

Suicide Among Aboriginal People in Canada



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Suicide Among Aboriginal People in Canada

Prepared for

The Aboriginal Healing Foundation

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2007

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Preface

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Laurence J. Kirmayer, MD

Montreal, May 2006

Abbreviations

AAS	American Association of Suicidology
ACADRE	Aboriginal Capacity and Developmental Research Environments
ACYRN	Aboriginal Community Youth Resilience Network
AFN	Assembly of First Nations
AHF	Aboriginal Healing Foundation
AHWS	Aboriginal Healing and Wellness Strategy
ARBD	Alcohol-related birth defects
ASIST	Applied Suicide Intervention Skills Training
CASP	Canadian Association for Suicide Prevention
CBSPP	Community-Based Suicide Prevention Program
CI	Confidence interval
CIDI	Composite International Diagnostic Interview
CSP	Centre for Suicide Prevention
DIS	Diagnostic Interview Schedule
DSM	Diagnostic and Statistical Manual
FAE	Fetal alcohol effects
FAS	Fetal alcohol syndrome
FNIHB	First Nations and Inuit Health Branch of Health Canada
INAC	Indian and Northern Affairs Canada
ITK	Inuit Tapiriit Kanatami
NAHO	National Aboriginal Health Organization
NAYSPS	National Aboriginal Youth Suicide Prevention Strategy
NIYC	National Inuit Youth Council
NTSPT	Northwest Territories Suicide Prevention Training
OR	Odds ratio
OSPN	Ontario Suicide Prevention Network
RHS	First Nations Regional Longitudinal Health Survey
RR	Relative risk
SPRC	Suicide Prevention Resource Centre
SSRI	Selective serotonin reuptake inhibitor
WHO	World Health Organization
ZLSD	Zuni Life Skills Development Curriculum

Glossary

Ambivalence – Ambivalence refers to a conflict between competing wishes or desires within the person; in the context of suicide, for example, the ambivalent individual may simultaneously have both the desire to die and the desire to live.

Anomie – Sociologist Émile Durkheim used this term to refer to a lack of social order and integration within a society, and suggested that there is a relationship between social conditions and suicide. *Anomic suicide* can occur in a society that lacks “collective order” because it is undergoing major social change.

Antidepressant – A medication used to treat major depression.

Antisocial personality disorder – A psychiatric diagnosis in which a person shows repeated and persistent social difficulties including conflict with the law, inconsistent employment, and irresponsibility as a parent. In adolescence, this may involve truancy or expulsion from school, running away, persistent lying, sexual promiscuity, substance abuse, fighting, and vandalism.

Anxiety – The state of being anxious or having feelings of nervousness and fear; a psychiatric disorder characterized by a state of excessive uneasiness.

Bimodal – A statistical distribution having two peaks.

Bipolar disorder (also called manic-depressive illness) – A psychiatric disorder is characterized by cyclical periods (lasting days, weeks, or months) of extremes of mood, both highs (mania) and lows (depression).

Borderline personality disorder (BPD) – A mental health problem characterized by instability in moods, behaviour, self-image, and interpersonal relationships. Symptoms include intense bouts of anger, depression, and anxiety that may last for hours or, at most, a day. These periods may be associated with episodes of impulsive aggression, self-injury, and substance abuse.

Cohort – In epidemiology, a well-defined group of people who have had a common experience or exposure, and are then followed up. A *birth cohort* is a group of people born during the same time period.

Cohort effect – A variation in health or other characteristics that arises from some factors to which a specific birth cohort in the population was exposed.

Comorbidity – The co-occurrence of two or more illnesses or disorders; often refers to a psychiatric or psychological disorder coexisting with a substance use disorder.

Conduct disorder – A disorder of childhood or adolescence characterized by repetitive and persistent anti-social activities that violate the rights of others. Symptoms may include physical or verbal aggression directed towards others, repeated violation of age-appropriate social rules and norms, stealing, and “conning” others to avoid responsibility or for personal gain.

Correlation – A relationship between variables or measurements such that when one increases so does the other (positive correlation), or when one increases the other decreases (negative correlation).

