by age group and sex, Canada, 1999/2000

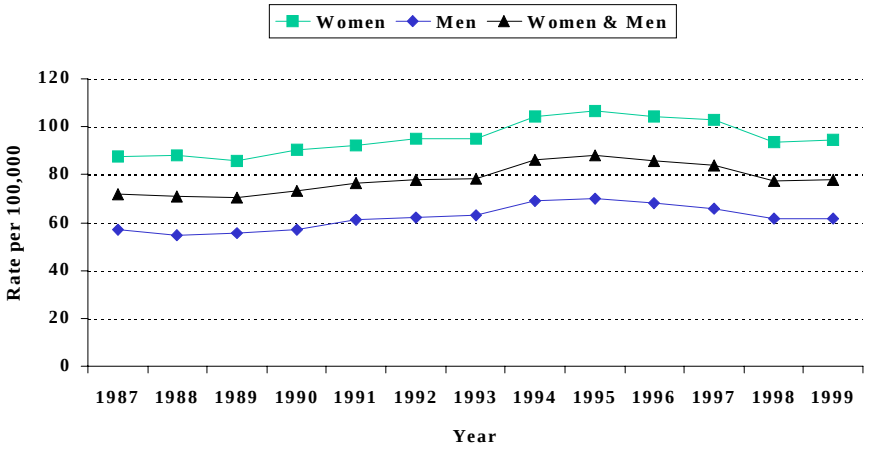


* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

Between 1987 and 1999, rates of hospitalization for attempted suicide peaked in 1995 (Figure 7-7). Rates declined in the latter 1990s among both men and women.

Figure 7-7 Rates of hospitalization for attempted suicide* in general hospitals by sex, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)

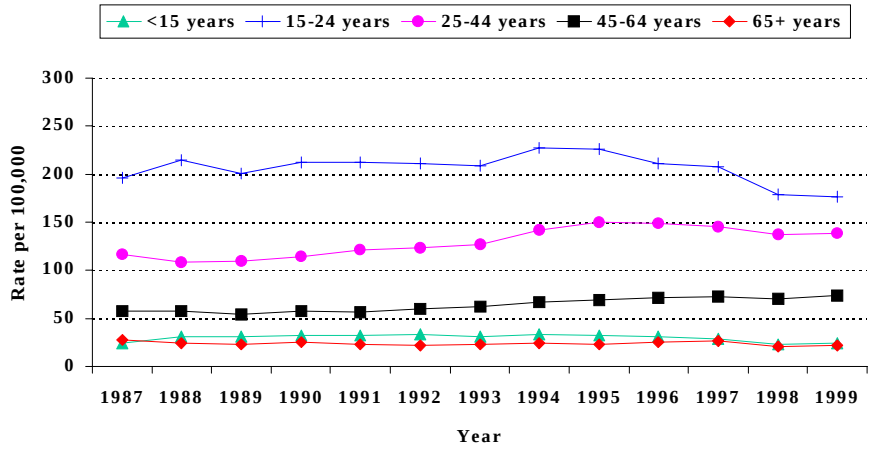


* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

In the two youngest age groups of women (<15 years and 15-24 years) hospitalization rates for attempted suicide increased between 1987 and 1995, then decreased (Figure 7-8). Although rates in the middle age groups (25-44 and 45-64) showed a similar increase up to 1995, they did not decrease in the same way in the later part of the decade.

