"Looking for Something to Look Forward To..."

(a B.C. youth who died by suicide)

A Five-Year Retrospective Review of Child and Youth Suicide in B.C.

Child Death Review Unit • BC Coroners Service • 2008

BRITISH COLUMBIA
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Message from the Chief Coroner

The death of a child by suicide is a profound and tragic loss to family, friends and the community. Although we will never know what went on in the minds of these children and youth during those last moments we do know that they loved and were loved by relatives, friends, partners, and countless others. Their deaths touched so many.

This report is a review of the 81 children and youth who died by suicide in British Columbia in the five-year period between January 1, 2003 and December 31, 2007.

These children and youth were sons and daughters; sisters and brothers; nieces and nephews; grandchildren and cousins. They were best friends, schoolmates and colleagues. They were also patients, students, employees and clients in the community. They were the kid down the street and the captain of the hockey team. They were everyone's children and thus, suicide is everyone's issue.

Throughout the report, you will see words written by the children and youth or spoken by their friends. We chose to include these phrases in order to emphasize that these were real people with real hopes, fears and dreams, not just numbers and percentages in a report.

The lives of these children and youth were unique and complex; each experienced risk factors differently. Their deaths were also complicated as no single, easy, all-encompassing answer exists to explain why these children and youth took their own lives. It is important that we recognize the complicated nature of child and youth suicide and realize that preventing these deaths is equally complex, but by no means impossible. As we continue to receive reports of children and youth who die by suicide, I am moved to take action despite not knowing all there is to know about why these tragic deaths occurred and how they can be prevented. B.C.'s vulnerable children and youth cannot wait.

I strongly encourage you to share the findings of this report with your colleagues, friends, and family members with hope that we learn from these tragic losses and take forward the lessons that these children and youth teach us in order to prevent future deaths by suicide.

Every death of a child in B.C. matters. The men and women of the BC Coroners Service commit this report to the memory of the 81 children and youth who died by suicide and to all who were a part of their lives.

Terry P. Smith
Chief Coroner

Acknowledgements

The child and youth suicide cases reviewed for this report were initially investigated by the men and women of the BC Coroners Service. These coroners work around the clock to identify children and youth like those in this report, and to determine how, when, where and by what means they have have died. They are also mothers, fathers, spouses and grandparents who often put their own lives aside in order to attend to the children and youth and their families at the most tragic of times. We appreciate the compassion and professionalism our colleagues bring to their work.

We would also like to specifically acknowledge the following organizations and individuals for their contribution and guidance in the review process:

- Dr. Jennifer White, who shared with us her knowledge of best practice in suicide prevention
- Dr. Elizabeth Saewyc, who provided us with valuable information about gay, lesbian and bisexual children in B.C.
- Dr. Bob Fisk, of the Public Health Surveillance and Epidemiology Branch (Ministry of Healthy Living and Sport), who informed us about suicide rates and trends in B.C.
- representatives from the B.C. Ministry of Children and Family Development, including Child and Youth Mental Health, Youth Justice and Aboriginal Regional Support Services
- representatives from the Diversity and Equity Branch and Aboriginal Education Enhancements Branch of the B.C. Ministry of Education
- the Children's Commissions of New South Wales and Queensland, Australia, for the opportunity to learn from their research into youth suicide.

The production of this report greatly benefited from the expertise of Merrie-Ellen Wilcox (editor), Anthony Alexander (graphic design) and Anne Cochran (panel facilitator). Their time and effort is greatly appreciated.

Finally, the Child Death Review Unit expresses sincere appreciation to Chief Coroner Terry Smith and his executive team, who provide leadership, support and sound advice as we continue our work in child death review.

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Key Findings

In the five-year period between January 1, 2003, and December 31, 2007, 81 children and youth died by suicide in British Columbia. When this project was initiated, 66 of these cases were closed and 15 remained open and under investigation. The Child Death Review Unit's review of the 66 closed cases resulted in the following findings:

- Older youth (age 17–18 years), males, Aboriginal children and youth, and gay, lesbian and bisexual children and youth, as well as those who were questioning their sexuality, were at increased risk of suicide.
- Hanging was the most common method of suicide in the cases reviewed.
- Past suicidal behaviour, such as expressing thoughts of suicide, making threats of suicide, and attempting suicide, was the most significant risk factor identified, present in 70 per cent of the cases reviewed.
- The majority of children and youth (68 per cent) had experienced an acute stressful event, such as an argument with a parent or romantic partner. In most cases this event occurred less than 24 hours prior to death and in the context of an ongoing mental health problem or chronic family dysfunction.
- Almost half of the children and youth (45 per cent) had a mental health problem. Depressive symptoms were reported most frequently.
- Close to two-thirds of children and youth with mental health problems had received medication, in most cases an antidepressant. Several children and youth had stopped taking or were inconsistent in taking their medication in the months prior to death.
- Nearly half of the children and youth (44 per cent) experienced chronic dysfunction (such as abuse and neglect) in their relationships with family members or romantic partners.
- A large number of the children and youth had received one or more types of services in the year prior to death. Medical services, such as those provided in family practices, emergency departments and psychiatric care, were received most frequently.

1. Introduction

The Child Death Review Unit of the Coroners Service of British Columbia reviews all child deaths in the province. This includes children and youth under the age of 19 who die unexpectedly or through natural disease processes. The results of these reviews are included in annual reports and special reports.

Suicide is the second most common cause of death for children and youth aged 12 to 18, after motor vehicle crashes. Past reviews of child and youth suicide conducted by the Child Death Review Unit have found that the majority of these deaths are preventable. Both the prevalence and the high level of preventability suggested the need for a special report on child and youth suicide.

The project

To produce this special report, we studied the population of children and youth who died by suicide in B.C. over a five-year period. The aim of the project was to look specifically at the following questions:

1. Who were the children and youth and how did they die?
2. What modifiable and non-modifiable risk factors were present in their lives?
3. What types of services did the children and youth receive?
4. Which risk profiles identified in the research literature fit the children and youth? Did any other risk profiles emerge?
5. What can these children and youth teach us about preventing future suicide deaths?

What we looked at

In the five-year period between January 1, 2003, and December 31, 2007, 81 children and youth died by suicide.

As of June 1, 2008, when this project began, 66 of the 81 child or youth suicide cases (81 per cent) were "closed" – in other words, the coroner had completed the investigation of these cases. The project consisted of an in-depth review of these 66 suicide deaths.

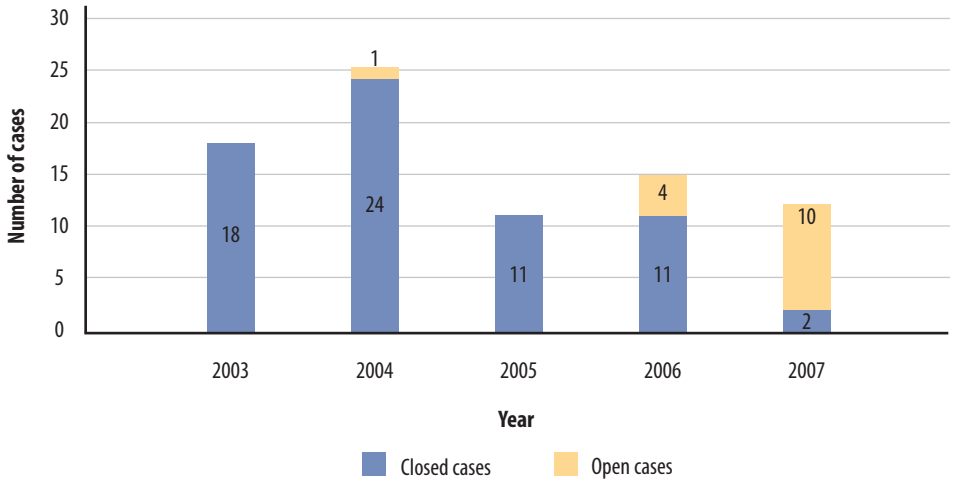
Fifteen of the 81 child or youth suicide cases (19 per cent) remained "open" as of June 1, 2008: the coroner was still investigating the death at that time. The majority of these open cases involved deaths that had occurred in 2007 (Figure 1.1).

What we did

We began by compiling all of the child and youth suicide files dating from January 1, 2003, to December 31, 2007. Of the 81 files compiled, 66 were closed and 15 remained open and under investigation. (The open cases are reported on separately in this report, since only preliminary data was available when we reviewed the files.)

After a preliminary review of the closed files, we developed a suicide-specific protocol – a lens through which to undertake a more detailed review of the files. Informed by suicide research from Canadian and international sources, the protocol was used to identify demographics and circumstances of death, as well as the various risk factors in the children and youth's lives.

Figure 1.1 Child and youth suicide cases by year death occurred



Source: Child Death Review Unit, BC Coroners Service

We obtained additional information for many of the children and youth, including records from schools, physicians and government agencies. We also invited families to contribute their stories, to enrich our understanding of the complexities of these children and youth's lives.

Using the resulting summaries of the files, we completed an aggregate review, through which preliminary patterns involving demographics, risk factors, circumstances and contact with services began to emerge. On the basis of the aggregate data and a further review of the research literature, we identified 15 key risk factors and three main risk profiles.

We also completed a review of best practices, looking at the current state of policy, planning and research provincially, nationally and internationally.

Finally, the Chief Coroner appointed a Child Death Review Panel, consisting of survivors and experts in fields such as child welfare, law enforcement, health, education and Aboriginal affairs. The panel met to review the data and best practices and to formulate recommendations aimed at preventing future child and youth deaths by suicide and improving outcomes for B.C.'s children and youth.

The report

"Looking for Something to Look Forward To...": A Five-Year Retrospective Review of Child and Youth Suicide in B.C. presents the findings of the literature review, the review of the cases, and the recommendations of the Child Death Review Panel.

In addition to describing the project, Chapter 1 provides a brief overview of what we know about child and youth suicide from the current research.

Chapter 2 briefly outlines what is known about the children and youth in the 15 open cases. This is followed by a more detailed description of the demographics and circumstances of death of the children and youth in the 66 closed cases.

Chapter 3 describes the risk factors that we identified. These include non-modifiable risk factors, such as age and sex, and 15 modifiable risk factors – those which can be removed or alleviated.

Chapter 4 describes the types of services received by the children and youth, including school, medical, Ministry of Children and Family Development (including child and family services, Youth Justice, Child and Youth Mental Health and delegated Aboriginal agencies), and other community services.

Chapter 5 describes and compares the three main risk profiles that we identified through the aggregate review of the 66 closed cases:

- children and youth with mental health problems
- children and youth who experienced family or relationship dysfunction, and
- children and youth who experienced a stressful event.

Chapter 6 focuses on Aboriginal children and youth, providing information about demographics, circumstances of death, risk factors, and types of services received. Findings related to Aboriginal children and youth are discussed separately in order to look at why these children and youth may experience higher rates of suicide than non-Aboriginal children and youth.

Finally, Chapter 7 includes the recommendations made by the Child Death Review Panel on the basis of the data and the best practices identified in the review.

Throughout the report, you will see words written by children and youth who died by suicide, or words spoken by their friends.

Key terms appear in **bold face** the first time they are used, and are defined in the margin and in a glossary at the end of the report.

A note about limitations

Child and youth suicide is a relatively rare occurrence, resulting in a small number of deaths for review and analysis. Percentages and trends discussed in the report should be interpreted with caution, as the use of small numbers in statistical analysis can in some circumstances be misleading.

child and youth: In the *Coroners Act*, the broad term "child" is used to describe anyone who is under the age of 19. For the purposes of this report, "child" refers to individuals 12 years of age and under, and "youth" refers to individuals over 12 but under 19 years of age.

suicide: the BC Coroners Service classifies a death as suicide when it can be determined that the death occurred as a result of a self-inflicted injury with intent to cause death.

suicidal behaviour: suicidal ideation, threats and/or suicide attempts.

suicidal ideation: thoughts of suicidal acts involving oneself.

suicide attempt: a self-inflicted, non-accidental injury that does not result in death.

What we know about child and youth suicide

Suicide is a complex public health problem that affects families and communities on a global scale. In 2000, the World Health Organization (2008) reported approximately one million deaths due to suicide, resulting in a global mortality rate of 16 per 100,000 people – the equivalent of one death every 40 seconds.

Overall, suicide is the fifth leading cause of death among Canadians. Certain demographic groups are found to be at greater risk than others. Although elderly males have historically experienced the highest rates, the increased incidence of **suicidal behaviour** among young people has been a growing concern in many countries, including Canada (World Health Organization, 2008).

Rates of suicide among Canadian youth tripled between the1950s and 1980s, with the largest increase among young males (B.C. Ministry of Children and Family Development [MCFD], 2008c). Possible reasons for this dramatic increase include the corresponding increase in the prevalence of depressive disorders, substance use and substance use disorders, psychobiologic changes (including earlier onset of puberty), increase in the number of social stressors, and changes in attitudes towards suicidal behaviours and the related increased availability of suicidal methods (Guo & Harstall, 2002).

While the national youth suicide rate has since levelled off, Canada still loses close to 200 children and youth aged 19 and under to suicide every year. It is also important to consider the extent of non-fatal suicidal behaviours: approximately seven per cent of all young people in B.C., in Grades 7 to 12, have reportedly made a **suicide attempt** in the previous year, and 16 per cent have seriously considered it (MCFD, 2008c).

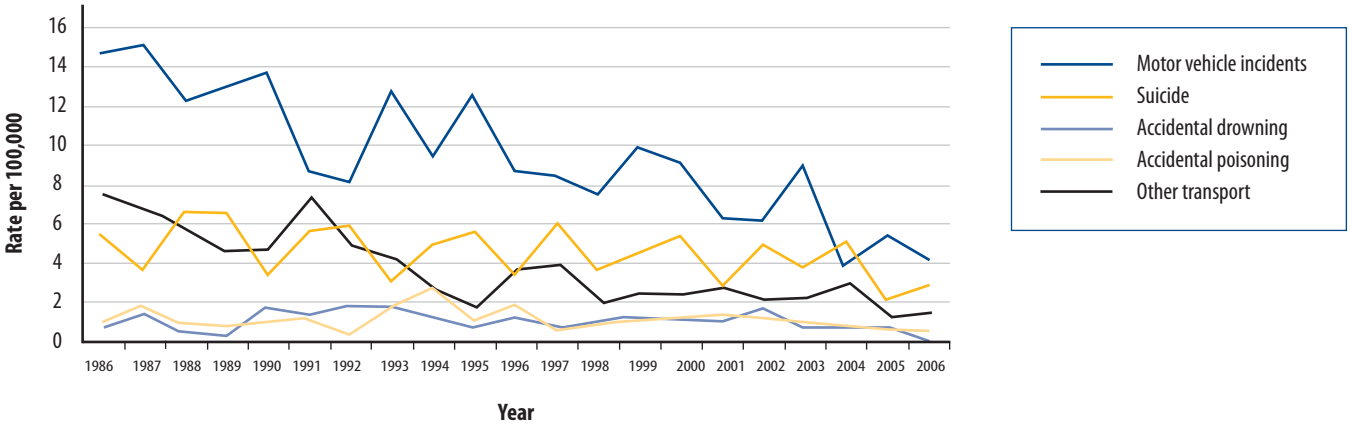
Suicide in B.C.: Rates and trends

The youth suicide rate in B.C. has declined significantly over the past 20 years, yet suicide remains a leading cause of injury death for B.C. children and youth aged 10 to 18 years, second only to motor vehicle incidents (Figure 1.2).

Age

Over the last 20 years in B.C., youth 15 to 18 years of age have had significantly higher rates of suicide than children and youth 10 to 14 years of age (Figure 1.3). This finding is supported by earlier evidence showing that older adolescents are more likely to die by suicide than younger adolescents and children (Kutcher & Szumilas, 2008). In B.C., the suicide rate is lower among young people than among older populations (Figure 1.4).

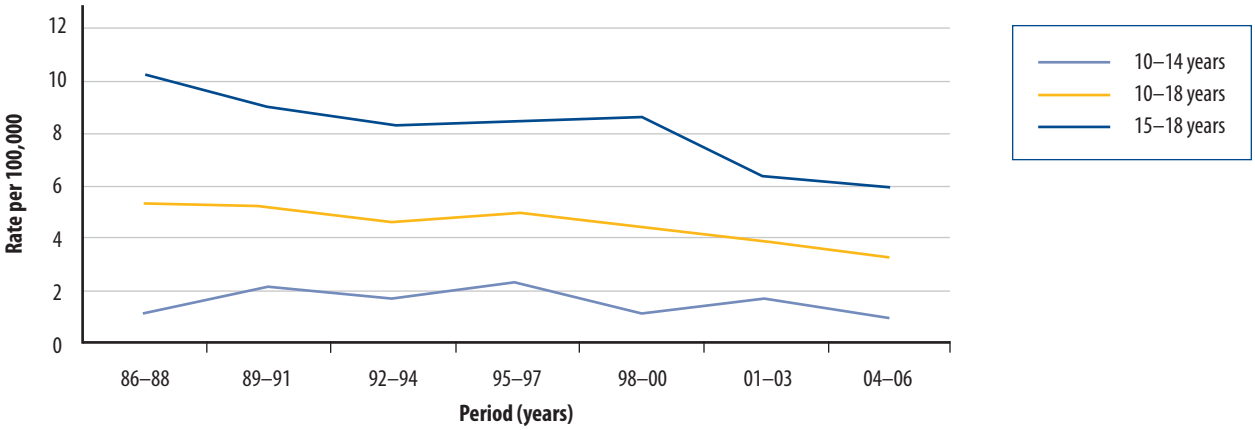
Figure 1.2 Leading causes of injury death, B.C. children and youth ages 10–18, 1986–2006



Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

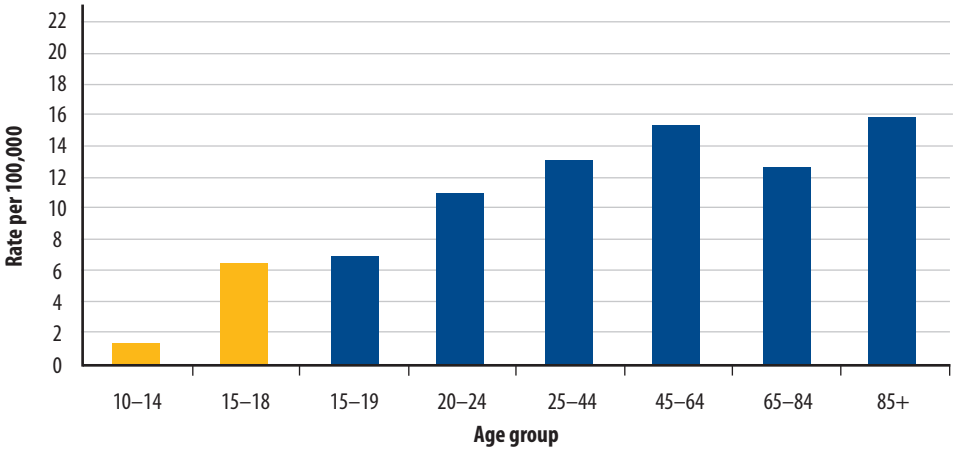
Figure 1.3 Suicide among B.C. children and youth ages 10–14, 10–18, and 15–18, 1986–88 to 2004–06



Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

Figure 1.4 Suicide by B.C. age group, 2002–06

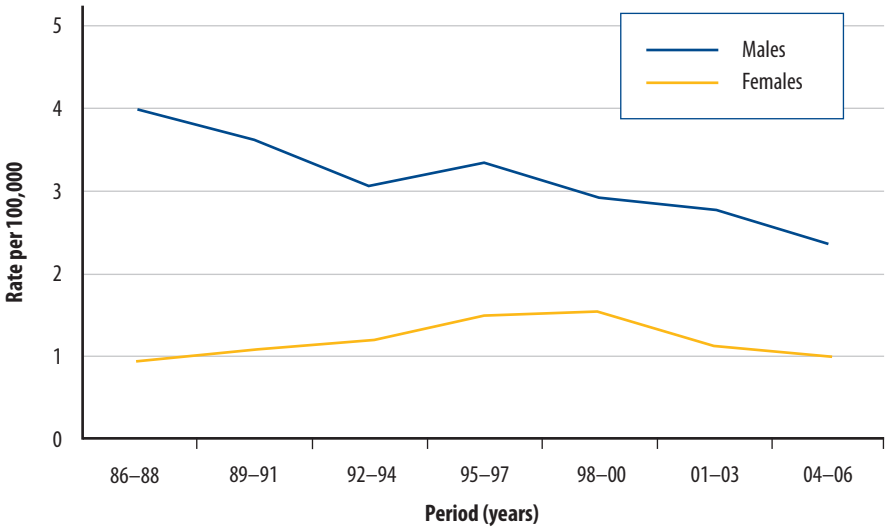


Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

Figure 1.5

Suicide rates for B.C. males and females ages 10–18, 1986–88 to 2004–06

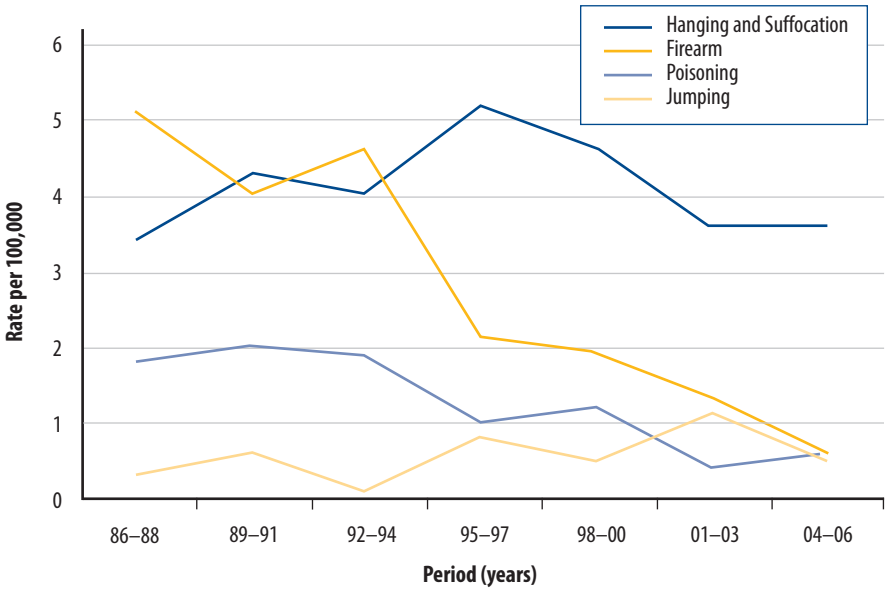


Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

Figure 1.6

Suicide methods, B.C. youth ages 15–19, 1986–88 to 2004–06



Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

Sex

Males have a significantly higher rate of suicide than females (Figure 1.5). Over the last 20 years, the suicide rate for male children and youth has declined significantly, while the rate for females has remained unchanged. In both B.C. and Canada, males die by suicide more than three times as often as females, although suicide attempts have a higher incidence in the female population (Hamid-Balma, 2005; MCFD, 2008c).

Possible reasons for this pattern are that females tend to use less immediately lethal methods in their suicide attempts and are reportedly more likely to take advantage of community suicide prevention services, while males tend towards more lethal means and are reportedly less likely to ask for help (Links, Masecar, Ramsey & Hill, 2001).

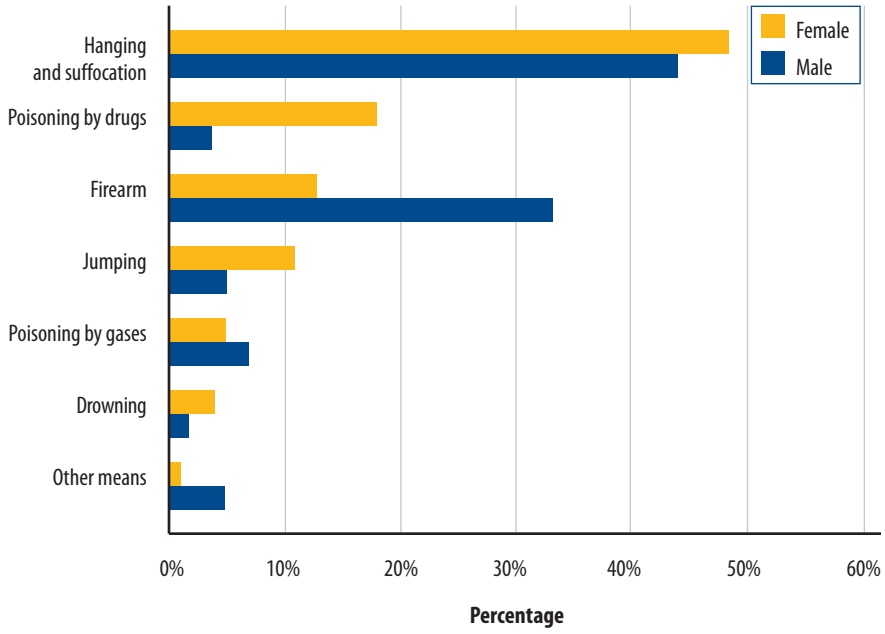
Method

In B.C., hanging has remained the most common method of suicide for both male and female youth aged 15 to19 years since the early 1990s (Figure 1.6).

Over the past 20 years, rates of suicide by firearm and by poisoning have declined significantly, while the rate of suicide by jumping from a height has not significantly changed. There was a significant preference for firearms among males and a

Figure 1.7

Suicide methods, B.C. males and females ages 15–19, 1986–2006

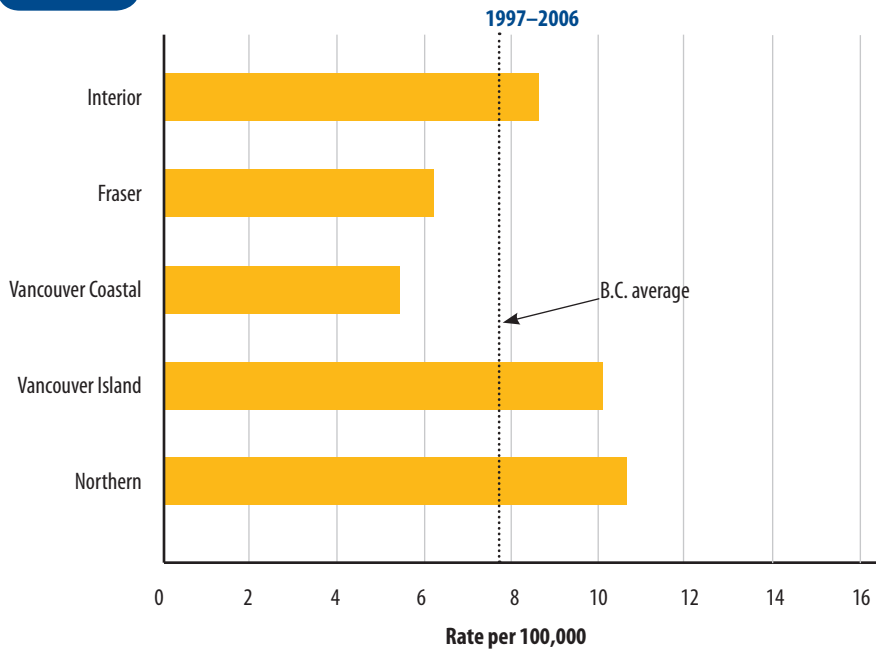


Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

Figure 1.8

Suicide deaths, B.C. youth ages 15–19, by health authority, 1997–2006



Source: Vital Statistics Agency

Prepared by: Population Health Surveillance and Epidemiology, Ministry of Healthy Living and Sport

significant preference for poisoning and jumping among females (Figure 1.7).

Region

There was no significant difference in rates of child and youth suicide among B.C. health authority regions* over the last 10 years (Figure 1.8). The Vancouver Island and Northern regions had slightly higher rates, but the difference was not significant.

***Note:** Health authority regions do not directly correspond to BC Coroners Service regions. Maps of the BC Coroners Service regions and health authority regions are included in the appendix.

2. The Children and Youth

The 81 children and youth who died by suicide between January 1, 2003, and December 31, 2007, came from a wide variety of backgrounds. They came from regions all over the province, from the Lower Mainland to remote communities in the north. Some were popular and some found it hard to make friends. Some struggled in school and others excelled. They were everyone's children.

The open cases

As of June 1, 2008, 15 of the 81 child or youth suicide deaths that occurred between January 1, 2003, and December 31, 2007, were open, and therefore still under investigation. The review of these **open cases** was limited to obtaining basic demographic information on these children and youth from the coroner's preliminary report.

All of the 15 children and youth were between 12 and 18 years of age. Most were between 16 and 18 years of age. Nine (60 per cent) were male and six (40 per cent) were female. Five of the children and youth were **Aboriginal**. All five were of First Nations ancestry; there were no Métis or Inuit children and youth. Of the 15 children and youth, six resided in the Fraser region, four in the Interior, three in the Northern region and two in the Vancouver Metro region. The Island region reported no open child or youth suicide cases.

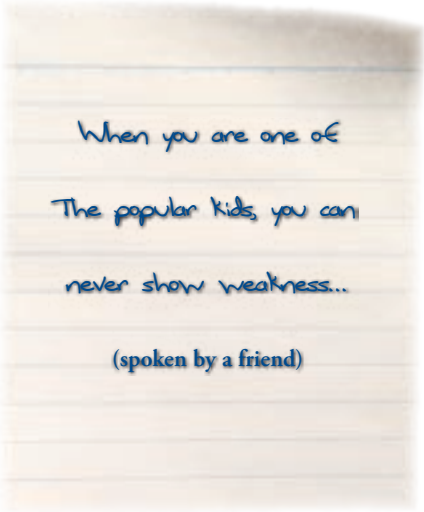
Ten of the 15 children and youth had a history of using illicit drugs and/or alcohol. (There was insufficient information to determine whether use was chronic and/or heavy.) Four children and youth had been noted as having a **mental health problem**. Nine children and youth had previously attempted suicide. Eight children and youth had been noted as having experienced **family dysfunction**.

Seven of the 15 children and youth had experienced an event that caused the child or youth significant emotional distress. In most cases the stressful event involved conflict with a romantic partner.

Hanging was the most common method of suicide, accounting for 10 of the 15 open suicide cases. There were two deaths attributable to a gunshot wound and one death attributable to each of jumping from a height, jumping in front of a moving object, and intentional poisoning.

The closed cases

Of the 81 child and youth suicide cases that occurred between January 1, 2003, and December 31, 2007, 66 were closed, meaning the coroner had completed the investigation of the cases when this project began. It was these 66 **closed cases** that we reviewed in detail.



Note

Personally or socially defined factors such as ethnicity, religion or spirituality, sexual orientation and culture were often difficult to determine based on the information found on the coroner's file and the additional information obtained by the Child Death Review Unit as part of the review process.

open case: a case in which the coroner is still investigating a death.

Aboriginal: For the purposes of this report, the term "Aboriginal" refers to First Nations (both status and non-status), Métis and Inuit peoples.

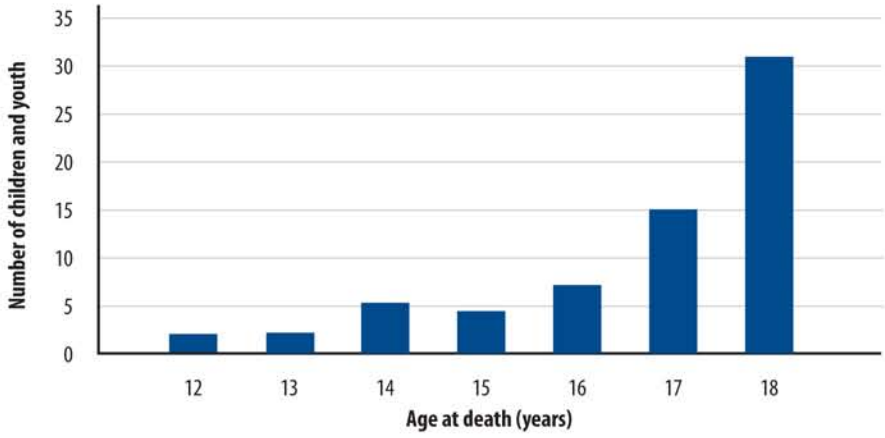
mental health problem: a significant impairment of an individual's cognitive, affective and/or relational abilities that may be recognized as a medically diagnosable disorder.

family dysfunction: the consequence of a social practice or behaviour pattern (such as abuse or neglect) that undermines the stability of the family unit.

closed case: a case in which the coroner has completed the investigation into a death.

Figure 2.1

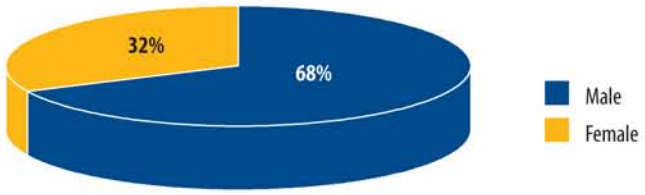
Age at time of death



Source: Child Death Review Unit, BC Coroners Service

Figure 2.2

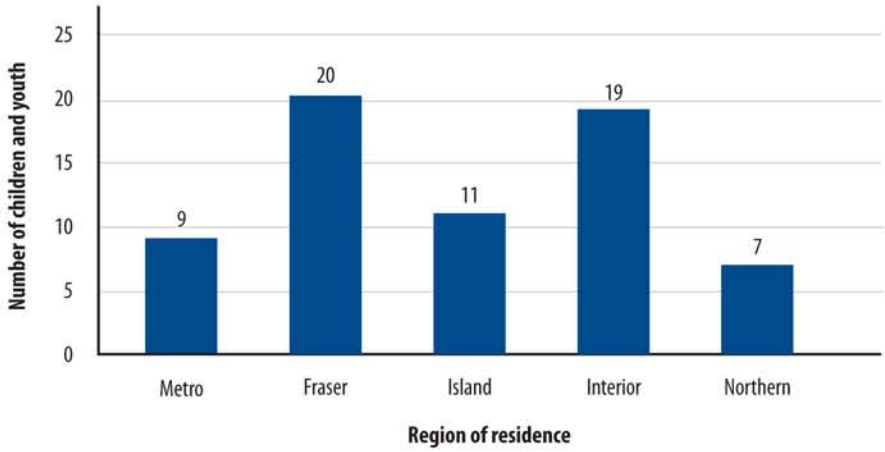
Child and youth suicide deaths, male and female



Source: Child Death Review Unit, BC Coroners Service

Figure 2.3

Child and youth suicide deaths by region of residence



Source: Child Death Review Unit, BC Coroners Service

Demographics

Age

The children and youth ranged in age from 12 to 18 years (Figure 2.1). Eighteen-year-olds accounted for the highest number of children and youth who died by suicide during this five-year period.

Sex

The number of male children and youth who died by suicide was more than double the number of females. Forty-five (68 per cent) of the children and youth who died by suicide were male. Twenty-one (32 per cent) were female.

Aboriginal ancestry

Twelve children and youth (18 per cent) were identified as Aboriginal. Eleven of them were of First Nations ancestry and one was Métis.

Country of birth

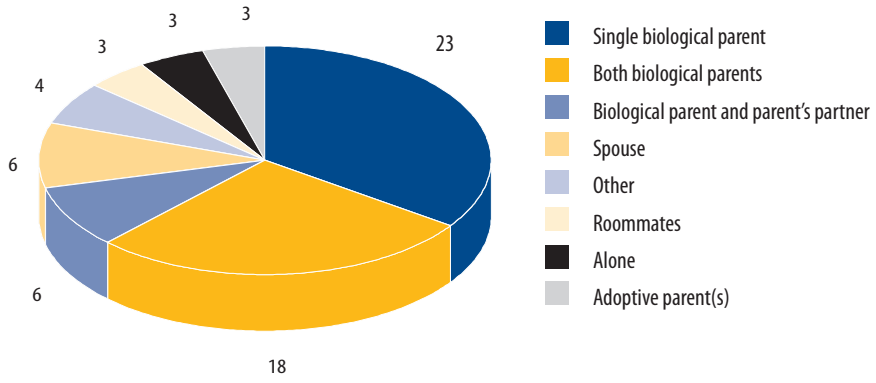
Eight children and youth (12 per cent) were born outside of Canada: two in Korea and one in each of Australia, England, the United States, India, Russia and Romania.

Region of residence

Over the five-year period studied, the Fraser and Interior regions* had the highest number of child and youth suicides (Figure 2.3). These findings should be interpreted with caution, however, as child and youth suicide rates (rather than strictly numbers) need to be considered when making comparisons between regions.

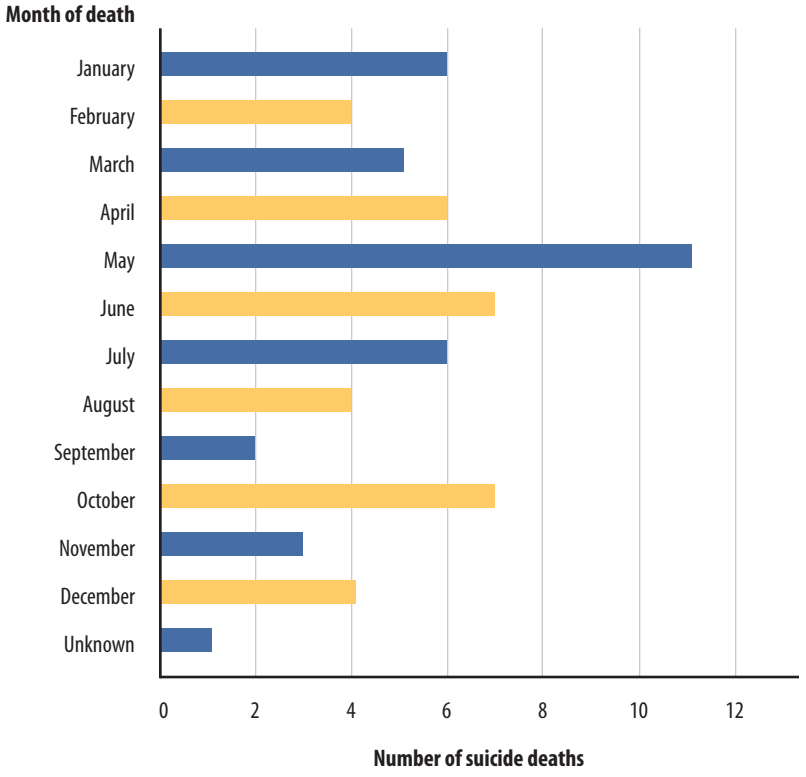
***Note:** Health authority regions do not directly correspond with BC Coroners Service regions. Maps of the Coroners Service and health authority regions are included in the appendix.