Correlates – Factors related by correlation.

Depression – A psychiatric disorder characterized by persistent sadness, low mood, a loss of interest or pleasure in usual activities, difficulty in concentration or thinking, loss of energy, fatigue, slowing down, and lethargy or agitation. Other symptoms include loss of appetite, sleep disturbance (insomnia or excessive sleep), loss of sexual interest, and weight loss.

Direct case-finding – Screening a population with a questionnaire or interview to identify individuals who are suicidal.

Distribution – In epidemiology, it is the pattern and frequency of a characteristic in a population. In statistics, it is the observed or theoretical frequency of values of a variable.

DSM-IV – Fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association; the standard psychiatric diagnostic system in use in Canada and the United States.

Dysphoria – An unpleasant mood such as irritability, sadness, or anxiety.

ICD-10 – The tenth edition of the *International Classification of Diseases and Related Health Problems*, the standard diagnostic system in use internationally (includes psychiatric diagnoses similar to those in DSM-IV).

Incidence – The number of new instances of someone falling ill during a given period in a specified population (e.g. new cases of disease in a population within a specified period of time).

Locus of control – A measure of an individual's belief that what happens to them is either under their own control (*internal* locus of control) or under the control of other people or external forces (*external* locus of control).

Longitudinal study – A study that follows a group of people over time.

Morbidity – Any illness or disease.

Mortality rate – The frequency of death in a given population during a specified interval of time.

Neuroticism – A personality trait characterized by the tendency to experience many symptoms and negative emotions (worry, anxiety, or depression).

Odds ratio – A measure of association that quantifies the relationship between an exposure and health outcome from a comparative study (e.g. a factor with an odds ratio of 2.0 would increase the likelihood of an outcome by 2 times).

Parasuicide – Any acute, intentional self-injurious behaviour that creates the risk of death.

Period effect – An effect due to factors that affect the whole population at one point in time (e.g. the introduction of changes in diagnostic practices).

Personality disorder – Personality disorders are psychiatric conditions that involve persistent aspects of the individual's personality, which are maladaptive as they have negative effects on a person's quality of life and/or on others.

Postvention – Postvention refers to those interventions done “after the fact” to address and lessen possible after-effects of trauma or suicide.

Prevalence – The number of instances or people affected by a disease, problem, or condition in a given population at a designated time.

Primary prevention – An intervention that aims to prevent the occurrence of new cases of a disease, disorder, or condition in a population.

Protective factor – An aspect of the person or the environment that reduces an individual's likelihood of developing an illness or increases his or her resilience.

Psychometrics – The statistical characteristics of scales including their reliability and validity. Also, it is the field of study concerned with the theory and technique of psychological measurement, which includes the measurement of knowledge, abilities, attitudes, and personality traits. The field is primarily concerned with the study of differences between individuals.

Psychosis – A state of being out of touch with reality, and includes symptoms such as hallucinations (hearing or seeing things that others cannot hear or see) and delusions (false beliefs or convictions that cannot be changed no matter how clearly they are shown to be wrong).

Reliability – The extent to which a measurement (e.g. a psychological test) remains consistent over repeated measurement when the conditions remain identical.

Resilience – The ability to adapt positively and thrive despite adversity.

Risk factor – An aspect of the person or the environment that increases an individual's likelihood of developing an illness.

Schizophrenia – A psychiatric disorder characterized by chronic psychotic symptoms, which may include delusions, hallucinations, disordered thinking, unusual behaviour or speech, and social withdrawal that impair the ability to interact with others.

Sense of coherence (SOC) – SOC is a global psychological orientation that expresses the extent to which one has confidence that life makes sense, one can meet its demands and it is worthwhile. These three components are called *comprehensibility*, *manageability*, and *meaningfulness* (Antonovsky, 1993).

Validity - Confirmation that a test, questionnaire, interview, or diagnosis actually measures what it is supposed to measure.