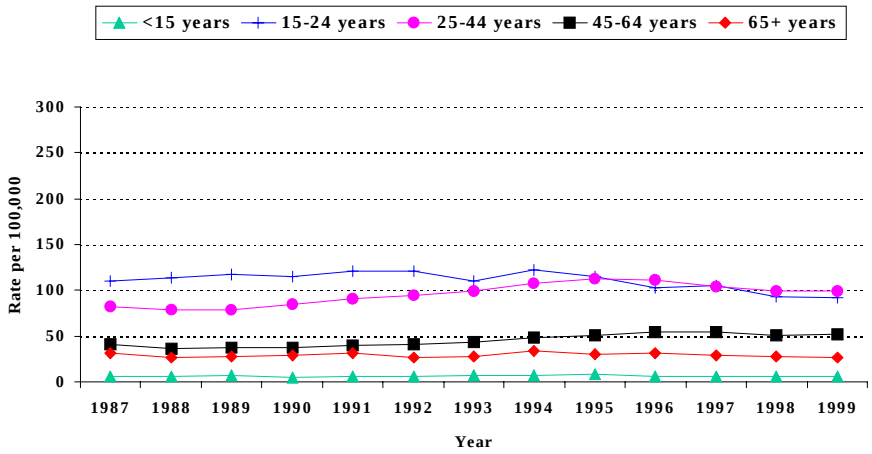
Figure 7-8 Rates of hospitalization for attempted suicide* in general hospitals among women by age, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)



* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

Figure 7-9 Rates of hospitalization for attempted suicide* in general hospitals among men by age, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)



* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

In the latter part of the 1990s, the pattern of hospitalization rates for attempted suicide in men was similar to that in women (Figure 7-9). Rates decreased markedly among men between 15 and 24 years of age, and the rates in the middle age groups remained steady.

Discussion

The difference in rates of suicide and attempted suicide among men and women has several possible explanations.[4] Although both men and women exhibit suicidal behaviour, men express their despair through fatal acts (by, for example, use of a firearm (26%) or hanging (40%)), and women are more likely to choose less lethal acts (such as an overdose of pills, from which they can be resuscitated).[2]

Youth suicide is a tragic event that relates, in part, to events associated with this life stage. Resolving the challenges that are part of youth development, such as identity formation, gaining acceptance and approval among peers, and gaining acceptance from families is a stressful time for teenagers.[5] For example, loss of a valued relationship, interpersonal conflict with family and friends, and the perceived pressure for high scholastic achievement can be overwhelming. For those who are vulnerable to suicide because of other factors, these developmental stresses can create a serious crisis for which suicide may seem to be the only solution. The impulsiveness of youth and their lack of experience in dealing with stressful issues also contribute to the higher risk of suicide.

Seniors face related challenges. They, too, experience the loss of relationships, but more through the death and chronic illness of their friends and life partners. They may also experience loss of their physical and mental abilities. Symptoms of depression may not be recognized and treated as such. In addition, being constantly faced with their own mortality, they may choose death on their own terms.

Suicide rates among the Aboriginal population are 3 to 6 times the rate of the national average, depending on the community.[6] Rates are particularly high among teenagers

and young adults. A recent Royal Commission stated that, historically, government and institutional policies toward the Aboriginal peoples have created a social environment that directly contributes to the higher incidence of suicidal behaviours.[7] Because of conflicting messages about the value of their own culture, many Aboriginal people do not have a strong sense of self. In addition, cultural instability has led to sexual abuse, family violence and substance abuse, which are associated with a high risk of suicide. Childhood separation, poverty and access to firearms also are contributing factors.

Impact of Suicide

'I feel as though I am in a crowded room, watching everyone around me dance, but I can't hear the music,' said Claire, a survivor who lost both her father and sister to suicide.[8]

When a loved one dies by suicide, family members in mourning are left alive, left behind, left alone.[8]

An individual's suicide affects everyone in his/her circle of family and friends. To begin with, those close to the individual feel a huge sense of loss. To some degree, they blame themselves for what has happened and second-guess whether they could have done something to prevent the tragedy. They experience a mixture of emotions, including both abandonment and anger toward the person who took his/her own life.

Family and close friends often feel isolated because the stigma associated with suicide makes it difficult to share their feelings with others: they find it hard to believe that anyone else could understand their feelings. Support groups can help survivors both to cope with the death and to adjust to life without the individual.