Figure 2.4 Child and youth suicide deaths by living situation



Source: Child Death Review Unit, BC Coroners Service

Figure 2.5 Child and youth suicide deaths by month of death



Source: Child Death Review Unit, BC Coroners Service

Vital Statistics Agency data from 1986 to 2006 show that the Interior and Vancouver Island health authority regions have the highest rates, followed by the Northern, Fraser and Vancouver Coastal regions. Historically, the Interior and Vancouver Island regions have had rates higher than the B.C. average.

Living situation

Most children and youth lived with one or both biological parents. Twelve of the 66 children and youth (18 per cent) lived apart from a parent or adult caregiver, either with a roommate or romantic partner or alone (Figure 2.4).

Education and employment

The majority of children and youth were attending elementary or secondary school at the time of their deaths. Fifteen youth had graduated from secondary school; five of them had acquired some post-secondary education.

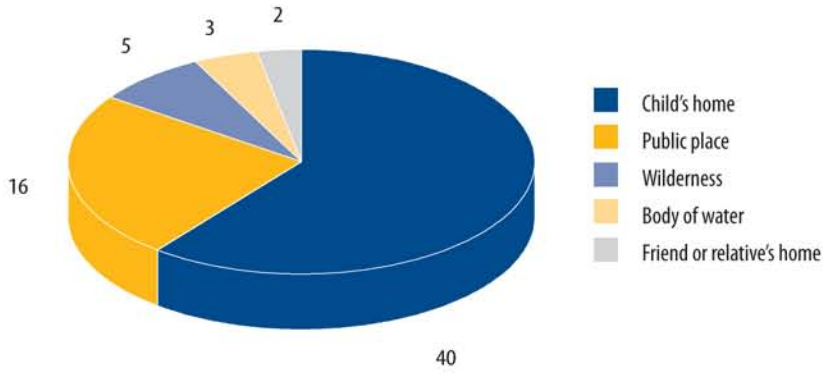
Ten youth had not yet completed secondary school but were not enrolled or attending at the time of death.

Thirteen youth were employed; eight of them worked part-time and five full-time.

Sexual orientation

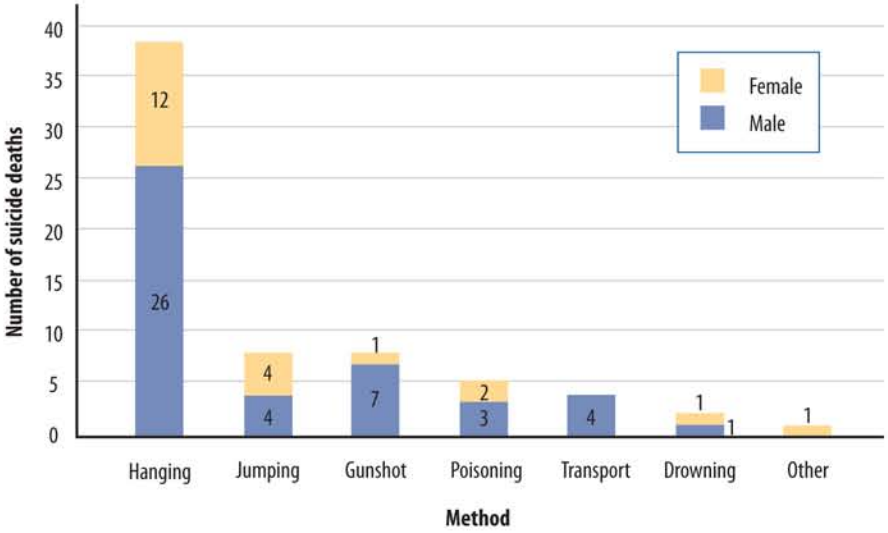
Four children and youth identified as gay, lesbian or bisexual. Three other children and youth had been questioning their sexual orientation in the months prior to death.

Figure 2.6 Child and youth suicide deaths by location



Source: Child Death Review Unit, BC Coroners Service

Figure 2.7 Method of suicide



Source: Child Death Review Unit, BC Coroners Service

Circumstances

Month

The highest number of child and youth suicides occurred between the months of May and July (Figure 2.5).

Despite a commonly held belief that the Christmas season has the highest suicide rate of the year, studies have shown that suicide rates across North America are actually lower at that time of year (Suicide Information and Education Centre [SIEC], 2002). Studies also suggest that while the holidays can bring up some very difficult emotions, they also tend to evoke feelings of family connectedness and these feelings may act as a buffer against suicide (SIEC, 2002).

Location

The most common location for suicide deaths was the child or youth's home, followed by a public space such as a park, a roadway or a school (Figure 2.6). A small number of suicides took place in the wilderness or at a friend or relative's home.

Method

Hanging was the most common method of suicide for both males and females and accounted for more total deaths than all of the other methods combined (Figure 2.7). Gunshot and jumping from a height were the next most common methods used.

Over the 20-year period between 1979 and 1999, the percentage

of Canadian youth who died by suicide using a firearm decreased from 60 per cent to 20 per cent. Research suggests that this decrease may be attributed to Bill C-17, which imposed stricter firearm legislation (Cheung & Dewa, 2005).

Of the eight children and youth who jumped from a height, five jumped from a bridge and three jumped from a building.

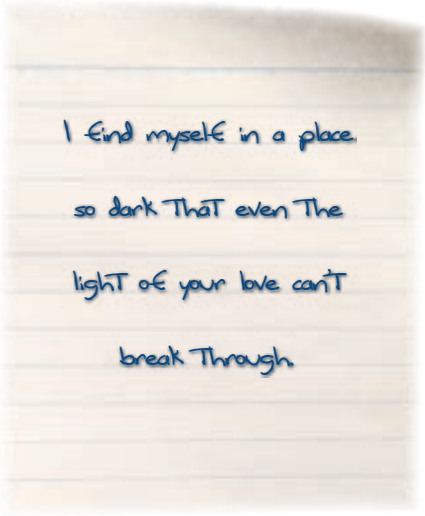
Males were more likely to die by hanging, gunshot and transport-related incidents than females.

Of the four transport-related deaths, all of which involved males, three youth jumped in front of a moving vehicle and one youth intentionally crashed the vehicle he was driving.

Stressful event

Thirty-six of the children and youth (54 per cent) had experienced a stressful event in the 24 hours prior to death. An argument with a parent or caregiver, the breakup of a romantic relationship, or an argument with a romantic partner were the events most frequently experienced. Other stressful events included physical altercations with peers, commission of a crime, humiliation, **bullying**, and experiencing the death of a peer by suicide or other means.

bullying: a pattern of repeated aggressive behaviour, with negative intent, directed from one person to another, where there is a power imbalance (Olweus, Limber & Mihalic, 1999).



3. The Risk Factors

The review of the 66 closed cases showed that these children and youth were affected by a multiplicity of risk factors, both non-modifiable and modifiable.

The risk factors identified do not necessarily represent all factors that may have been present in the lives and/or deaths of the children and youth. Identification of risk factors is based on information found on the coroner's file and the additional information obtained by the Child Death Review Unit as part of the review process.

It is difficult to confirm a causal relationship between risk factors and child and youth suicide. The risk factors used in the Child Death Review Unit's suicide review protocol and discussed in this report were selected on the basis of their association with an increased likelihood of suicidal behaviours, as identified in current research. These risk factors have been shown to *increase the risk of* suicide, not to *cause* suicide. In the majority of cases, no single risk factor can be considered to be the sole contributor to a suicide death; rather, it is the presence of multiple risk factors and their interaction which needs to be considered.

It is also important to recognize that each child and youth who died by suicide experienced risk factors in a unique way, in terms of the number, combination and severity of factors he or she faced and how these factors interacted during his or her life.

Non-modifiable risk factors

Non-modifiable risk factors cannot be changed and include age, biological sex, Aboriginal ancestry and sexual orientation.

Age

Youth between the ages of 17 and 18 years accounted for the largest percentage of suicide deaths (69 per cent) during the five-year period.

This is consistent with current research findings, which show that across Canada, older adolescents are more likely to die by suicide than younger adolescents and children (Kutcher & Szumilas, 2008).

Although the risk of suicide increases with age, it is important that suicide prevention initiatives be targeted not just at older youth. Many of the youth in the cases reviewed had encountered ongoing problems (such as family dysfunction and mental health problems) that began in their childhood or early adolescence. Programs aimed at developing personal coping skills and resiliency in children and youth, as well as mental health screening of younger children, may be beneficial steps in the prevention of suicide in the later teen years.

Sex

Males accounted for 68 per cent of the suicide deaths over the five-year period.

In Canada, males die by suicide more than three times as often as females, a statistic consistent with international trends (Hamid-Balma, 2005). Current research often attributes the disparity between males and females to the male tendency to use more immediately lethal methods in their suicide attempts and to be less likely to take advantage of community suicide prevention services and to ask for help (Links et al., 2004). Nationwide, females experience higher rates of suicide attempts than males (Lewinsohn, Rohde, Seeley & Baldwin, 2001).

This speaks to the importance of encouraging help-seeking behaviour in male youth. Initiatives that seek to reduce the stigma of mental disorders among male youth may also be an important component in decreasing the rate of suicide in this group.

Aboriginal ancestry

Twelve children and youth (18 per cent) were identified as Aboriginal.

non-modifiable risk factors: risk factors that cannot be changed, including age, biological sex, Aboriginal ancestry and sexual orientation.

Eleven were First Nations and one was Métis.

Rates of suicide among First Nations youth are estimated to be five to six times higher than non-Aboriginal youth, although variations in suicide rates across First Nations communities are common and many have low or non-existent rates of youth suicide (Chandler & Lalonde, 1998).

Risk factors relating to Aboriginal children and youth who died by suicide are described in more detail in Chapter 6.

Sexual orientation

Seven youth (11 per cent) identified as gay, lesbian or bisexual or were questioning their sexual orientation. There was insufficient information to determine the youth's sexual orientation in 16 cases. A 2003 survey of B.C. high school students found that approximately two to four per cent identified as gay, lesbian or bisexual (Saewyc et al., 2007). Nine to 15 per cent may have been questioning their sexual orientation (Saewyc et al., 2007).

Six of the seven youth who were gay, lesbian, bisexual

or questioning their sexual orientation were known to have felt emotional distress relating to their sexual orientation. Three were bullied at school because of their sexual orientation. Three experienced significant family conflict relating to their sexual orientation. One youth experienced significant internal conflict regarding her sexual orientation.

Research shows that gay, lesbian and bisexual youth in B.C. are more likely than heterosexual youth to have had previous thoughts of suicide. They are also more likely to have attempted suicide in the previous year (Saewyc et al., 2007). Research suggests that these youth are at increased risk because they often experience higher levels of abuse, harassment and violence in school, at home and in the community than their heterosexual peers (Saewyc et al., 2007).

The findings from this review and the research literature in this area suggest that it is important to look further at how heterosexism increases the risk of suicide for youth who are gay, lesbian, bisexual or questioning their sexual orientation, and at what suicide prevention initiatives would specifically target this group.

Modifiable risk factors

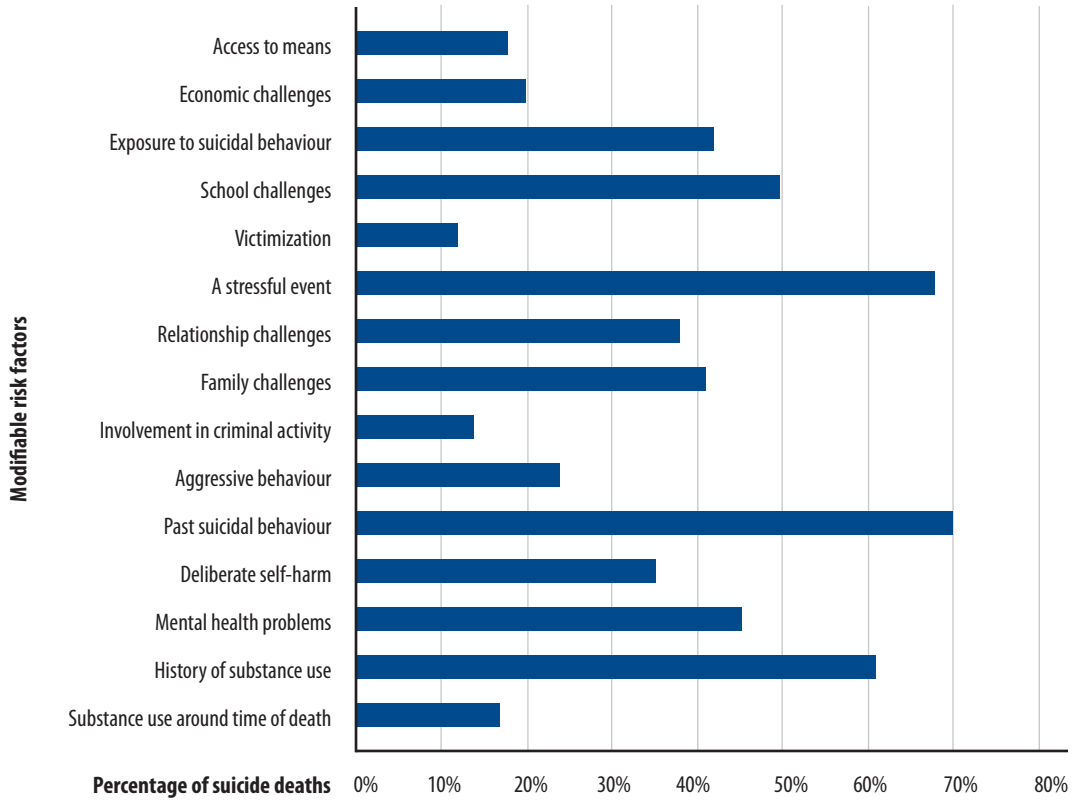
Modifiable risk factors are those that can potentially be removed or alleviated through intervention, thereby reducing the probability of injury, disease or death.

The 66 closed cases were looked at within the context of 15 modifiable risk factors that addressed the social, familial, individual and environmental spheres of the children and youth's lives (Figure 3.1.).

modifiable risk factors: risk factors that can potentially be removed or alleviated through intervention, thereby reducing the probability of injury, disease or death.

Figure 3.1

Child and youth suicide deaths by modifiable risk factor



Source: Child Death Review Unit, BC Coroners Service

The top five modifiable risk factors identified were:

- past suicidal behaviour
- a stressful event
- a history of **substance use**
- school challenges
- mental health problems.

Substance use around the time of death

Toxicological analysis was conducted in 37 of the 66 cases (56 per cent). Of the 37 analyses, substances were detected in 11 (30 per cent). Five children and youth had used alcohol around the time of death, three had used illicit substances, and three had used both alcohol and illicit substances. Of the six children and youth who used illicit substances around the time of death, three had used marijuana, two had used cocaine, and one had used methamphetamines.

Substance use around the time of death could not be confirmed in the 29 cases where toxicological analysis was not conducted.

Suicide risk has been shown to increase when alcohol and/or illicit drugs are used, as intoxication may decrease inhibitions, increase aggressive behaviour and impair judgment (Canada Institute of Health [CIH], 2006; Hufford, 2001).

substance use: the use or misuse of substances such as alcohol and drugs (both legal and illegal).

All of the children and youth who were found to have used substances around the time of death had a history of substance use; almost all were identified as chronic or heavy users of drugs and/or alcohol.

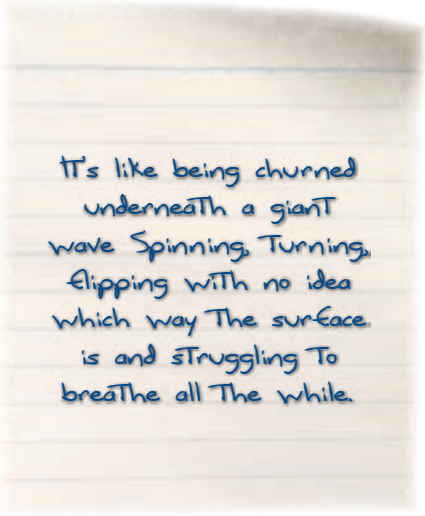
A history of substance use

Forty children and youth (61 per cent) were identified as having used substances during their lives. Over half used both alcohol and illicit drugs. Marijuana was the illicit drug used most frequently, followed by cocaine and MDMA (ecstasy).

Nine children and youth were further identified as chronic and/or heavy substance users. Many had long-standing difficulties with substance use lasting longer than one year. Of these nine, eight were chronic and/or heavy illicit drug users and one was a chronic user of alcohol.

Three of the children and youth with a history of substance use received alcohol and drug counselling services. Two attended a single counselling session and one completed a treatment program.

Research shows that dependent substance users, especially those dependent on illicit drugs other than marijuana, are at higher risk of suicide than the general population (Wilcox, Connor & Caine, 2004). Dependent substance users may be at higher risk, as they experience higher rates of mental disorders, family dysfunction and social isolation – all risk factors for suicide (Wilcox et al., 2004).



An untreated substance use disorder is a significant risk factor for suicide. Early identification of substance use disorders combined with long-term treatment is an important component of effective suicide prevention initiatives.

Mental health problems

Thirty children and youth (45 per cent) had either been diagnosed with a mental or behavioural disorder or were noted as having had the signs and symptoms of a disorder by a medical professional or mental health clinician.

This number may be an under-representation, as a number of the children and youth may have had an undiagnosed mental or behavioural disorder. Mental disorders often go undiagnosed and untreated in children and youth, as their depressive symptoms are often attributed to emotional changes associated with transitioning into adulthood (US Department of Health and Human Services, 2008).

The child or youth had a diagnosis of or exhibited features of depression in 20 of the 30 cases (67 per cent). Depression was seen with a second disorder (or features of a second disorder) in three of the 20 cases.

In 10 cases the child or youth was diagnosed with or exhibited features of a mental or behavioural disorder, of which depression was not a component. These included mixed personality disorder, sexual disorder, psychotic disorder, adjustment disorder, neurobehavioural developmental disorder and anxiety disorder.

Studies show the associations between psychiatric disorders and suicidal behaviour are much stronger than for other social, familial, individual and environmental risk factors. Research suggests that a person's psychiatric state at the time of a suicide attempt and a psychiatric history were more important determinants of suicide risk than any other factors in the person's current social environment (Guo & Harstall, 2002).

The high percentage of children and youth with mental or behavioural disorders among the suicide deaths reviewed, paired with the significant correlation between these disorders and suicide, speaks to the importance of early identification and treatment. Education of those who have regular contact with children and youth (such as parents, teachers, general practitioners, social workers and coaches) about the signs and symptoms of mental disorders may aid in this early detection and treatment.

Deliberate self-harm

Twenty-three children and youth (35 per cent) had harmed themselves. In most cases this involved cutting of the arms.

Research consistently shows that **deliberate self-harm** is a risk factor for suicide. Repetitive self-harm is a stronger indicator of future suicide in females (Hawston & Zahl, 2004). Individuals who deliberately self-harm often do so in an effort to relieve emotional distress.

deliberate self-harm: the deliberate damage of one's own body without suicidal intent.

Past suicidal behaviour

Forty-six of the 66 children and youth (70 per cent) who died by suicide had exhibited suicidal behaviour, such as ideation, threats and non-fatal attempts.

Forty-four children and youth (67 per cent) had spoken with someone about their thoughts of suicide. They most frequently told a friend or a parent. Eleven of the 44 (25 per cent) discussed their thoughts in the week prior to death.