Executive Summary

Suicide is a deeply troubling event that challenges our assumptions about the meaning and value of life and leaves a wake of pain and perplexity among the families and friends of those who end their lives. What makes life worth living despite hardship and adversity? What makes some individuals decide to take their own lives or to act impulsively in self-destructive ways with no regard for their future? To what extent does suicide reflect individual suffering or a wider social predicament? Although suicide is just one indicator of individual and collective suffering, it demands special attention because of its severity and finality.

In recent years, Aboriginal people in Canada have suffered from much higher rates of suicide than the general population. The overall Canadian rate has declined, while in some Aboriginal communities and populations, rates have continued to rise for the last two decades. Although there are enormous variations across communities, bands, and nations, the overall suicide rate among First Nation communities is about twice that of the total Canadian population; the rate among Inuit is still higher—6 to 11 times higher than the general population. For Aboriginal people, suicide is an affliction of the young. From the ages of 10 to 29, Aboriginal youth on reserves are 5 to 6 times more likely to die of suicide than their peers in the general population. Over a third of all deaths among Aboriginal youth are attributable to suicide. Although the gender difference is smaller than among the non-Aboriginal population, males are more likely to die by suicide, while females make attempts more often. Despite widespread concern about these alarming statistics, there continues to be a lack of information on Aboriginal suicide, its origins, and effective interventions.

Suicide is a behaviour or action, not a distinct psychiatric disorder. Like any behaviour, it results from the interaction of many different personal, historical, and contextual factors. Suicide may be associated with a wide range of personal and social problems, and have many different contributing causes in any individual instance. In fact, suicide is only one index of the health and well-being of a population, and it is important to view suicide in the larger context of psychological and social health, and well-being.

Suicide is never the result of a single cause, but arises from a complex web of interacting personal and social circumstances. From the perspective of prevention, the contributors to suicide can be thought of in terms of risk factors that increase the likelihood of suicidal behaviour, and protective factors that reduce it. These risk and protective factors include: the physical and social environments; individual constitution, temperament, or developmental experiences; interpersonal relationships; alcohol and substance abuse; suicidal ideation and previous suicide attempts; and co-existing psychiatric disorders. The individual factors that affect suicide in Aboriginal people are no different than those found in other populations and communities, but the prevalence and interrelationships among these factors differ for Aboriginal communities due to their history of colonization, and subsequent interactions with the social and political institutions of Canadian society.

Suicide is just one indicator of distress in communities. For every suicide there may be many more people suffering from depression, anxiety, and other feelings of entrapment, powerlessness, and despair. At the same time, every suicide has a wide impact affecting many people—family, loved ones, and peers who find echoes of their own predicament, and who sometimes may be prompted to consider suicide themselves in response to the event. The circle of loss, grief, and mourning after suicide spreads outward in the community. In small Aboriginal communities where many people are related, and where many people face similar histories of personal and collective adversity, the impact of suicide may be especially widespread and severe.

Although much of the literature on suicide in the general population is relevant to the experience of Aboriginal people, there are specific cultural, historical, and political considerations that contribute to the high prevalence, and that require the rethinking of conventional models and assumptions. This report emphasizes what is distinctive about Aboriginal people in Canada in order to identify important gaps in knowledge, and to guide the development and adaptation of culturally appropriate strategies of prevention.

In general, risk factors for suicide among Aboriginal youth are similar to those for suicide in the general population of young people. These factors include: depression, hopelessness, low self-esteem or negative self-concept, substance use (especially alcohol), suicide of a family member or a friend, history of physical or sexual abuse, family violence, unsupportive and neglectful parents, poor peer relationships or social isolation, and poor performance in school. Two overlapping patterns of vulnerability to suicide can be identified in the existing literature: (1) severe depression is a key contributor to many suicides; and (2) life crises, substance abuse, and personality traits of aggressive impulsivity may play an important role in many suicides, especially among youth. Protective factors that contribute to individual resilience include family harmony and cohesion, involvement in family activities, good communication and feeling understood by one's family, good peer relations, and school success.

This information allows for the identification of youth in the community who may be at greater risk for suicide; namely, those who have mental health problems (especially depression, but also substance abuse, anxiety, or conduct problems associated with impulsive and aggressive behaviour), a history of physical or sexual abuse, a friend or family member who has attempted suicide, poor relationships with parents, and poor school attendance or performance. Providing mental health services, mobilizing social support, and increasing community involvement for these youth and their families should reduce their risk of suicide. Early interventions with families and communities to support the healthy development of infants and children may reduce the prevalence of personality disorders and other mental health problems, which are more difficult to address in adolescents or adults.