Stigma Associated with Suicide

> Stigma... is externally imposed by society for an unacceptable act and internally imposed by oneself for unacceptable feelings.[8]

In general, society does not condone suicide. This is, to some extent, a result of the influence of religion: some religious institutions refuse to bury a person on consecrated ground if he/she has committed suicide. Another factor is a traditional assumption in many societies that the state or the community has an economic and political interest in the life of its members, and that suicide is therefore an offence against the state. Life insurers may not pay benefits to survivors. Social and institutional judgments concerning suicide create a stigma that is felt intensely by family members. They may sense discussion among their friends, but because the subject is never broached directly they feel isolated and as though they are being blamed. If the individual also had a mental illness, the family and friends must cope with this stigma as well.

Within the family, each member may blame him or herself or others for the death or may feel anger toward the individual who has died. Because they judge these emotions as unacceptable, maintaining silence often seems to be the best solution.

The stigma against suicide operates, therefore, at two levels - social and personal. In either case, it acts as a major obstacle to frank discussion and emotional healing.

Causes of Suicidal Behaviour

The risk factors for suicidal behaviour are complex and the mechanisms of their interaction are not well understood. It is important to take an ecological perspective when considering the layers of influence on the individual. These layers include the self, family, peers, school, community, culture, society and the environment.[5]

A useful framework for categorizing the factors associated with suicidal behaviour includes four categories: predisposing factors, precipitating factors, contributing factors and protective factors.[5]

Predisposing Factors

Predisposing factors are enduring factors that make an individual vulnerable to suicidal behaviour. They include mental illness, abuse, early loss, family history of suicide and difficulty with peer relationships.

Research indicates that a very high proportion of people who kill themselves have a history of mental illness, such as depression, bipolar disorder, schizophrenia or borderline personality disorder. Of these, depression is the most common. This does not mean, however, that all people living with depression are suicidal.

Previous attempts at suicide serve as one of the strongest predictors of completed suicide.

Precipitating Factors

Precipitating factors are acute factors that create a crisis, such as interpersonal conflict or loss, pressure to succeed, conflict with the law, loss of stature in society, financial difficulties or rejection by society for some characteristic (such as ethnic origin or sexual orientation)

"The common stimulus in suicide is unendurable psychological pain.... The fear is that the trauma, the crisis, is bottomless - an eternal suffering. The person may feel boxed in, rejected, deprived, forlorn, distressed, and especially hopeless and helpless. It is the emotion of impotence, the feeling of being hopeless-helpless, that is so painful for many suicidal people. The situation is unbearable and the person desperately wants a way out of it."[9]

Contributing Factors

Contributing factors increase the exposure of the individual to either predisposing or precipitating factors. These include physical illness, sexual identity issues, unstable family, physical illness, risk-taking or self-destructive behaviour, suicide of a friend, isolation and substance abuse.

Protective Factors

Protective factors are those that decrease the risk of suicidal behaviour, such as personal resilience, tolerance for frustration, self-mastery, adaptive coping skills, positive expectations for the future, sense of humour and at least one positive healthy family relationship.

Prevention and Treatment

Using this framework of categories, suicide prevention programs must address the predisposing, precipitating, contributing and protective factors for suicidal behaviour:

- Early identification and treatment programs address the predisposing factors.
- Crisis intervention addresses the precipitating factors.
- Treatment programs address the contributing factors.
- Mental health promotion programs address the protective factors.

Many provinces, territories and communities have developed suicide prevention programs. Programs need to be both population-wide and targeted toward those who are at higher risk. A comprehensive program has a framework, goals and objectives and a commitment to adequate funding. Promotion of mental health of the entire Canadian population, reduction of risk factors and early recognition of those at risk of suicidal behaviour play essential roles in decreasing suicide and attempted suicide.

A comprehensive program has the following strategies.