Any talk of suicide should be taken seriously. North American research shows that up to 75 per cent of people who died by suicide spoke to someone about their intentions (American Foundation for Suicide Prevention [AFSP], 2008). According to Canadian studies, children and youth who died by suicide are more likely to have spoken to a friend than to a parent or another adult about their thoughts (CIH, 2006).

Twenty-five children and youth (38 per cent) had previously attempted suicide. Twelve (18 per cent) had made more than one previous attempt.

A previous suicide attempt is considered a significant risk factor for suicide. This risk increases significantly when those who have attempted are not provided with appropriate post-attempt care. People who have attempted multiple times are at even greater risk (AFSP, 2008).

In 11 of the 25 cases where the child or youth had previously attempted suicide, the previous method had a low risk of lethality (e.g., intentionally ingesting a low dose of over-the-counter medication or prescription medication, jumping from an insignificant height, or manual self-strangulation). In several cases, the methods used became progressively more lethal as the number of attempts increased.

In four cases where a child or youth had exhibited past suicidal behaviour, issues regarding confidentiality were identified. In all four cases, the child or youth's parents believed they had not been adequately informed by medical or school staff of their child's potential risk for suicide. In all cases, the child or youth requested that his or her parents not be informed.

These findings highlight the importance of crisis response and safety planning following suicidal behaviour, including a plan for parental or caregiver involvement. A safety plan may include (but is not limited to) means restriction in the home, increased supervision, awareness of "triggers" for suicidal behaviour, and a clear plan of what steps are to be taken in the event that the child or youth exhibits suicidal behaviour.

Aggressive behaviour

Sixteen of the 66 children and youth (24 per cent) had been perpetrators of aggressive behaviour such as bullying and physical and sexual assaults.

Seven children and youth had assaulted a family member. Thirteen had assaulted a non-family member such as a peer, a stranger or a police officer.

Three children and youth were known to have physically bullied their peers. Bullying occurred both at school and within the larger community.

Eleven of the 16 children and youth (69 per cent) who were perpetrators of aggressive behaviour were also victims of sexual and/or physical abuse.

Research indicates that there is no statistically significant correlation between aggressive behaviour and suicide. However, some studies suggest that children and youth who direct their anger and frustration outward in the form of physical assaults and bullying are then more likely to direct these feeling inwards, resulting in deliberate self-harm and non-fatal suicide attempts (Afifi, Cox & Katz, 2007).

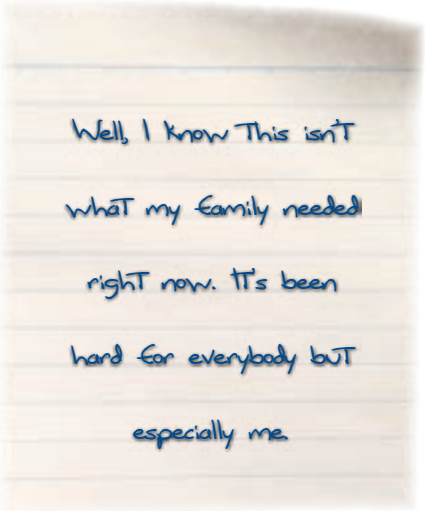
The findings from this review and the preliminary research in this area suggest that it is important to look further into what correlations may exist between aggressive behaviour in children and youth and suicide. It is also important to consider that many of the children and youth in this review experienced ongoing problems such as family dysfunction that may have further increased their risk of suicide.

Involvement in criminal activity

Nine children and youth had been charged with and convicted of a criminal offence. More than half of the convictions were for a physical assault. Most received probation. In one case the youth was remanded to a group home for young offenders following a conviction for sexual assault.

Family challenges

Twenty-seven children and youth (41 per cent) experienced family challenges such as abuse, neglect, familial substance use and mental



health problems, ongoing parent-child conflict, and exposure to domestic violence.

Thirteen children and youth (20 per cent) were victims of familial abuse and/or neglect.

Eleven children and youth (17 per cent) were exposed to domestic violence. In most cases the child or youth had witnessed violence between his or her parents. Many of these children and youth were also victims of familial violence themselves.

Substance use by a family member was identified as a factor in the lives of 21 children and youth (32 per cent). Thirteen children and youth had regular contact (lived in the same household or had regular visits) with a family member who was using substances. In four cases the family member (in all four cases a parent) had used substances in the past but was now in recovery and living a life of sobriety. In four additional cases the child or youth did not live with or have regular contact with the family member(s) who used substances.

Twelve children and youth lived with (at the time of death) or had lived with a parent and/or a sibling with a mental health problem.

Research consistently suggests an association between suicidal behaviour and parental mental health problems (e.g., substance use disorder, affective disorders, antisocial behaviours, family history of suicide), parent-child conflict and a history of abuse during childhood (Guo & Harstall, 2002).

These findings highlight the need for child welfare professionals to understand and recognize the link between significant family challenges and suicide risk.

Relationship challenges

Twenty-five children and youth (38 per cent) experienced significant challenges in their romantic relationships, such as ongoing conflict and breakups.

Two children and youth were victims of violence in a romantic relationship. Many of them had experienced more than one challenge in their relationship (e.g., domestic violence and chronic conflict).

A stressful event

Forty-five children and youth (68 per cent) experienced an event that was known to have caused them significant emotional distress. Events occurred in the context of a mental health problem and/or family or relationship dysfunction in 28 cases (62 per cent). Seventeen children and youth (38 per cent) experienced a stressful event and had no identified mental health problems or familial or relationship dysfunction.

In the majority of cases an event resulting in significant emotional distress occurred within 24 hours of death. In most cases, this was an argument or loss of relationship with a family member, romantic partner or peer. Several children and youth experienced multiple stressful events in the year before they died.

A number of studies show that suicidal behaviour among young people is often preceded by a stressful life event such as interpersonal conflict, loss or legal/disciplinary problems. However, it is recognized that stressful events commonly occur among adolescents and may act as precipitating factors for suicidal behaviour only when they occur in individuals who are vulnerable to such behaviour (Guo & Hartall, 2002).

The findings from this review, combined with those of the

research literature, suggest that children and youth may be at increased risk following a distressing event such as a breakup or the death of a family member. It is important for those who are involved with a child or youth to recognize events that might act as a "trigger" for suicide and other suicidal behaviours, especially in children and youth who experience ongoing problems such as mental disorders and family dysfunction.

Victimization

Ten children and youth had been victims of violence in their communities.

Four female children and youth had been sexually assaulted. Two of these assaults occurred within two years prior to death. The other two occurred more than five years prior to death.

One youth was physically assaulted by a group of youth in his community, and one child and one youth were bullied in the community. Two were threatened with physical violence, one after witnessing the commission of a crime and one after a verbal altercation with an adult. One youth belonged to a peer group typified by violent behaviour such as physical fighting.

Recent research from the United States has shown that there is a clear link between childhood sexual assaults and depressive and post-traumatic stress disorders. Children and youth with both depressive and post-traumatic stress disorder are at a higher risk of dying by suicide. However, research looking at a direct correlation between suicide and childhood sexual assault has been inconclusive (Olshen, McVeigh, Wunsch-Hitzig & Rickert, 2007). A literature review yielded very little research on associations between non-familial physical assault and suicide or suicidal behaviour.

School challenges

Thirty-three of the 66 children and youth (50 per cent) had experienced school challenges such as learning difficulties, chronic absenteeism, recent disciplinary action, recent changes in school behaviour, and bullying. Many of the children and youth had not been attending school in the months prior to death.

Eighteen children and youth (27 per cent) experienced significant learning challenges. Six of them had a diagnosed learning disability. The remaining 12 had substantive learning difficulties that necessitated extensive learning assistance and additional school resources. Many of these children and youth were known to have experienced significant emotional distress related to their struggles at school.

Some research suggests that children and youth who have learning difficulties may be at increased risk for suicide because of weak cognitive coping skills and a prevalence of personality traits associated with suicide, such as impulsivity, hopelessness and aggression (Bender, Rosenkrans & Crane, 1999).

Fourteen children and youth (21 per cent) had a history of chronic absenteeism from school. A recent decrease in school attendance and/or grades was noted for 15 children and youth.

Five children and youth had been suspended or expelled from school in the three months prior to death.

Nine children and youth were victims of bullying in their school environment. In three cases the bullying was noted as having occurred in the year prior to death. There was insufficient information in the remaining six cases to determine when the bullying occurred. Three children and youth were bullied because of their sexual orientation.

A Finnish study found that children and youth who are bullied are more likely to feel depressed and have thoughts of suicide than the general population (Kaltiala-Heino, Rimpelä, Marttunen, Rimpelä & Rantanen, 1999). It is important to note that this study found that children and youth who are perpetrators of bullying are also at increased risk for depression and suicide ideation. It suggests that both groups

experience social isolation that can lead to feelings of hopelessness and despair.

Twenty-seven children and youth (41 per cent) were going through a period of transition at school. They were transitioning from elementary to secondary school, out of secondary school, or from secondary to post-secondary education. Several of the children and youth who were transitioning at school reported feeling stress about the change in peers, identity and environment that resulted from this transition.

Many of these children and youth experienced school challenges in the context of other ongoing problems, such as mental heath disorders and family dysfunction.

When developing suicide prevention initiatives, it is important to recognize that children and youth who experience substantial school challenges such as learning disabilities, bullying and recent disciplinary action may be at increased risk for suicide.

Exposure to suicidal behaviour

Twenty-eight children (42 per cent) had been exposed to suicide or suicidal behaviour.

Seven of the 66 children and youth (11 per cent) had experienced the suicide of a peer (six children and youth) or a relative (one child) in the year prior to death. Of the six peers who had died by suicide, one was a romantic partner, two were fellow students, and four belonged to the same group of friends. In one case the youth spoke of a friend who had recently died by suicide in the hour prior to his death.

Two children and youth had experienced the suicide of an adult in the community in the year prior to death. There was insufficient information to determine how well each child or youth knew these adults.

One youth was part of a suicide pact with a person from outside the country whom the youth had met through an Internet chat room. Two other youth had made previous attempts as part of a suicide pact.

Twenty of the 66 children and youth (30 per cent) had been exposed to suicidal behaviour (including attempts, ideation and threats) of a peer or a family member during their lives.

In two cases, a peer in the community had attempted suicide in the months prior to the child or youth's death. Other exposure to suicidal behaviour through peers involved suicidal ideation and threats of suicide. In most cases the child or youth was exposed to the suicidal behaviour of a peer in the year prior to his or her death.

Seven children and youth had a parent and/or sibling who had attempted suicide. In two cases, there had been attempts by multiple immediate family members. One youth had witnessed a parent's suicide attempt earlier in his childhood.

Consistent evidence indicates that children and youth who are already vulnerable to suicidal behaviour because of mental health problems, family dysfunction or other risk factors are at greater risk of suicide if they are exposed to suicide or non-fatal suicidal behaviour (Velting & Gould, 1997). Research shows that children and youth are often more susceptible to the suicidal behaviour of family and peers than are adults (de Leo & Heller, 2008).

This speaks to the importance of taking steps to reduce the risk of contagion following a suicide death in a community or social network. It is important to tailor initiatives to children and youth, as they are particularly known to be at risk following a suicide.

It is also important to look further into how exposure to suicidal behaviour (such as ideation, threats and attempts) through family and peers may also increase a child or youth's risk of suicide.

Economic challenges

Thirteen children and youth (20 per cent) were identified as having economic challenges present in their lives. Challenges included lack of food or other basic necessities, reliance on government

agencies for financial support, homelessness, overcrowding, and recent loss of employment or other source of income.

Research has found relatively strong evidence of an association between low socio-economic status and increased risk for youth suicidal behaviour (Guo & Harstall, 2002).

Access to means

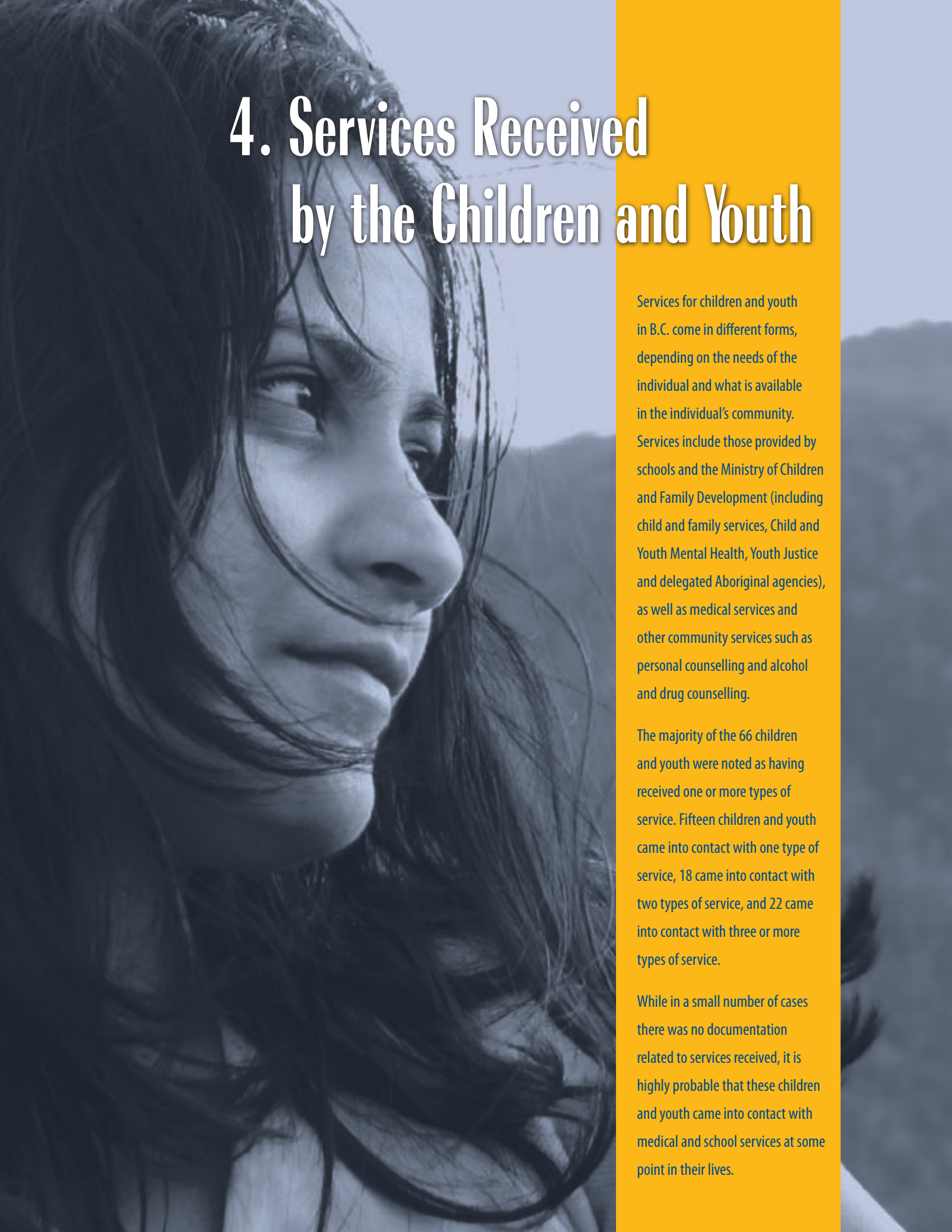
Access to lethal means was a modifiable risk factor identified in 11 cases (17 per cent).

Access to a firearm was a risk factor for the eight children and youth who died as a result of a gunshot wound. The firearm belonged to a parent in six of the eight cases. In the two remaining cases the owner of the firearm could not be determined. Four firearms were stored in a locked cabinet and four were not. Ammunition was stored separately from the firearm in two cases. Four of the eight children and youth had exhibited suicidal behaviour in the months prior to their deaths.

Three of the five children and youth who died as a result of intentional poisoning had access to lethal amounts of prescription medication. One youth ingested medication that had been prescribed for him in the days prior to death. One youth ingested medication that had been prescribed for her as well as medication that had been prescribed for her parent. In both cases the youth had unlimited and unrestricted access to the prescription medications. These youth had mental health problems and had exhibited suicidal behaviour in the months prior to their deaths.

In one case the youth obtained medication from an online source based in another country.

Restricting access to lethal means is recognized as an important component of suicide prevention. Research has shown significant associations between educating parents of suicidal children and youth about restricting means and the restriction of means in the child or youth's household (McManus et al., 1997).



4. Services Received by the Children and Youth

Services for children and youth in B.C. come in different forms, depending on the needs of the individual and what is available in the individual's community. Services include those provided by schools and the Ministry of Children and Family Development (including child and family services, Child and Youth Mental Health, Youth Justice and delegated Aboriginal agencies), as well as medical services and other community services such as personal counselling and alcohol and drug counselling.

The majority of the 66 children and youth were noted as having received one or more types of service. Fifteen children and youth came into contact with one type of service, 18 came into contact with two types of service, and 22 came into contact with three or more types of service.

While in a small number of cases there was no documentation related to services received, it is highly probable that these children and youth came into contact with medical and school services at some point in their lives.

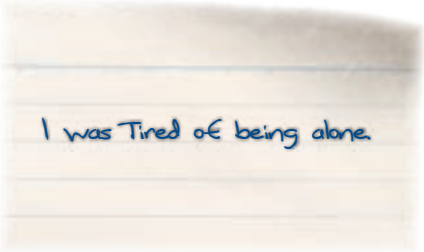
School services

The Ministry of Education provides a wide range of services for children, youth and families, including students in the K–12 education system and adults completing secondary school and upgrading their skills. There are 59 school districts across the province and one Francophone Education Authority, serving approximately 665,000 students. Services provided by B.C. schools for K–12 students range from school counselling to specialized education programs such as Aboriginal education, English as a Second Language (ESL) and learning assistance programs. (B.C. Ministry of Education, 2006)

In 20 of the 66 cases (30 per cent), the school system became aware of the child or youth's mental health concerns or suicidal behaviour, 11 of the 20 in the year prior to death.

Nine children and youth spoke to a teacher or counsellor about their thoughts of suicide. Nine were known to school staff to be exhibiting signs of a mental disorder. Four were known to school staff to have exhibited suicidal behaviour.

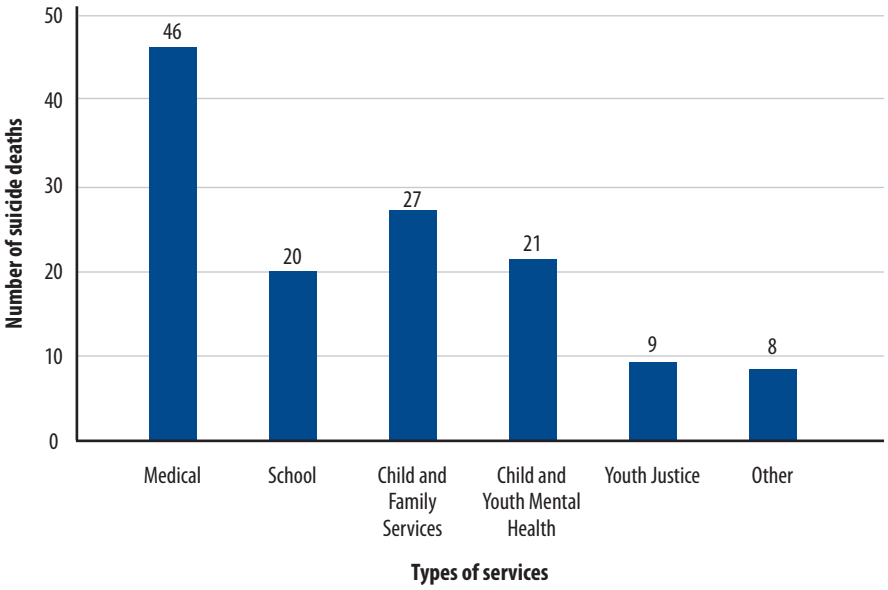
In seven of the 20 cases (35 per cent) where the school was aware of mental health concerns or suicidal behaviour, a school counsellor conducted a suicide assessment: one child or youth was determined to be "at risk," although it was not clear what this meant; two were at "low" or "low to moderate" risk, and two were determined to be at no risk.