However, this portrait of individual vulnerability and resilience is only half of the picture. Suicidal behaviour affects large numbers of young people in some Aboriginal communities, but not in others. This makes it clear that there are social forces at work at the levels of communities, regions, and nations that are of central importance. Understanding of the role of larger social factors is therefore crucial to identifying the most important contributors to suicide for any specific Aboriginal population, community, or individual.

Acculturation stress and marginalization (failing to acquire and value Aboriginal values and identity, while also failing to identify with the cultural values of the larger society) has been repeatedly described as a risk factor for Aboriginal adolescent suicide. Cultural marginalization and concomitant problems in identity formation may render Aboriginal youth vulnerable to suicide, even in the absence of clinical depression. These processes of marginalization and acculturation stress do not simply reflect individual differences in adaptation, but are largely determined by social and political forces beyond the individual.

Governmental policies of forced assimilation enacted through the residential school system and the child welfare system resulted in profound disruption in the transmission of culture and the maintenance of healthy communities. The impact of the residential school system and other systematic practices of cultural suppression and forced assimilation can be seen at the levels of individual experience, family systems, communities, and whole nations or peoples. Each of these levels has its own pathways that can transmit negative effects across the generations. Each level also has its own ways of contributing to resilience,

revitalization, and renewal. The individual, family, community, and nation levels interact to shape each successive generation so that, while their experiences are unique in many respects, there is a historical continuity. The historical roots of current problems must be recognized and addressed to develop effective interventions that can transform intrafamilial and intergenerational cycles of suffering. Although there is still a lack of good evaluation studies and demonstrations that suicide prevention programs actually work, even in the general population, recent evidence does suggest that certain specific types of interventions are likely to be effective. There is evidence of benefits from programs or interventions that: (1) restrict access to the means of suicide; (2) provide school-based education to teach coping skills, how to recognize and identify individuals at risk, and how to refer them to counselling or mental health services; (3) train youth as peer counsellors or “natural helpers;” (5) train other individuals with whom youth come into regular contact (teachers, nurses, primary care providers, clergy, parents) to recognize and refer youth at risk; (6) mobilize the community to develop suicide prevention programs, a crisis intervention team, family support, and activities that bring together youth and Elders to transmit cultural knowledge and values; and (7) insure that mass media portray suicide and other community problems in appropriate ways.

For individuals already identified as at risk for suicide, or suffering from other mental health problems, it is crucial to insure that they have access to adequate mental health services. Depending on the severity of the problem, this includes psychiatry, psychology, counselling, peer support, and indigenous forms of help and healing. Families and friends bereaved by a suicide should also have counselling and other forms of support available. The fact that the youth in Aboriginal communities are most obviously affected by suicide tends to keep the focus primarily on youth. Any intervention that reduces the suffering and improves the well-being of the parents and families of youth will benefit youth as well as contribute to suicide prevention.

Given the limited state of knowledge about what works in suicide prevention, research must continue to play an important role. In fact, participatory action research may contribute directly to suicide prevention by strengthening communities. To achieve these beneficial effects, research must be conducted collaboratively with communities to ensure relevance and responsiveness to local needs and perceptions. Ethical guidelines for the conduct of research with Aboriginal communities and people have been published by the Royal Commission on Aboriginal Peoples and the National Aboriginal Health Organization.

Often, suicide is a response to feeling trapped in a dead-end with no exit. It is almost always an effort to escape unending frustration, grief and psychic pain. The prevention of suicide must therefore counteract frustration, hopelessness and unbearable pain in all of their toxic forms, and provide other means of changing or escaping intolerable circumstances. In many cases, this may involve psychotherapy, medication, or other forms of healing that renew the individual’s sense of power, self-efficacy, and self-worth. Where the loss of hope affects whole communities, however, this individualized approach may be woefully inadequate. However, rather than turning Aboriginal communities into “therapeutic milieus” where everyone is preoccupied with mental health issues, it may be more effective to directly address the social problems that affect whole generations of young people by supporting community development and political empowerment. In this way, young people will move with their parents, elders, and communities from a position of marginalization, powerlessness, and pessimism to one of agency, creativity, self-confidence, and hope.