1. Increase public awareness and decrease the stigma associated with suicidal behaviour.
2. Address determinants of health, including housing, income, education, employment and community attitudes.
3. Implement prevention programs for youth, for individuals at high risk for suicidal behaviour, and for family members post-suicide.
4. Provide and ensure equitable access to co-ordinated, integrated services, including crisis phone counselling and treatment of mental illnesses.
5. Reduce access to lethal means of suicide, particularly firearms and lethal doses of prescription drugs. Since suicidal behaviour is often crisis-oriented and impulsive, restricting access to lethal means can substantially reduce the risk of the completion of a suicide attempt.[10] This includes reducing access to firearms, bridges and dangerous sites, and medication.
6. Train service providers and educators in the early identification of predisposing factors and crisis management.
7. Conduct research and evaluation to inform the development of effective suicide prevention programs. These research efforts need to address the causes of suicidal behaviours, factors that increase risks for these behaviours, and factors that are protective and that may facilitate resiliency in vulnerable persons. Research must also evaluate the effectiveness of health and social services.

Future Surveillance Needs

Suicidal behaviour is a very serious manifestation of stress, hopelessness and despair.

Existing data provide a very limited profile of suicidal behaviour in Canada. The available hospitalization and mortality data need to be complemented with additional data to fully monitor suicidal behaviour in Canada. Priority data needs include

- Incidence and prevalence of suicidal behaviour by age, sex and other key variables (for example, socio-economic status, education and ethnicity)
- Prevalence of other mental illnesses in association with suicidal behaviour
- Impact of suicidal behaviour on the individual and family
- Access to and use of primary and specialist health care services
- Access to and use of public and private mental health services
- Access to and use of mental health services in other systems, such as schools, employee assistance programs, and criminal justice programs and facilities
- Stigma associated with suicidal behaviour
- Access to the means of suicide
- Treatment outcomes
- Exposure to known or suspected risk and protective factors

References

[1] Bland RD, Dyck RJ, Newman SC, Orn H. Attempted suicide in Edmonton. Leenaars AA, Wenckstern S, Sakinofsky I, Dyck RJ, Kral MJ, Bland RC, ed., Suicide in Canada. Toronto: University of Toronto Press. 1998: 136.

[2] Langlois S, Morrison P. Suicide deaths and suicide attempts. Health Reports 2002;13:2:9-22. Statistics Canada Catalogue 83-003

[3] Sakinofsky I. The epidemiology of suicide in Canada. Leenaars AA, Wenckstern S, Sakinofsky I, Dyck RJ, Kral MJ, Bland RC, ed., Suicide in Canada. Toronto: University of Toronto Press. 1998: 38.

[4] Canetto SS, Sakinofsky I. The gender paradox in suicide. Suicide and Life Threatening Behavior 1998;28:1:1-23.

[5] White J. Comprehensive youth suicide prevention: a model for understanding. Leenaars AA, Wenckstern S, Sakinofsky I, Dyck RJ, Kral MJ, Bland RC, ed., Suicide in Canada. Toronto: University of Toronto Press, 1998: 165-226.

[6] Sinclair CM. Suicide in First Nations people. Leenaars AA, Wenckstern S, Sakinofsky I, Dyck RJ, Kral MJ, Bland RC, ed., Suicide in Canada. Toronto: University of Toronto Press, 1998: 165-78.

[7] Royal Commission on Aboriginal Peoples. Choosing Life: Special Report on Suicide Among Aboriginal People. Ottawa: Canadian Government Publishing, 1995: Chapter 3.

[8] Rosenfeld L. 'I can't hear the music'. Leenaars AA, Wenckstern S, Sakinofsky I, Dyck RJ, Kral MJ, Bland RC, ed., Suicide in Canada. Toronto: University of Toronto Press. 1998: 376.

[9] Leenaars AA. Suicide, euthanasia, and assisted suicide. Leenaars AA, Wenckstern S, Sakinofsky I, Dyck RJ, Kral MJ, Bland RC, ed., Suicide in Canada. Toronto: University of Toronto Press. 1998: 460-461.

[10] Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. Arch Gen Psychiatry 1999;56:617-626.