In two cases the level of risk was unknown.

A parent was contacted in 11 of the 20 cases where the school became aware of the child or youth's mental health problems or suicidal behaviour. In one case a referral was also made by the school to Child and Youth Mental Health. In two cases, the Ministry of Children and Family Development (child and family services) was contacted in addition to the parents. In eight cases, only

Figure 4.1 Child and youth suicide deaths by type of services received



Source: Child Death Review Unit, BC Coroners Service

the child or youth's parent was contacted.

A referral was made by the school to Child and Youth Mental Health in six cases and to child and family services in two cases. In two cases the school contacted the medical professional who was responsible for the youth's mental health care (in one case, a family doctor and in the other a psychiatrist). In these cases, there was no information to indicate that the parents or caregivers were contacted.

In three cases there was insufficient information to determine what contact the school made after becoming aware of the child or youth's mental health problems or suicidal behaviour.

Medical services

The Ministry of Health Services provides health services for everyone in the province. The overall responsibility of the ministry is to ensure quality, appropriate and timely health services for people in B.C. Five regional health authorities are responsible for delivering a full continuum of health services to meet the needs of the population in their regions.

Based on documentation on the coroner's file and additional information obtained by the Child Death Review Unit during the review process, 46 of the 66 children and youth (70 per cent) were known to have been in contact with a medical professional to address general medical concerns at some point in their lives. Of these, 32 (69 per cent) had been in contact with a medical professional in the year prior to death.

Thirty-one of the 46 children and youth (60 per cent) had been in contact with a medical professional with regard to a mental health concern or suicidal behaviour at some point in their lives, 20 of the 31 (64 per cent) within the year prior to death.

Of the 20 children and youth who had seen a medical professional for a mental health concern in the year prior to death, 12 attended a hospital emergency room to address their suicidal behaviour. Three of the 12 (60 per cent) had been admitted as involuntary patients following suicidal behaviour (two had attempted suicide, and one had spoken to a parent about feeling suicidal). All three had been discharged within the six months prior to death.

Eight had been in contact with a medical professional within the previous year to address the signs and/or symptoms of a mental or behavioural disorder. One youth had been hospitalized as a result of a psychotic break and was receiving in-patient care at the time of his death.

Of the 31 children and youth who had been in contact with a medical professional for mental health concerns, 10 received primary mental health care from their family doctor. In seven cases, the family doctor referred the child or youth to secondary care (e.g., psychiatrist, counselling) but the child or youth did not attend. One youth died before the scheduled appointment. Another youth was against psychiatric care. In the five other cases, there was insufficient information to determine why the child or youth did not follow up with the referral from their family doctor.

A psychiatrist was responsible for the child or youth's primary mental health care in 14 of the 31 cases. In another seven cases there was insufficient information to determine what medical professional was responsible for the child or youth's primary mental health care. Two of the seven had seen a psychiatrist for a psychiatric assessment, but there was no information to indicate that the child or youth received further treatment.

Of the 31 children and youth who came into contact with a medical professional for a mental health problem, nearly half were treated with both medication (in most cases an antidepressant) and counselling. A small number of children and youth were treated with one of either medication or counselling.

In 10 cases the treatment plan was not followed as intended. Non-compliance with the treatment plan involved not taking

medication as indicated (e.g., the child or youth had stopped taking it altogether, missed doses, or was taking it intermittently) or missing multiple counselling appointments.

Ministry of Children and Family Development services

The Ministry of Children and Family Development offers a wide spectrum of programs, services and resources designed to support children, youth and their families. Services are provided through 429 ministry offices in five regions (North, Interior, Fraser, Vancouver Coastal and Vancouver Island) and a number of delegated Aboriginal agencies.

Services include family development, early childhood development, services for children and youth with special needs and their families, child care, child protection, residential and foster care, adoption for children and youth permanently in care, community child and youth mental health services, programs for at-risk or sexually exploited youth, and youth justice services. The ministry is also responsible for youth custody, youth forensic psychiatric services, and the Maples Adolescent Treatment Centre. (MCFD, 2008d)

For the purposes of this report the Child Death Review Unit looked specifically at the following service areas within the ministry: child and family services, Child and Youth Mental Health, Youth Justice and delegated Aboriginal agencies.

Child and family services

The Ministry of Children and Family Development is responsible for providing support services for children and youth and their families, responding to child protection concerns, supervising children and youth in care, and approving foster homes for children and youth who come into care.

Three of the 66 children and youth (4 per cent) were in care at the time of death.* Two of the three were in care through a special needs agreement.

Twenty-four of the 66 children and youth (36 per cent) had been in contact with child and family services at some point in their lives. Eleven of the 24 children and youth (46 per cent) had received services in the year prior to death. Five were in regular contact with these services through an in-care agreement (four) or a youth agreement (one). Four children and youth had received services in the year prior to death as a result of an allegation of abuse or neglect in the child or youth's home.

***Note:** One additional youth was in the permanent care of another province.

Child and family services was aware of the child or youth's mental health issues and/or suicidal behaviour in 10 of the 24 cases (42 per cent) where the child or youth had been in contact with the ministry.

Youth Justice services

Youth Justice provides programs and services for youth aged 12 to 17 who have committed criminal offences. Programs and services are intended to protect society from the illegal behaviour of youth and to provide youth with opportunities for healthy growth, functioning and development. They include in-custody programs, substance abuse programs, intensive support and supervision programs, community service and restorative justice services. (MCFD, 2008e)

Nine of the 66 children and youth (14 per cent) had received services from Youth Justice. In seven of the nine cases the child or youth had received services from Youth Justice as part of a probation order in the year prior to death.

In most cases the child or youth was under a probation order as a result of charges arising from a physical assault.

Child and Youth Mental Health services

Child and Youth Mental Health provides children and youth under the age of 19 and their

families with direct and contracted community-based services on a voluntary basis. Child and Youth Mental Health services vary across the province, but the overarching goal remains the same: to improve mental health outcomes for children and youth in B.C.

Child and Youth Mental Health is staffed by psychologists, social workers, counsellors and nurses who provide services such as assessment, planning, treatment, issue management, and consultation with family members and others involved in the child or youth's care, such as doctors or school staff. Children and youth can contact Child and Youth Mental Health directly to receive services or they may be referred by a parent, medical doctor, school teacher or other individual involved in their care. (MCFD, 2008b)

Twenty-one of the 66 children and youth (32 per cent) had been in contact with Child and Youth Mental Health at some point during their lives.

Thirteen of the 21 (62 per cent) had received services in the year prior to death. Nine of the thirteen (69 per cent) were seen by Child and Youth Mental Health with regard to their suicidal behaviour (e.g., attempts, threats or ideation).

In most cases the child or youth was referred to Child and Youth Mental Health by a parent or caregiver, a medical professional or school staff.

Child and Youth Mental Health clinicians conducted suicide assessments for seven of the 21 children and youth. Based on the assessments, one youth was determined to be at "no risk," four were at low or low-to-moderate risk, and two were at high risk.

In almost all cases, Child and Youth Mental Health provided counselling and psychiatric care or made referrals to community agencies. In several cases the child or youth's file was closed with Child and Youth Mental Health when the child or youth failed to show up for scheduled appointments. There was no follow-up in these cases.

Delegated Aboriginal agencies

Delegated Aboriginal agencies are responsible for child protection and family support for Aboriginal children and youth and their families. There are currently 24 delegated Aboriginal agencies at various levels of delegation: four can provide voluntary services and recruit and approve foster homes; 10 have the additional delegation necessary to provide guardianship services for children and youth in continuing care; and seven have the delegation required to provide, in addition to the above, full child protection, including the authority to investigate reports and remove children. (MCFD, 2008a)

One child had received family support services through a delegated Aboriginal agency.

Other community services

Eight children and youth had accessed other types of service, including alcohol and drug counselling and private counselling.

5. The Three Main Risk Profiles

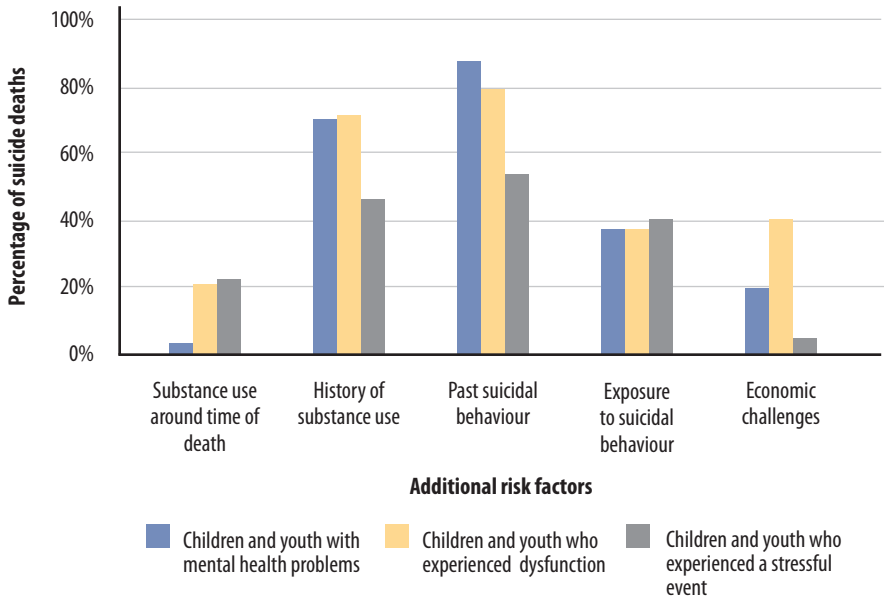
Three main risk profiles emerged from a review of the research literature and an aggregate review of the 66 suicide deaths:

- children and youth with ongoing mental health problems (30 children and youth – 45 per cent)
- children and youth who experienced chronic dysfunction in their interpersonal relationships (29 children and youth – 44 per cent)
- children and youth who experienced a stressful, life-changing event in the absence of chronic family, relationship or mental health problems (17 children and youth – 26 per cent).

The first two of these risk profiles were identified in the literature as correlating strongly with suicidal behaviour and suicide. The majority of the 66 children and youth fit one or both of these profiles; however, a small number of the children and youth did not. An aggregate review of these cases showed that most of these children and youth shared the experience of a stressful life event sometime before their death.

Figure 5.1

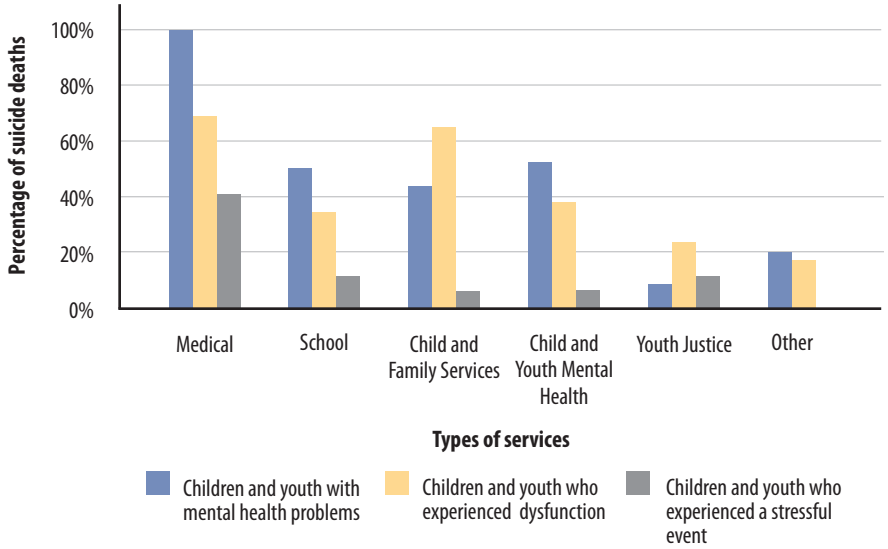
Risk profiles by additional risk factors identified



Source: Child Death Review Unit, BC Coroners Service

Figure 5.2

Risk profiles by type of services received



Source: Child Death Review Unit, BC Coroners Service

In four of the 66 cases (6 per cent) there was insufficient information to determine whether the child or youth had a mental health problem, experienced dysfunction or endured a stressful event.

Fourteen of the 66 children and youth (21 per cent) experienced both mental health problems and family or relationship dysfunction.

Children and youth from each of the three main risk profiles were looked at in terms of additional risk factors (Figure 5.1) and their contact with services (Figure 5.2). Additional risk factors included substance use around the time of death, history of substance use, suicidal behaviour, exposure to suicidal behaviour, and economic challenges. A comparison of these profiles is included below.

Note

Each child and youth who died by suicide experienced risk factors in a unique way, in terms of the number, combination and severity of factors he or she faced and how these factors interacted during his or her life.

Children and youth with mental health problems

Thirty children and youth (45 per cent) had been either diagnosed with a mental or behavioural disorder or noted by a medical or mental health professional as having the signs and symptoms of a disorder. Studies consistently show that the association between mental disorders and suicidal behaviour is more significant than for other individual, social or environmental factors (Guo & Harstall, 2002).

Thirteen of the children and youth with mental health problems (43 per cent) had a biological family member with a mental health problem: 11 were immediate family members, including parents and siblings, and two were extended family members.

Certain mental disorders, such as major depressive disorder, have been shown to be influenced by genetic factors (Sullivan, Neale & Kendler, 2000). Studies suggest that genetic factors occur within the larger context of environmental factors such as family dysfunction and social isolation and have not been shown to be a singular predictor in the diagnosis of a mental disorder.

Additional risk factors

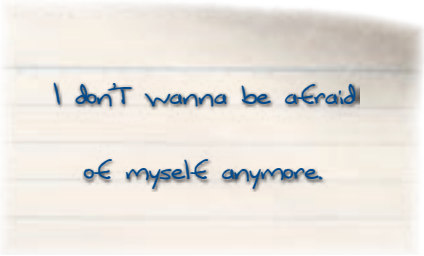
A large percentage (87 per cent) of the children and youth with mental health problems had exhibited past suicidal behaviour (e.g., previous attempts, ideation or threats) – more than children and youth from the other two profiles (Figure 5.1). In addition, many of the children and youth with mental health problems also experienced difficulties with substance use (70 per cent).

Types of services received

Children and youth with mental health problems were more likely to have received services than children and youth who experienced dysfunction or a stressful event (Figure 5.2).

By the very nature of their inclusion in this profile (the child or youth was diagnosed with or exhibited features of a mental or behavioural disorder), all had been in contact with a medical professional because of a mental health concern. Over half of the children and youth with mental health problems had received services from Child and Youth Mental Health. Half had come to the attention of school staff as a result of a mental health concern.

Sixteen of the 30 children and youth with mental health problems (53 per cent) were assessed by medical, school or Child and Youth Mental Health staff for suicide risk. The children



and youth who fit this profile were more likely to be assessed for suicide risk than those in the other profiles.

Children and youth who experienced family or relationship dysfunction

Twenty-nine children and youth (44 per cent) experienced dysfunction in a familial or romantic relationship. Of those, 28 experienced family dysfunction. Children and youth who were abused, neglected, exposed to domestic or family violence, or affected by an immediate family member's substance use were included in this group.

Two children and youth experienced significant dysfunction in a romantic relationship. Both were victims of violence in their romantic relationship. One of the two also experienced familial dysfunction.

Studies show that children and youth who experience family dysfunction are more likely to feel suicidal and to have

attempted suicide than the general population (Martin, Rotaries, Pearce & Allison, 1995).

Additional risk factors

As with the children and youth with mental health problems, high numbers of children and youth who experienced dysfunction in their family or romantic relationships were known to have exhibited previous suicidal behaviour (79 per cent) and experienced difficulties with substance use (72 per cent) (Figure 5.1). Similarities between the two profiles could be attributed to the pervasiveness of both mental health problems and interpersonal dysfunction.

These children and youth were more than twice as likely as those with mental health problems or those who experienced a stressful event to have economic challenges (41 per cent compared to 20 per cent and 6 per cent).

Types of services received

Children and youth who experienced family or relationship dysfunction were less likely overall to have received services than children and youth with mental health problems (Figure 5.2). However, they were more likely to have come to the attention of child and family services and Youth Justice services.

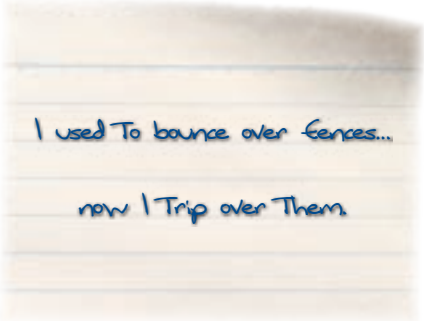
Children and youth who experienced a stressful event

Seventeen children and youth (26 per cent) experienced a life event that caused significant emotional distress. These children and youth were not known to have had a mental health problem or persistent family/relationship dysfunction. In many cases the event was identified as a "trigger" to the child or youth's suicide, occurring less than 24 hours before the child or youth died. Almost all of the children and youth experienced significant emotional distress following conflict with family members, romantic partners or peers.

Additional risk factors

When compared to children and youth from the other two profiles, these children and youth had overall fewer additional risk factors. They were less likely to have had difficulties with substance use or to have exhibited previous suicidal behaviour, but were slightly more likely to have used substances around the time of death.