Introduction

When I was 14 years old, a student in my class committed suicide and it just, it affects everybody. It leaves you feeling, you know, just incredibly empty inside because you don't, you can't, it's so hard to understand. The way a person would feel, to go so far as to actually kill themselves, you know. So it's, people who are even you know, who feel great about their lives, you know. Someone near them kills themselves and you start questioning your own life too. It's got such a domino effect and it's just everyone around gets pushed back and feels the weight of the pressure of that person who killed themselves (First Nation youth).¹

Suicide is a deeply troubling event that challenges our assumptions about the meaning and value of life, and leaves a wake of pain and perplexity among the families and friends of those who end their lives. What makes life worth living despite hardship and adversity? What makes some individuals decide to take their own lives or to act impulsively in self-destructive ways with no regard for their future? To what extent does suicide reflect individual suffering or a wider social predicament? Although suicide is just one indicator of individual and collective suffering, it demands special attention because of its severity and finality.

In recent years, Aboriginal people in Canada have suffered from much higher rates of suicide than the general population. While the overall Canadian rate has declined, in some Aboriginal communities and populations, rates have continued to rise for the last two decades (Royal Commission on Aboriginal Peoples, 1995). Although there are enormous variations across communities, bands, and nations, the overall suicide rate among First Nation communities is about twice that of the total Canadian population; the rate among Inuit is still higher—6 to 11 times higher than the general population (Government of Canada). For Aboriginal people, suicide is an affliction of the young. From the ages of 10 to 19, Aboriginal youth on reserves are 5 to 6 times more likely to die of suicide than their peers in the general population (Medical Services Branch Steering Committee on Native Mental Health, 1991a). Over a third of all deaths among Aboriginal youth are attributable to suicide (Health Canada, 2003). Despite widespread concern about these alarming statistics, there continues to be a lack of information on Aboriginal suicide, its origins, and effective interventions (Advisory Group on Suicide Prevention, 2003).

The aim in this report is to review and integrate the available research literature in order to better understand the origins of suicide and identify effective interventions. This report gives priority to studies of suicide among Aboriginal people in Canada including status and non-status Indians, Inuit, and Métis, in rural and urban settings. However, relevant information on suicide among other Indigenous people in North America, Australia, and elsewhere, as well as on the general North American population, is included. In addition to reviewing research on established risk and protective factors for suicide, examining literature on physical and sexual abuse, residential schools, and related social stressors, even where suicide was not explicitly studied in order to identify potential links, was completed. Finally, a review of current models of suicide prevention and mental health promotion was conducted in order to identify best practices that can be adapted to Aboriginal populations and communities.

¹ All quotations are from archival material collected by Suicide Prevention Training Programs, part of the Centre for Suicide Prevention in Calgary, Alberta, Canada. The quotations are used with the permission of the Centre for Suicide Prevention, 16 February 2006.

Suicide is a behaviour or action, not a distinct psychiatric disorder. Like any behaviour, it results from the interaction of many different personal, historical, and contextual factors. Suicide may be associated with a wide range of personal and social problems, and have many different contributing causes in any individual instance. In fact, suicide is only one index of the health and well-being of a population, and it is important to view suicide in the larger context of psychological and social health and well-being. Accordingly, this report will try to situate the experiences of Aboriginal people within the larger contexts of mental health and Canadian society (Kirmayer, Brass, and Tait, 2000).

Although much of the literature on suicide in the general population is relevant to the experience of Aboriginal people, there are specific cultural, historical, and political considerations that contribute to the high prevalence, and that require the rethinking of conventional models and assumptions. This report emphasizes what is distinctive about Aboriginal people in Canada in order to identify important gaps in knowledge and to guide the development and adaptation of culturally appropriate strategies of prevention.

The Scope of this Report

This report was commissioned by the Aboriginal Healing Foundation. It reviews research on suicide and suicide attempts among Aboriginal people in Canada (First Nation, Inuit, and Métis)² to address four broad questions:

- 1) What is known about the prevalence and distribution of suicide in Aboriginal populations and communities in Canada?
- 2) What are the factors that increase or diminish the risk of suicide in individuals and communities?
- 3) What evidence is there for a relationship between suicide and the intergenerational effects of residential schools, especially physical and sexual abuse?
- 4) What are the current best practices regarding prevention of suicide and intervention for suicidal individuals and affected communities?

An extensive Internet literature search to December 2003 was conducted using Medline and PsychINFO. The terms used in the search included suicide (attempted and completed), Ethnic groups (Native), Aboriginal, North American Indian, First Nations, Eskimo, Inuit, and Indigenous. Articles were selected for their scientific quality and relevance to Aboriginal mental health issues. In addition, reports available from Aboriginal organizations and suicide information clearinghouses were reviewed. The emphasis is on scientific literature, but this is interpreted and integrated throughout with close attention to available reports of Aboriginal perspectives as represented in the available reports of conferences, workshops, and consultations.

² Throughout this report, the term *Aboriginal* is used to encompass First Nation, Inuit, and Métis people in Canada. When reporting on Indigenous people from other countries, the currently accepted terms or the original language of the specific study is followed. For the United States, the terms *American Indian*, *Alaska Native*, or *Native American and Eskimo* are used to follow the use in the source being reviewed.

Definitions of Suicide and Suicidal Behaviour

Suicidal behaviour encompasses a range of self-destructive acts. The classic definition of suicide comes from the sociologist Emile Durkheim:

the term suicide is applied to all cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result (1951:44).

While it appears clear, this definition assumes one can know what people were thinking about their own actions during a moment of crisis or a prolonged period of intense distress. Usually, there is no way to reconstruct with complete certainty just what someone was thinking or intending before they died. Even for those who knew the person well, it can be difficult to determine his or her precise motivation or intention to die. In attempted suicide, individuals may have poor recollection of the events surrounding their attempt because they were intoxicated or otherwise in an extremely agitated or confused state. Clinically, patients often recount complex and conflicting motivations that change over time as they recover and try to distance themselves from the crisis experience. In the case of studies of death by suicide where the assessments can only be done retrospectively by interviewing others (in what has been called a “psychological autopsy”), judgments of individuals’ intention inevitably remain uncertain.

The official records of coroners on which suicide and other causes of death are recorded are often inaccurate, incomplete, and do not contain crucial information for studying psychological and socio-cultural correlates of suicide. Suicide is associated with considerable stigma, and family and authorities may be reluctant to report or acknowledge it. Even hospital records may be inaccurate (Rhodes et al., 2002). Self-injury may mimic or aggravate a pre-existing disease so that suicide is difficult to distinguish from “natural death.”

Researchers have distinguished between studies of *attempted suicide*, *completed suicide* and *parasuicide* (self-injurious or risk-taking behaviour that is life-threatening without suicide being the conscious goal). The World Health Organization has defined parasuicide as:

an act with nonfatal outcome, in which an individual deliberately initiates a nonhabitual behaviour that, without intervention by others, will cause self-harm, or ingests a substance in excess of the prescribed or generally recognized therapeutic dosage, and which is aimed at realizing changes which he/she desired via the actual or expected physical consequences (1986:2).

This is a complex definition that includes assessments of motivation that are difficult to make. There is controversy about what to include within the group of suicide-related behaviours or parasuicide. For example, many risk-taking or self-destructive acts may be motivated by the same sorts of hopelessness, suffering, and wish to escape from a painful life that contribute to suicide. On the other hand, in many Aboriginal communities, certain types of risky behaviour (like driving all-terrain vehicles without helmets) are so common among all youth that they do not distinguish between those who are depressed or suicidal and those who are doing well. Risk-taking behaviour and suicide may be related, in part, because both are independently influenced by such personality factors as impulsivity.