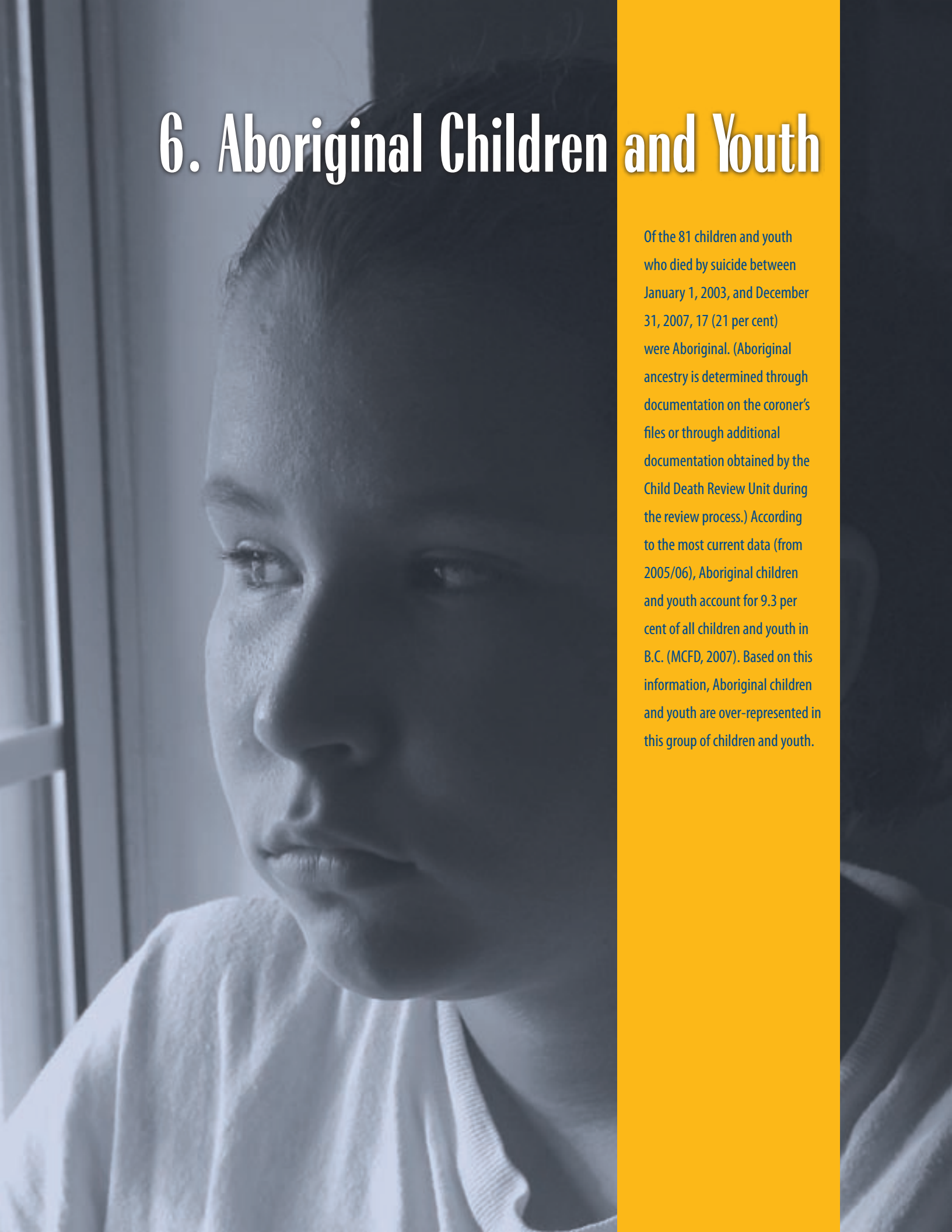
Over half (53 per cent) had exhibited suicidal behaviour prior to death. This behaviour was linked to either the current stressful event or another stressful event that had occurred in the past.



Types of services received

Children and youth who experienced a stressful event had the lowest frequency of contact with services when compared to children and youth with mental health problems or family dysfunction (Figure 5.1).

6. Aboriginal Children and Youth



Of the 81 children and youth who died by suicide between January 1, 2003, and December 31, 2007, 17 (21 per cent) were Aboriginal. (Aboriginal ancestry is determined through documentation on the coroner's files or through additional documentation obtained by the Child Death Review Unit during the review process.) According to the most current data (from 2005/06), Aboriginal children and youth account for 9.3 per cent of all children and youth in B.C. (MCFD, 2007). Based on this information, Aboriginal children and youth are over-represented in this group of children and youth.

Research shows that female Aboriginal children and youth are 7.5 times more likely to die by suicide than their non-Aboriginal cohorts. Similarly, male Aboriginal children and youth are five times more likely to die by suicide than non-Aboriginal children and youth. (White & Jodoin, 2007)

Although the overall risk of suicide for Aboriginal children and youth is high, research shows that there is significant variation among First Nations groups (Chandler & Lalonde, 1998). First Nations groups that have preserved their culture and achieved three or more measures of success in community development (in the areas of land title; self-government; education; police, fire and health services; and cultural preservation facilities) have low rates of youth suicide or, in many cases, no youth suicides at all. Conversely, First Nations groups that have not established these measures, in some cases experience child and youth suicide rates much higher than the provincial average (Chandler & Lalonde, 2004).

As of June 1, 2008, five of the 15 open cases involved Aboriginal children and youth; all were of First Nations ancestry. Twelve of the 66 closed cases involved Aboriginal children and youth; 11 were First Nations and one was Métis.

A multidisciplinary review of the 12 closed cases involving Aboriginal children and youth was conducted, resulting in findings related to demographics, circumstances, risk factors and types of services received. These findings are included below.

Demographics

Age

Of the 12 Aboriginal children and youth, 11 were youth and one was a child (age 12 years). This finding parallels the age distribution of non-Aboriginal children and youth.

Sex

Nine of the children and youth (75 per cent) were male and three (25 per cent) were female. The distribution is similar among the non-Aboriginal children and youth whose cases were reviewed, where males account for 68 per cent and females 32 per cent.

Region of residence

Three of the 12 Aboriginal children and youth lived in each of the following regions: Fraser (Abbotsford, Burnaby, Deroche), Interior (Kelowna, Penticton, Skeetchestn), North (Nak'azdli, Terrace, Williams Lake), and Vancouver Island (Duncan, Nanaimo, Sooke).

Three children and youth lived on-reserve at the time of death.

Aboriginal: For the purposes of this report, the term "Aboriginal" refers to First Nations (both status and non-status), Métis and Inuit peoples.

Note

Aboriginal ancestry is determined through documentation on the coroner's files or through additional documentation obtained by the Child Death Review Unit during the review process. Relying solely on this method of identification may result in an underestimation of those children and youth who are of Aboriginal ancestry. The extent of this under-representation is unknown.

Living situation

Two of the children and youth (17 per cent) lived with both of their biological parents, six (50 per cent) lived with one biological parent, and one (8 per cent) lived with a biological parent and that parent's partner. Two youth (17 per cent) lived with roommates and one youth (8 per cent) lived with extended family.

Education and employment

Seven of the 12 Aboriginal children and youth (58%) were enrolled in school at the time of death. Of these, one was in elementary school and six were in secondary school. Two of the seven youth enrolled in school were working part-time.

In one case, there was insufficient information to determine whether the youth was enrolled in school.

Four of the 12 children and youth were not enrolled in school. Three had not been enrolled in school for approximately one year, and one had not been enrolled in school for several years. Of the four, two had withdrawn from school and were working full-time.

Sexual orientation

Eight children and youth were identified as having heterosexual orientation. Four males had unknown sexual orientation.

Circumstances

Month

One child or youth died in each of the following months: March, April, June, August, October and December. Three children and youth died in January and three died in May.

Location

Five children and youth died in their homes, two died in the wilderness, and two died in a public space. One child or youth died in each of the following locations: a friend's home, a relative's home and a roadway.

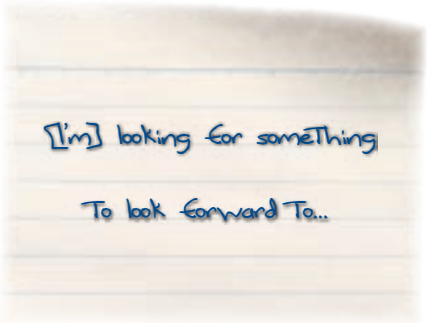
Method

Hanging was the most common method of suicide, accounting for eight deaths (67 per cent), followed by two (17 per cent) suicides by gunshot. One youth (8 per cent) jumped from a height and one youth (8 per cent) jumped in front of a moving vehicle.

Hanging was the most common method of suicide for both Aboriginal and non-Aboriginal children and youth.

Recent stressful event

Nine of the 12 Aboriginal children and youth (75 per cent) had experienced a stressful event in the 24 hours prior to death. In six of the nine cases (67 per cent) the event involved interpersonal conflict between the child or youth



and a family member, a romantic partner or both.

Aboriginal children and youth were more likely than non-Aboriginal children and youth to have experienced a stressful event in the 24 hours prior to death (75 per cent compared to 50 per cent). Interpersonal conflict with family or a romantic partner was the most common stressor for both groups.

Risk factors

There is a wide range of general risk factors that contribute to suicide in adolescents of all cultural backgrounds, including depression, substance use, a family history of suicide, social isolation, and access to firearms. Aboriginal youth often experience a greater number of these risk factors concurrently or more severely (White & Jodoin, 2007).

Aboriginal children and youth experienced non-modifiable risk factors (e.g., age and sex) similar to those experienced by non-Aboriginal children and youth. A breakdown of the modifiable factors for all children and youth (i.e., both Aboriginal and non-Aboriginal children and youth

combined) is provided in Figure 3.1. A comparison of non-Aboriginal and Aboriginal children and youth for a selection of modifiable risk factors is provided in Figure 6.1.

Substance use around time of death

Toxicology analyses were completed for nine of the 12 children and youth (75 per cent). Six of the nine (67 per cent) were positive. Four of the six were positive for alcohol, while two were positive for alcohol and illicit drugs.

By comparison, toxicology analyses were completed for 28 of the 54 non-Aboriginal children and youth (52 per cent). Five (18 per cent) were positive.

Note

Caution must be used when comparing these findings for Aboriginal and non-Aboriginal children and youth, because of the small sample numbers and the discrepancies between the percentage of cases where toxicology analyses were conducted for both groups.

History of substance use

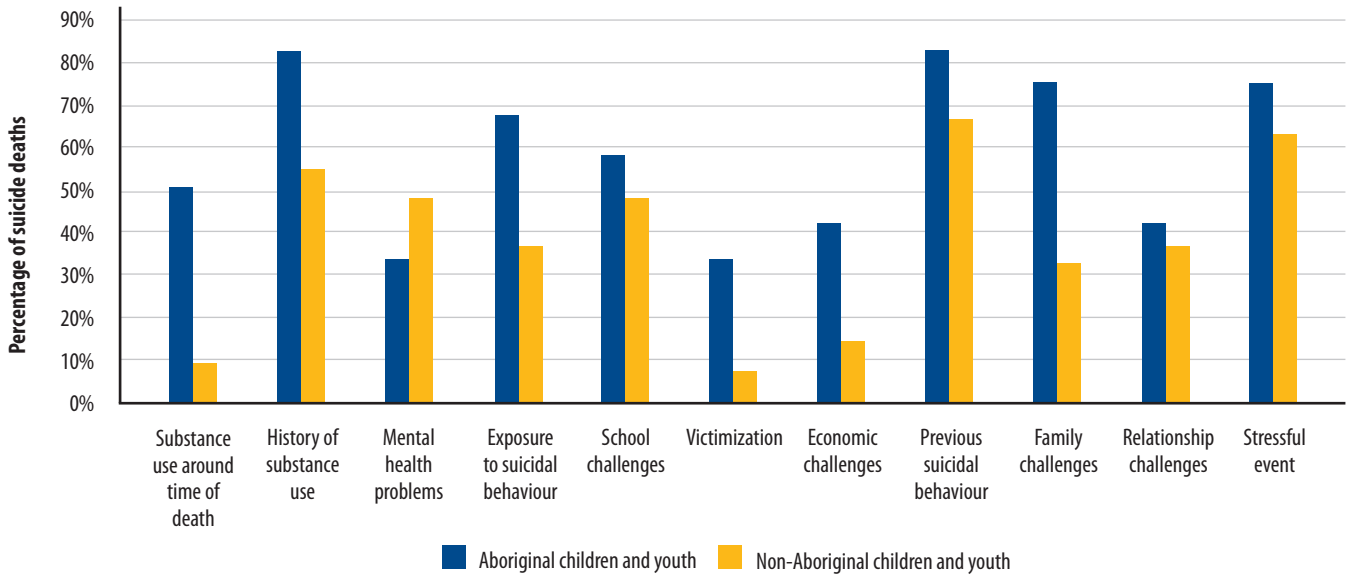
Ten of the 12 children and youth (83 per cent) were known to use substances. Three used alcohol, one used illicit drugs, and six used both alcohol and illicit drugs. Marijuana was the illicit drug commonly used among this group. Seven of the 12 (58 per cent) were known to be chronic or heavy substance users.

Two non-Aboriginal children and youth (4 per cent) were known to be chronic or heavy substance users.

Aboriginal children and youth who died by suicide during this five-year period had a higher frequency of overall substance use, especially when comparing chronic and/or heavy substance use. Many of the Aboriginal children and youth who used substances, especially those who were chronic or frequent users, also experienced family challenges such as abuse, neglect or parental substance use.

A 2003 poll of Aboriginal children and youth in B.C. indicated that children and youth who reported less family connectedness were more likely to use substances (van der Woerd et al., 2005).

Figure 6.1 Aboriginal and non-Aboriginal child and youth suicide deaths by risk factor identified



Source: Child Death Review Unit, BC Coroners Service

Mental health problems

Four of the 12 Aboriginal children and youth (33 per cent) had been either diagnosed with a mental or behavioural disorder or noted as having had the signs and symptoms of a disorder by a medical professional or mental health clinician. This number may be an under-representation, as some of these children and youth may have had undiagnosed or untreated mental or behavioural disorders.

Aboriginal children and youth were slightly less likely than non-Aboriginal children and youth to have been diagnosed with a mental or behavioural disorder or noted as having the signs and symptoms of a disorder by a medical professional or mental health clinician (33 per cent compared to 48 per cent).

Previous suicidal behaviour

Aboriginal children and youth were more likely to have exhibited previous suicidal behaviour than non-Aboriginal children and youth.

Nine of the 12 children and youth (75 per cent) had previously spoken to someone about their thoughts of suicide. Two (17 per cent) had made one previous suicide attempt.

In 2003, Aboriginal high school students reported thinking about suicide and attempting suicide more often than their non-Aboriginal peers (van der Woerd et al., 2005).

Exposure to suicidal behaviour

Aboriginal children and youth were more likely to have been exposed to suicidal behaviour than non-Aboriginal children and youth (Figure 6.1).

Eight Aboriginal children and youth (67 per cent) had been previously exposed to suicidal behaviour, including suicide death, attempts, ideation or threats, through a relative, peer or other member of their community.

Four experienced the suicide of a relative (including an extended family member, an uncle and a cousin). Two experienced the suicide of a peer (including a friend's sibling and a romantic partner). In two cases the child or youth experienced the suicide death of a peer or a relative in the year prior to death.

Four Aboriginal children and youth had a parent or a sibling who had attempted suicide. In one case the youth had witnessed the parent's attempt earlier in his childhood.

A 2003 poll of high school youth in B.C. found that a quarter (26 per cent) of Aboriginal youth had experienced the suicide death of a family member, compared to 13 per cent of non-Aboriginal youth (van der Woerd, 2005).

School challenges

Seven of the 12 Aboriginal children and youth (58 per cent) had experienced significant school challenges, such as learning challenges, chronic absenteeism, disciplinary action and bullying (both as victims and as perpetrators).

Victimization

Four of the 12 children and youth (33 per cent) had experienced violence in the community (specifically sexual assault, physical assault, threats of physical violence, or peer group violence).

Aboriginal children and youth experienced higher frequencies of violence in their communities than non-Aboriginal children and youth (33 per cent compared to seven per cent).

Economic challenges

Five of the 12 Aboriginal children and youth (42 per cent) experienced economic challenges during their lives, including financial dependence on income assistance, homelessness, loss of employment (by the child or youth or parent/caregiver), and loss of family income due to substance use.

In contrast, 15 per cent of non-Aboriginal children and youth had experienced economic challenges.

Family challenges

Nine of the 12 children and youth (75 per cent) experienced chronic family challenges, such as abuse, neglect, familial substance use and mental health problems, and exposure to domestic and family violence.

Aboriginal children and youth were more likely to have experienced chronic family challenges than non-Aboriginal children and youth (75 per cent compared to 33 per cent).

Relationship challenges

Five youth experienced relationship challenges, such as ongoing conflict and breakups. One youth was a victim of violence in a romantic relationship.

A stressful event

Nine of the 12 Aboriginal children and youth (75 per cent) experienced a stressful event. These events included interpersonal conflict, the death of a peer or relative, and victimization in the community. In one case the youth had experienced the death of several friends over the past year, one on the day prior to death.

The majority of these children and youth (78 per cent) experienced a stressful event in the context of family/relationship dysfunction and/or a mental health problem.

Services received by the children and youth

Eleven of the 12 Aboriginal children and youth were known to have received services during their lives. Only one youth had no known contact with services. It is probable that this youth had received some type of services (i.e., school and medical services) prior to death; however, there was insufficient information to support this.

Types of services received by the children and youth included medical services, school services, Ministry of Children and Family Development services (through child and family services, Child and Youth Mental Health, Youth Justice and delegated Aboriginal agencies) and community services such as alcohol and drug counselling and personal counselling. Brief descriptions of each type of service are provided in Chapter 4.

Two children and youth (17 per cent) received a single type of service, four (33 per cent) received two types of service, and five (42 per cent) received three or more types of service.

By comparison, for non-Aboriginal children and youth, 10 (19 per cent) had no known contact with services; 13 (24 per cent) received one type of service; 14 (26 per cent) received two types of service; and 17 (31 per cent) received more than two types of service.

Medical services

Nine of the 12 children and youth (75 per cent) were known to have been in contact with a medical professional at some point during their lives, three of the 12 (25 per cent) with regard to a mental health concern.

The number of Aboriginal children and youth who accessed medical services was similar to that of non-Aboriginal children and youth (Figure 6.2).

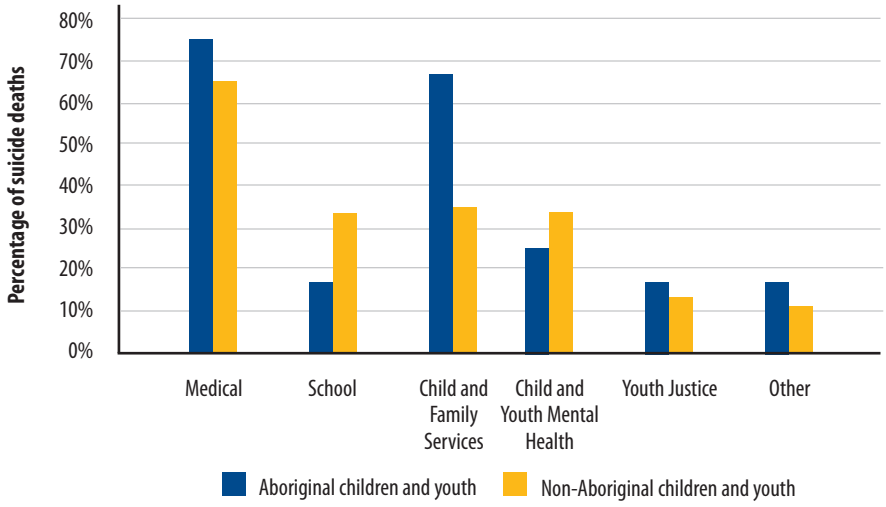
School services

In two cases, school staff were aware of the child or youth's mental health concerns or suicidal behaviour, one in the year prior to death. In both cases, a teacher or school counsellor became aware that the child or youth was experiencing auditory and/or visual hallucinations. A suicide assessment was completed in one case, however, the youth's level of risk could not be ascertained from the school documentation obtained.

Mental health concerns and suicidal behaviour in Aboriginal children and youth were less likely to come to the attention of school staff than were those of non-Aboriginal children and youth.

Figure 6.2

Aboriginal and non-Aboriginal child and youth suicide deaths by type of services received



Source: Child Death Review Unit, BC Coroners Service

Ministry of Children and Family Development services

Child and family services

Eight of the 12 children and youth (67 per cent) had contact with the Ministry of Children and Family Development (child and family services) at some point in their lives. One of the eight children and youth had been in contact with the ministry in the year prior to death. None of the children and youth was in care at the time of death. Services received from child and family services ranged from support services to previous periods of being in care.

Aboriginal children and youth were in contact with child and family services in higher numbers than non-Aboriginal children and youth. Aboriginal children and youth generally experienced more family challenges than non-Aboriginal children and youth.

Child and Youth Mental Health services

Three of the 12 Aboriginal children and youth (25 per cent) had accessed Child and Youth Mental Health services at some point in their lives, one in the year prior to death. In the two cases where the nature of the referral was known, one youth received Child and Youth Mental Health services after the death of a relative; one youth received services after a sexual assault.

Aboriginal children and youth were less likely to have received services through Child and Youth Mental Health than non-Aboriginal children.

Youth Justice services

Two Aboriginal youth (17 per cent) had received Youth Justice services following criminal charges and subsequent convictions. One youth had received services in the year prior to death.

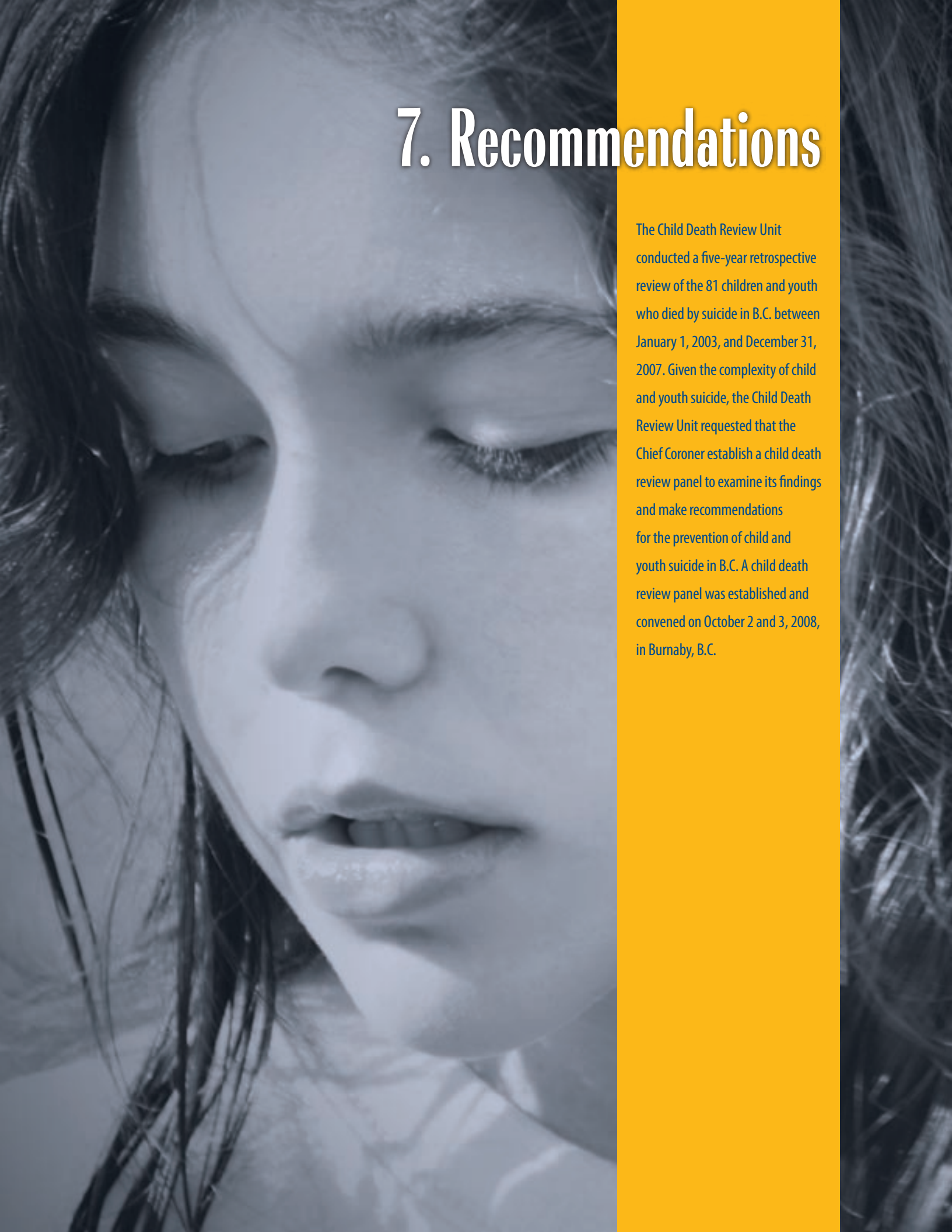
Thirteen per cent of non-Aboriginal children and youth had received services from Youth Justice.

Delegated Aboriginal agency services

One youth received family support services through a delegated Aboriginal agency in the year prior to death.

Other community services

One youth had received alcohol and drug counselling services. He sought counselling independently after learning about the service at school.



7. Recommendations

The Child Death Review Unit conducted a five-year retrospective review of the 81 children and youth who died by suicide in B.C. between January 1, 2003, and December 31, 2007. Given the complexity of child and youth suicide, the Child Death Review Unit requested that the Chief Coroner establish a child death review panel to examine its findings and make recommendations for the prevention of child and youth suicide in B.C. A child death review panel was established and convened on October 2 and 3, 2008, in Burnaby, B.C.

Panel members were appointed under section 49 of the *Coroners Act* and included content experts, researchers, therapists, educators and physicians; representatives from law enforcement, health, mental health and Aboriginal communities; and parent survivors. Under the *Coroners Act*, child death review panels may provide the Chief Coroner with general advice with respect to the health, safety and well-being of children and any recommendations intended to prevent similar deaths. The Chief Coroner must then contemplate the recommendations and ensure that they are directed appropriately to the relevant jurisdictions.

After the panel adjourned, panel member comments were consolidated by the Child Death Review Unit into five pieces of overarching advice and 17 recommendations. The recommendations call for action along a continuum of suicide prevention strategies, including **mental health promotion** and the prevention of mental illness, early intervention and detection, targeted clinical interventions, and **postvention**.

mental health promotion: mental health promotion focuses on enabling and achieving positive mental health at the population level, by building competencies, resources and strengths and addressing the broader determinants of mental health. (Mental health promotion is not the same as the prevention of mental illness, which aims to reduce the incidence, prevalence or seriousness of specific disorders and problems.) (Balfour, 2007)

postvention: a range of activities following a youth suicide, designed to provide support for survivors and prevent suicide contagion and imitative suicidal behaviour (Dafoe & Monk, 2005).

It is important to remember that suicide is a complex problem that will not be addressed by any single intervention or through the actions of any individual agency. The recommendations presented below are, in many cases, focused on long-term outcomes and hence should not be understood as providing an immediate solution to child and youth suicide. For those agencies tasked with responding to the recommendations, the Child Death Review Unit recognizes that significant consideration will need to be given to the feasibility of the proposed intervention, how we might build on good work that is already underway, and any short-term actions that are necessary as we work collectively towards achieving long-term goals.

Overarching advice

After examining the findings related to the 81 children and youth who died by suicide in B.C. between January 1, 2003, and December 31, 2007, the panel advised that all child-serving jurisdictions responsible for ensuring the mental health and well-being of B.C.'s children and youth practice in a manner that is:

- collaborative
- youth- and family-centred
- culturally safe
- multi-level, and
- informed by current knowledge.

Collaborative

Collaborative practice recognizes that suicide prevention is a shared responsibility across several child-serving jurisdictions, and acknowledges that communication and co-operation across these sectors is crucial to achieving positive outcomes for children and youth. For children and youth with mental health problems or who are struggling with suicidal behaviour, collaborative practice ensures that knowledge and expertise are shared within the child or youth's circle of care, including families where appropriate.

Youth- and family-centred

Youth-centred practice recognizes the importance of engaging and consulting with youth when considering how to effectively approach the prevention of suicide, including promotion, prevention and early intervention in mental health, and suicide postvention. Family-centred practice ensures

that families are involved and educated about risk factors and warning signs of depression and suicidal behaviour, resulting in increased adult vigilance and care and support for vulnerable children and youth (White, 2005). The delivery of programs and messages to children and youth should be sensitive to those who may have been affected by suicide or suicidal behaviour. This includes children and youth who may be currently experiencing or have a history of suicidal behaviour, in addition to those who are survivors of suicide.

Culturally safe

Culturally safe practice ensures genuine awareness of and competency in all matters related to the diversity of children and youth, their families and communities, including respecting differences in nationality, culture, age, gender or religious beliefs. Moving beyond the notion of cultural sensitivity, cultural safety examines power imbalances, institutional discrimination and colonization as they apply to the delivery of health and social services (National Aboriginal Health Organization, 2006). Cultural safety is particularly relevant when considering the prevention of child and youth suicide in B.C.'s Aboriginal population.

Multi-level

A multi-level approach to suicide prevention involves coordinated action along a broad continuum of strategies, including the promotion of mental health, prevention of mental illness, treatment and rehabilitation of children and youth who are living with a mental disorder and/or struggling with suicidal behaviour, and postvention. This principle supports the provision of universal and targeted interventions to both improve mental health and reduce the burden of mental illness among children and youth.

Informed by current knowledge

Practice that is informed by the current knowledge base supports a more inclusive approach by broadening our understanding of evidence to reflect both scientific and traditional sources that have been recognized in a culture as effective. This approach allows for action despite the somewhat sparse body of robust empirical evidence that currently exists to support child and youth suicide prevention interventions. It also allows our understanding of "best practices" to be more inclusive of those interventions that are traditional or culturally rooted and therefore less prone to scientific investigation.

The recommendations

The panel issued the following recommendations to the Chief Coroner for the prevention of child and youth suicide.

Mental health plan considerations

Over the past 20 years, three provincial mental health plans have been developed in B.C., the most recent being the 1998 Mental Health Plan, which focused on the needs of adults with serious mental illness. The 2008 Throne Speech committed to renewing B.C.'s mental health plan, calling for a continued focus on vulnerable populations and an added priority on promotion, prevention and early intervention for mental health.

Recommendation 1

Ministry of Healthy Living and Sport, Ministry of Health Services, Provincial Health Services Authority of British Columbia

As government develops an updated 10-year mental health plan for B.C.:

- adopt a government-wide approach to promotion, prevention and early intervention in mental health for children and youth, including detection and response to suicidal behaviour, similar to the province's approach to the promotion of positive physical health
- call for targeted efforts to reduce the stigma and discrimination associated with mental disorders.

Mental health indictors

Understanding of the mental health status of children and youth is compromised by the lack of provincially or nationally validated indicators (Canadian Child and Youth Health Coalition, 2008). Development of mental health indicators would support population-level mental health strategies and monitoring of the state of mental health in B.C. Preliminary work in this area has been done by the European Commission (2008) and the Canadian Child and Youth Health Coalition (2008).

Recommendation 2

Ministry of Healthy Living and Sport

Develop population-level mental health indicators to support effective delivery of population mental health strategies and enhanced knowledge of the mental health status of B.C. children and youth.

Skill-building programs

Positive child and youth development programs help foster protective factors such as self-efficacy, self-determination and a positive self-identity. Teaching children and youth resiliency and coping skills has been found to enhance these protective factors (MCFD, 2008e).

Recommendation 3

Ministry of Education, British Columbia School Trustees Association

To increase resiliency and coping skills in children and youth, deliver curriculum-based universal skill-building programs in all B.C. schools.

A mental health literacy tool

People who die by suicide are frequently suffering from undiagnosed, under-treated or untreated depression. This is especially true for youth, whose depressive symptoms are often mistaken for "normal" developmental and emotional changes associated with transitioning into adulthood (US Department of Health and Human Services, 2008). Parents are well positioned to observe significant changes in their child or youth's behaviour and therefore require education to promote recognition of mental health problems and appropriate responses if issues are identified (MCFD, 2008f).

Recommendation 4

Ministry of Children and Family Development

Develop a mental health literacy tool to assist B.C. families in recognizing and responding to signs of mental health problems involving children and youth, and to distinguish these from normal developmental processes.

An information clearinghouse

Although extensive information and practice resources are available on promotion, prevention and early detection for mental health in B.C., there is no central repository under which this information is organized and accessed. A clearinghouse is a way of bringing together key research and resources in a specific field for the purpose of providing better and quicker access to information, promoting scientific co-operation and reducing duplication of efforts among those working in the field. Examples of the effective application of clearinghouses to topics in public health include Canada's National Clearinghouse on Family Violence (Public Health Agency of Canada, 2007) and Australia's Clearinghouse for Youth Studies (2008).

Recommendation 5

Ministry of Children and Family Development, Ministry of Healthy Living and Sport

Establish a web-based information clearinghouse for B.C., which will serve as a centralized access point for resources on promotion, prevention and early intervention in mental health (including suicide prevention and postvention). Its development should include a communications plan that promotes regular and ongoing use by both professionals and the public.

Gatekeeper training programs

School and community gatekeeper programs are dedicated to increasing recognition of children and youth at potential risk for self-harm and suicide by those who live, work and play in close proximity to children and youth (MCFD, 2008d). Studies in this area suggest that educating school and community gatekeepers is a key strategy in the development of a comprehensive approach to child and youth suicide prevention (White, 2008).

Recommendation 6

Crisis Intervention and Suicide Prevention Centre of British Columbia

Across B.C., deliver community-based gatekeeper training programs to improve recognition of and response to suicidal behaviour among those who have regular, non-clinical contact with children and youth. Programs should include an evaluation component and target a diverse group of potential interveners in the community – for example, teachers, coaches, employers, police officers, probation officers, clergy and other community leaders.

Peer training programs

Peer recognition and response training describes activities designed to improve a child or youth's ability to recognize suicide risk in a peer and initiate getting help (MCFD, 2008g). Studies suggest that school-based suicide prevention programs that include both an educational and screening component can be effective (without undesirable effects, such as feelings of hopelessness) at increasing knowledge, influencing attitudes in the desired direction, and reducing suicide attempts (White, 2008).

Recommendation 7

Ministry of Education, Ministry of Children and Family Development, British Columbia School Trustees Association, Crisis Intervention and Suicide Prevention Centre of British Columbia

Offer evidence-based peer recognition and response training to youth in all B.C. school districts. This training should be offered on a continual basis and be delivered as part of a holistic school-based approach to preventing suicide that incorporates other recommendations made by the panel, including universal systematic screening and the development of crisis response protocols.

A school-based screening program

Systematic screening of youth using evidence-based suicide predictors is considered an effective public health strategy for addressing youth suicide (O'Briain, 2007). Evaluations of targeted school-based programs that incorporate screening and brief, skill-based follow-up interventions have found a reduction in risks for suicide (White, 2005).

Recommendation 8

Ministry of Education, Ministry of Healthy Living and Sport, British Columbia School Trustees Association

To improve school connectedness, engagement and attendance among B.C. youth, implement systematic, school-based screening to identify students who require enhanced skills-based social support. This screening program should incorporate evidence-based suicide predictors and include measures to ensure that enhanced support and adequate follow-up are provided when a need is identified.

School connectedness

Secondary school programs that incorporate ecological interventions can influence positive mental health and reduce risk factors and emotional and behavioural problems among children and youth (Domitrovich et al., 2005). Research has found that students with good school and social connectedness are more likely to have positive educational outcomes and less likely to be involved in health risk behaviours and experience subsequent mental health issues (Bond et al., 2007).

Recommendation 9

Ministry of Education, Ministry of Healthy Living and Sport, British Columbia School Trustees Association

Using a "determinants of health" approach to address emotional and behavioural problems among children and youth, implement province-wide policies or programs that aim to improve school

connectedness. Interventions should integrate both school-based and community-based strategies to improve a child or youth's connection with peers, teachers and the learning process.

Means restriction

Restricting access to lethal means of self-injury can make the difference between a death and an opportunity to help a distressed individual, and is considered one of the most effective universal approaches to suicide prevention (Kirmayer et al., 2007). Evidence indicates that physical safety barriers or safety nets on bridges significantly reduce suicide by jumping from those locations (Beautrais, 2007) as well as from surrounding locations (Bennewith, Nowers & Gunnell, 2007).

Recommendation 10

Ministry of Transportation and Infrastructure

Improve means restriction efforts in B.C. by:

- retrofitting the five bridges in B.C. that are responsible for over 50 per cent of suicide deaths by jumping from 1991 to 2007 (Burrard Street Bridge, Granville Street Bridge, Iron Workers Memorial Bridge, Lions Gate Bridge, Pattullo Bridge)[1] with barriers to prevent future suicide deaths by jumping
- developing policy that establishes criteria for determining when bridges should be outfitted with barriers to prevent suicide by jumping, and enforcing this policy in the construction of all new bridges in B.C.

[1] *BC Coroners Service*

Confidentiality requirements and information sharing

In ensuring that client or patient confidentiality is maintained appropriately, child-serving jurisdictions in B.C. are governed by various legislative frameworks, both provincial and federal. This legislation can be difficult for professionals to navigate when attempting to balance confidentiality requirements with the need for effective information sharing within a child or youth's circle of care.

Recommendation 11

Information and Privacy Commissioner

Develop and distribute a policy handbook to support accurate, consistent interpretation and practice of confidentiality requirements among those working in child-serving jurisdictions. This handbook should address appropriate sharing of information within the circle of care, including families, when a child or youth is determined to be at risk to him/herself or others, as dictated under relevant provincial and federal legislation (including the *Freedom of Information and Protection of Privacy Act*, *Infants Act*, *Child, Family and Community Service Act,* and *Youth Criminal Justice Act*).

Professional education

As treatment therapies for mental disorders change over time, those who intersect with children and youth in a professional capacity require lifelong learning to remain current in their practice. Educational opportunities must be universal and easily accessible.

Recommendation 12

Ministry of Children and Family Development, Ministry of Health Services, British Columbia Medical Association, College of Registered Nurses of British Columbia, British Columbia School Counsellors' Association

Provide point-of-care practitioners across B.C. with ongoing yearly continuing professional education on effective recognition and treatment of adolescent depression and suicidal behaviour.

Emergency room suicide response protocol

The emergency room is a gateway to the community, and is an essential link in the "chain of survival." The Centers for Disease Control and Prevention (US) note that in 2002, more than 115,000 people were treated in emergency rooms for suicide attempts and released (Perhats & Valdez, 2008). It is estimated that for every suicide death, there are 20 attempts; one of the strongest predictors of death by suicide is a previous attempt (BC Partners for Mental Health and Additions Information, n.d.).

Recommendation 13

Ministry of Health Services, Ministry of Children and Family Development

Develop a suicide response protocol for B.C. hospital emergency rooms, to be initiated after an assessment of a child or youth in an emergency ward when suicidal behaviour has been noted. The protocol should specify

that at the point of discharge from the emergency ward the following occurs:

- notification of parent or guardian
- education of family/caregivers on restricting access to suicidal means within the home (for example, safe storage of prescription medications)
- creation of a safety plan
- immediate notification of the patient's community mental health team
- sending of a discharge summary to the patient and his or her family, the patient's family doctor and community mental health team.

Upon receiving this notification, the community mental health team should follow up with the child or youth within 24 hours.

Provincial task force on suicide postvention

Post-suicide response protocols outline activities that should take place after a suicide and identify the roles and responsibilities of those involved. Their purpose is to identify high-risk children and youth, reduce risks for suicide contagion and subsequent mental health problems, and facilitate healthy expressions of grief (White, 2008). Post-suicide or crisis-response protocols are an important part of postvention and a key component in any comprehensive approach to child and youth suicide prevention.

Recommendation 14

Ministry of Public Safety and Solicitor General, Ministry of Education, Ministry of Children and Family Development, Ministry of Health Services, Ministry of Healthy Living and Sport, Crisis Intervention and Suicide Prevention Centre of British Columbia, First Nations Health Council

Establish a provincial task force that will advance suicide postvention efforts in B.C. by completing an environmental scan of crisis-response teams and/or suicide-response protocols that exist in B.C. municipalities, and:

- where response teams exist, determining their nature and membership, and
- in municipalities that currently lack them, supporting the establishment of crisis-response teams or protocols while encouraging the use of existing postvention models that have shown success in other jurisdictions.

Surveillance system

Regulations under the 2008 *Public Health Act* support mandated surveillance as a key public health objective to promote health and enhance health service development and delivery. B.C. currently has effective surveillance systems in place in the areas of communicable diseases and alcohol and drug monitoring.

Recommendation 15

Ministry of Health Services, Ministry of Healthy Living and Sport

As supported by the provincial *Public Health Act,* develop a surveillance system for suicide attempts in B.C. that brings together currently available data systems and draws from successful surveillance models in other areas.

Media coverage

Research shows that certain types of media stories about suicide can contribute to imitative behaviour, particularly among youth. The scale of this effect appears to be proportional to the level of coverage, the duration of the story and the prominence of the coverage. Responsible media coverage is important in reducing contagion among youth after a suicide death takes place (White, 2008).

Recommendation 16

British Columbia Press Council, Canadian Association of Broadcasters

Adopt and ensure province-wide adherence to best practices for media coverage of suicide deaths, as outlined in currently available guidelines, such as the (US) Centers for Disease Control and Prevention's *Reporting on Suicide: Recommendations for the Media.*

Postvention resources

Postvention response is designed to decrease the risk of imitative suicidal behaviour, alleviate consequent mental health problems and facilitate healthy grieving. Special attention must be paid to child and youth survivors, as they are often at heightened risk following a suicide death (MCFD, 2008c).

Recommendation 17

Ministry of Public Safety and Solicitor General

Following a suicide death, ensure that survivors receive existing postvention resources directly. Suicide survivors may include family members, friends, school peers, care providers, co-workers and others who have been affected by a suicide death.

Glossary

This report uses the following key terms and definitions:

Aboriginal: refers to First Nations (status and non-status), Métis and Inuit people in Canada.

bullying: a pattern of repeated aggressive behaviour, with negative intent, directed from one person to another, where there is a power imbalance (Olweus et al., 1999).

child: for the purposes of this report, refers to individuals 12 years of age or under.

closed case: a case in which the coroner has completed the investigation into a death.

deliberate self-harm: the deliberate damage of one's own body without suicidal intent.

family dysfunction: the consequence of a social practice or behaviour pattern (such as abuse or neglect) that undermines the stability of the family unit.

mental health problems: a significant impairment of an individual's cognitive, affective and/or relational abilities that may be recognized as a medically diagnosable disorder.

mental health promotion: focuses on enabling and achieving positive mental health at the population level, by building competencies, resources and strengths and addressing the broader determinants of mental health. (Mental health promotion is not the same as the prevention of mental illness, which aims to reduce the incidence, prevalence or seriousness of specific disorders and problems.) (Balfour, 2007)

modifiable risk factors: risk factors that can potentially be removed or alleviated through intervention, thereby reducing the probability of injury, disease or death.

non-modifiable risk factors: risk factors that cannot be changed, including age, biological sex, Aboriginal ancestry and sexual orientation.

open case: a case in which the coroner is still investigating a death.

postvention: a range of activities following a youth suicide, designed to provide support for survivors and prevent suicide contagion and imitative suicidal behaviour (Dafoe & Monk, 2005).

substance use: the use or misuse of substances such as alcohol and drugs (both legal and illegal).

suicide: the BC Coroners Service classifies a death as suicide when it can be determined that the death occurred as a result of a self-inflicted injury with intent to cause death.

suicide attempt: a self-inflicted, non-accidental injury that does not result in death.

suicidal behaviour: suicidal ideation, threats and/or suicide attempts.

suicidal ideation: thoughts of suicidal acts involving oneself.

youth: for the purposes of this report, refers to individuals over 12 but under 19 years of age.

Appendix: BC Coroners Service and Health Authority Regions

BC Coroners Service regions

Fraser Region
Includes Burnaby to the Coquihalla Highway Toll Booth, east to Manning Park and north to Jackass Mountain bordering Merritt.

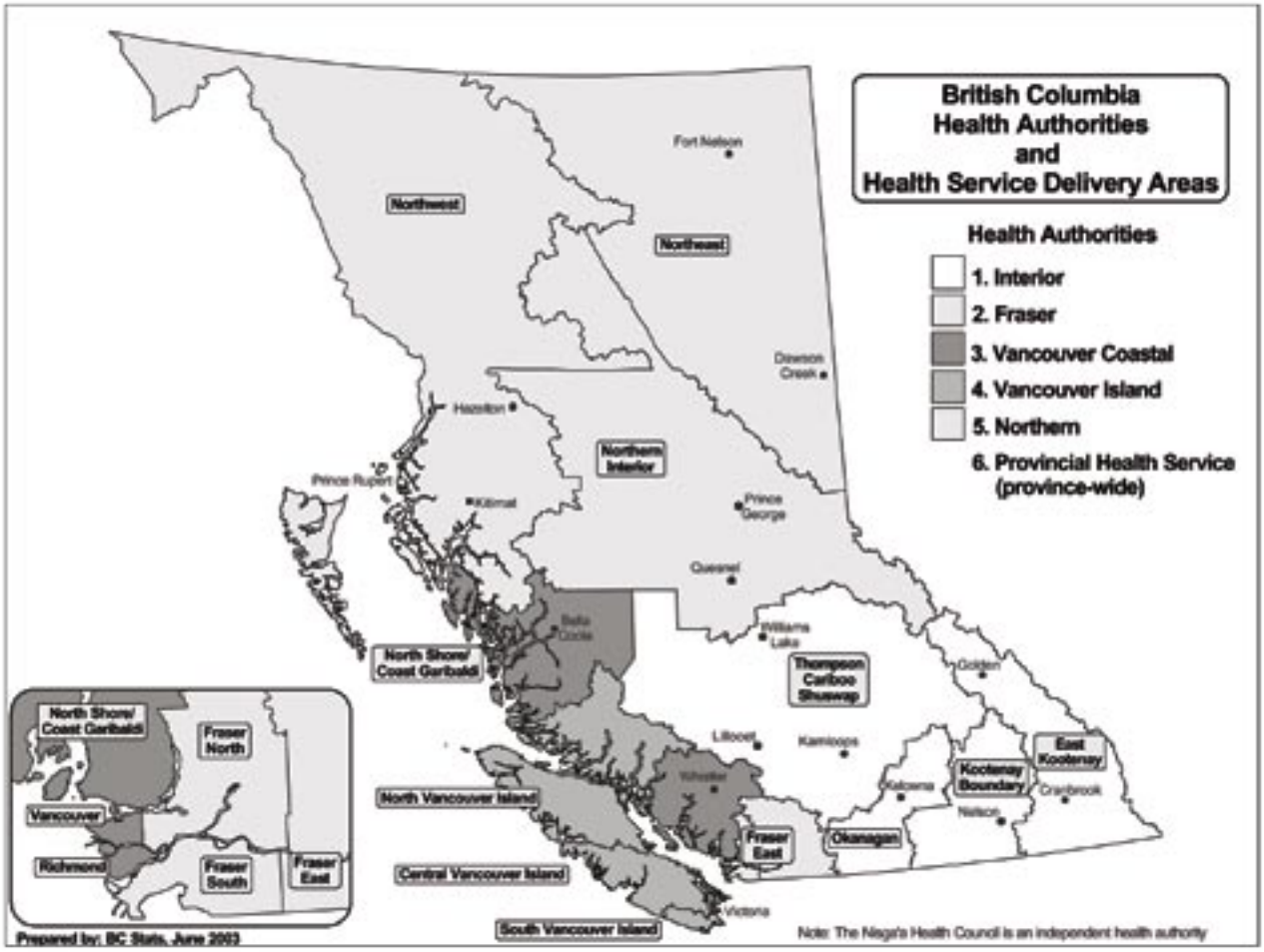
Interior Region
Includes the region north to 100 Mile House and Blue River, east to the Alberta border, south to the USA border and west to the Manning Park gate, including Ashcroft, Lytton and Lillooet.

Island Region
Includes all of Vancouver Island, the Gulf Islands and Powell River.

Northern Region
Includes the region north, east and west from Williams Lake to all borders, Bella Bella and the Queen Charlotte Islands.

Vancouver Metro Region
Includes Sunshine Coast, Sea to Sky Corridor, North Shore, Vancouver, UBC, Delta and Richmond.

B.C. health authority regions



References

Afifi, T., Cox, B., & Katz, L. (2007). The associations between health risk behaviours and suicidal ideation and attempts in a nationally representative sample of young adolescents. *Canadian Journal of Psychiatry, 52,* 666–674.

American Foundation for Suicide Prevention. (2008). Risk factors for suicide. Retrieved August 20, 2008, from http://www.afsp.org/index.cfm?fuseaction=home.viewPage&page_id=05147440-E24E-E376-BDF4BF8BA6444E76

Australian Clearinghouse for Youth Studies. (2008). Retrieved October 15, 2008, from http://www.acys.info

Balfour, K. (2007). *Evidence review: Mental health promotion.* Victoria, BC: Population Health and Wellness, B.C. Ministry of Health.

BC Health Guide. (2008). Depression in Children and Teens. Retrieved October 15, 2008, from http://www.bchealthguide.org/kbase/topic/major/ty4640/trtover.htm

BC Partners for Mental Health and Addictions Information. (n.d.). *Suicide: Follow the Warning Signs.* Retrieved October 15, 2008, from http://www.heretohelp.bc.ca/publications/factsheets/suicide

Beautrais. A. (2007). Suicide by jumping: A review of research and prevention strategies. *Crisis 28,* 58–63.

Bender, W. N., Rosenkrans, C. B., & Crane, M. (1999). Stress, depression, and suicide among students with learning disabilities: Assessing the risk. *Learning Disability Quarterly, 22,* 143–156.

Bennewith, O., Nowers, M., & Gunnell, D. (2007). Effect of barriers on the Clifton suspension bridge, England on local patterns of suicide: Implications for prevention. *British Journal of Psychiatry, 190,* 266–267.

Bond, L., Butler, H., Thomas, L., Carlin, J. B., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health and academic outcomes. *Journal of Adolescent Health 40,* 357e9–357e18.

British Columbia Ministry of Children and Family Development. (2007). Strategic context. In *2007 budget plan.* Retrieved August 20, 2008, from http://www.bcbudget.gov.bc.ca/2007/sp/cfd/default.aspx?hash=4

British Columbia Ministry of Children and Family Development. (2008a). Delegated child and family service agencies. Retrieved September 15, 2008, from http://www.mcf.gov.bc.ca/about_us/aboriginal/delegated/index.htm

British Columbia Ministry of Children and Family Development. (2008b). Mental health service delivery system. Retrieved September 15, 2008, from http://www.mcf.gov.bc.ca/mental_health/service_delivery.htm

British Columbia Ministry of Children and Family Development. (2008c). Preventing youth suicide: Assisting after a youth suicide. Retrieved October 15, 2008, from http://www.mcf.gov.bc.ca/suicide_prevention/after.htm

British Columbia Ministry of Children and Family Development. (2008d). Preventing youth suicide: Improving detection and promoting awareness. Retrieved October 15, 2008, from http://www.mcf.gov.bc.ca/suicide%5Fprevention/awareness.htm

British Columbia Ministry of Children and Family Development. (2008e). Preventing youth suicide: Information and background. Retrieved August 29, 2008, from http://www.mcf.gov.bc.ca/suicide_prevention/information.htm

British Columbia Ministry of Children and Family Development. (2008f). Preventing youth suicide: Parent education. Retrieved October 15, 2008, http://www.mcf.gov.bc.ca/suicide_prevention/parent_education.htm

British Columbia Ministry of Children and Family Development. (2008g). Preventing youth suicide: Peer recognition and response training. Retrieved October 15, 2008, from http://www.mcf.gov.bc.ca/suicide_prevention/peer.htm

British Columbia Ministry of Children and Family Development. (2008h). Purpose of the ministry. In *2008/09–2010/11 service plan.* Retrieved September 15, 2008, from http://www.bcbudget.gov.bc.ca/2008/sp/cfd/default.html#3

British Columbia Ministry of Children and Family Development. (2008i). Youth justice services. Retrieved September 15, 2008, from http://www.strongsafesupported.com/EN/youth_justice/

British Columbia, Ministry of Education. (2006). 2005/2006 Summary of key information. Retrieved September 15, 2008, from http://www.bced.gov.bc.ca/reporting/levels/prov_key.php

Canada Institute of Health. (2006). Youth suicide: It's time to get involved. Retrieved August 19, 2008, from http://www.cihr-irsc.gc.ca/e/32154.html

Canadian Child and Youth Health Coalition. (2008). Child and Youth Health Indicator Program. Retrieved October 15, 2008, from http://www.ccyhc.org/work_indicators_about.html

Chandler, M., & Lalonde, C. (1998). Cultural continuity as a hedge against suicide in Canada's First Nations. *Transcultural Psychiatry, 35,* 191–219.

Chandler, M., & Lalonde, C. (2004). Cultural continuity as a moderator of suicide risk among Canada's First Nations. In L. J. Kirmayer & G. Valaskakis (Eds.), *The mental health of Canadian Aboriginal peoples: Transformations, identity, and community* (p. 18). Vancouver, BC: University of British Columbia Press.

Cheung, A. H., & Dewa, C. S. (2005). Current trends in youth suicide and firearms regulations. *Canadian Journal of Public Health, 96,* 131–135.

Dafoe, B., & Monk, L. (2005). *Suicide postvention is prevention: A proactive planning workbook for communities affected by suicide.* Vancouver: BC Council for Families.

de Leo, D., & Heller, T. (2008). Social modeling in the transmission of suicidality. *Crisis, 29,* 11–19.

Domitrovich, C., Weare, K., Elias, M., Greenberg, M., & Weissberg, R. (2005). Enhancing resilience and reducing risk behaviour in schools. In C. Hosman, E. Jané-Llopis, & S. Saxena, (Eds.), *Prevention of mental disorders: Effective interventions and policy options.* Oxford: Oxford University Press.

European Commission. (2008). Health indicators. Retrieved October 15, 2008, from http://ec.europa.eu/health/ph_information/indicators/indicators_en.htm

Guo, B., & Harstall, C. (2002). *Efficacy of suicide prevention programs for children and youth* (Health Technology Assessment [HTA] 26.) Edmonton, AB: Alberta Heritage Foundation for Medical Research.

Hamid-Balma, S. (2005). Suicide 101: The statistics of risk. *Visions, 2(7)*, 6–7.

Hawston, K., & Zahl, D. L . (2004). Repetition of deliberate self-harm and subsequent suicide risk: Long-term follow-up study of 11,583 patients. *British Journal of Psychiatry, 185,* 70–75.

Hufford, M. (2001). Alcohol and suicidal behaviour. *Clinical Psychology Review, 21,* 797–811.

Kaltiala-Heino, R., Rimpelä, M., Marttunen, M., Rimpelä, A., & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: School survey. *British Medical Journal, 319,* 348–351.

Kirmayer, L. J., Brass, G. M., Holton, T. L., Paul, K., Simpson, C., & Tait, C. L. (2007). *Suicide among Aboriginal people in Canada* (Aboriginal Healing Foundation Research Series). Ottawa: Aboriginal Healing Foundation.

Kutcher, S. P., & Szumilas, M. (2008). Youth suicide prevention. *Canadian Medical Association Journal, 178,* 282–285.

Lewinsohn, P., Rohde, P., Seeley, J., & Baldwin, C. (2001). Gender differences in suicide attempts from adolescence to young adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry, 40,* 427–434.

Links, P., Masecar, D., Ramsey, D., & Hill, A. (2004). *The CASP blueprint for a Canadian national suicide prevention strategy.* Edmonton, AB: Canadian Association for Suicide Prevention.

Martin, G., Rotaries, P., Pearce, C., & Allison, S. (1995). Adolescent suicide, depression and family dysfunction. *Acta Psychiatrica Scandinavica, 92,* 336–344.

McManus, B. L., Kruesi, M. J. P., Dontes, A. E., Defazio, C. R., Piotrowski, J. T., & Woodward, P. J. (1997). Child and adolescent suicide attempts: An opportunity for emergency departments to provide injury prevention education. *American Journal of Emergency Medicine, 15,* 357–360.

National Aboriginal Health Organization. (2006). *Cultural safety* (fact sheet). Ottawa: National Aboriginal Health Organization.

O'Briain. W. (2007). Evidence review: *Prevention of mental disorders.* Victoria, BC: Population Health and Wellness, B.C. Ministry of Health.

Olshen, E., McVeigh, K. H., Wunsch-Hitzig, R. A., & Rickert, V. I. (2007). Dating violence, sexual assault, and suicide attempts among urban teenagers. *Archives of Pediatric Adolescent Medicine, 161,* 539–545.

Olweus, D., Limber, S., & Mihalic, S. (1999). *Blueprints for violence prevention.* (Book 9 in D. Elliott [Ed.], *Bullying prevention program.*) Boulder, CO: Center for the Study and Prevention of Violence.

Perhats, C., & Valdez, A. M. (2008). Suicide prevention in the emergency department. *Journal of Emergency Nursing, 34,* 251L–53.

Saewyc, E., Poon, C., Wang, N., Homma, Y., Smith, A., & McCreary Centre Society. (2007). *Not yet equal: The health of lesbian, gay, and bisexual youth in BC.* Vancouver, BC: McCreary Centre Society.

Suicide Information and Education Centre. (2002). Are suicide rates higher at Christmas? SIEC Alert 16. Retrieved August 19, 2008, from www.suicideinfo.ca

Sullivan, P. F., Neale, M. C., & Kendler, K. S. (2000). Genetic epidemiology of major depression: Review and meta-analysis. *American Journal of Psychiatry, 157,* 1552–1562.

US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. (n.d.). Mental illness and suicide. In *National strategy for suicide prevention.* Retrieved May 6, 2008, from http://mentalhealth.samhsa.gov/suicideprevention/suicidefacts.asp

van der Woerd, K. A., Dixon, B. L., McDiarmid, T., Chittenden, M., Murphy, A. & McCreary Centre Society. (2005). *Raven's children II: Aboriginal youth health in BC.* Vancouver, BC: McCreary Centre Society.

Velting, D. M., & Gould, M. S. (1997). Suicide contagion. In R. W. Maris & M. M. Silverman (Eds.), *Review of suicidology* (pp. 96–137). New York: Guilford Press.

White. J. (2005). *Preventing suicide in youth: Taking action with imperfect knowledge.* Research Report Prepared by the Children's Mental Health Policy Research Program for the British Columbia Ministry of Children and Family Development (Volume 1, Report 8). Retrieved October 15, 2008, from http://www.childhealthpolicy.sfu.ca/research_reports_08/rr_pdf/RR-9-05-full-report.pdf

White, J. (2008). *A summary of best practices in youth suicide prevention* (unpublished literature review prepared for the Child Death Review Unit).

White, J., & Jodoin, N. (2007). *Aboriginal youth: A manual of promising suicide prevention strategies.* Calgary, AB: Centre for Suicide Prevention.

Wilcox, H. C., Connor, K. R., & Caine, E. D. (2004). Association of alcohol and drug use disorders and completed suicide: An empirical review of cohort studies. *Drug and Alcohol Dependence, 76*(Spring), 11–19.

World Health Organization. (2008). Suicide prevention. Retrieved August 29, 2008, from http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/