Some accidents are associated with an intense misery and a wish to die (Clarke, Frankish, and Green, 1997); however, the accident may result not from any specific intention, but from lack of attention due

to preoccupation or distraction. In cases involving repeated acts of self-harm like substance abuse, some observers are tempted to interpret the behaviour as a form of “slow suicide.” This assumes a self-destructive intention that often cannot be confirmed. Individuals may become caught in many different sorts of self-destructive patterns of behaviour without intending to end their lives. Moreover, most suicidal behaviour involves a degree of ambivalence in which the afflicted person may both want to die and still hope for rescue and relief (Williams, 2001).

In some instances, individuals may make a suicide attempt in a way that clearly serves to communicate their distress. For example, someone may threaten to take an overdose in front of a person and wait for him or her to react. Such actions are sometimes referred to as suicide “gestures,” emphasizing the fact that they serve as dramatic communications aimed at provoking a response from others (Linehan, 2000).

Finally, some individuals engage in repeated acts of self-injury with no lethal intent. For example, they may cut themselves repeatedly. These are not suicide attempts but may constitute a method of controlling intense feelings of emotional tension and anxiety. Though they may be very distressed, the individual has no intent to die, may hide the cutting or self-injury from others, and usually feels some relief after injuring themselves. This pattern of behaviour may be chronic, being repeated many times over a period of years. The term *deliberate self-harm* is sometimes used as a synonym for parasuicide or suicide attempts and sometimes more inclusively to include this behaviour of repetitive self-injury.

Despite these ambiguities, the research literature on suicide continues to make distinctions among suicide, attempted suicide and parasuicide (Hawton, 1986; Maris, 1992). Each term covers a different set of behaviours and, when used to select a group of people for a research study, each definition identifies a somewhat different, though partially overlapping, group. While studies indicate some differences in the factors contributing to each of these forms of self-harm, they are certainly closely related (Williams, 2001). The stories of some people who died by suicide show a clear progression from suicidal ideation (having thoughts about suicide) to attempted suicide to the lethal act (Jeanneret, 1992). Accordingly, suicidal behaviour may be viewed on a continuum of severity and links can be sought between levels of life-threatening behaviour.

This report will focus on both suicide attempts and death by suicide. Where it exists, important contrasts in the groups of people identified by each definition will be highlighted. Statistics are generally more readily available and less ambiguous for death by suicide, while studies of psychological correlates are much easier to conduct with people who have attempted suicide and who can respond to detailed interviews and questionnaires. Some forms of risk-taking behaviour and attempted suicide, along with suicidal ideation, will be considered as precursors or risk factors for suicide.

There has been recent concern that the language used to describe suicide may have negative connotations. The terms “successful suicide” and “completed suicide” may inadvertently convey a sense of achievement or accomplishment. Current recommendations from the Canadian Association for Suicide Prevention (2004) suggest using the phrase “death by suicide.” This report adopts this terminology except when directly quoting other authors.

Methods of Studying Suicide

There are three broad strategies for studying the problem of suicide: clinical, epidemiological, and ethnographic. Each has strengths and limitations. The integration of these forms of knowledge is an ongoing challenge in the field of mental health.

Clinical Research

Clinical studies look at patients in health care settings. Typically, such studies compare suicide attempters with other patients seen in a clinic or a hospital. This allows systematic comparisons with patients who have other types of mental health problems but who are not suicidal. For example, although depression is strongly associated with suicide, only a minority of people with severe depression actually make suicide attempts. Understanding the differences between those who do make suicide attempts and those who do not may help to identify the crucial elements beyond depression and demoralization that contribute to suicidal behaviour. Clinical studies may include the measurement of biological parameters as well as psychological and social dimensions of the individual's experience. Ideally, clinicians develop a good relationship with the patients they work with to arrive at an accurate portrait of their personalities, life circumstances, and predicament. However, the clinic remains a limited setting from which to understand individuals' problems, which may be rooted in the contexts of family and community. As well, many people who make suicide attempts do not come for help or are seen in non-clinical settings, and it can be misleading to generalize the experiences of those in the community based on the subset of people who come to clinical attention.

Clinical studies can describe the characteristics of suicide attempters who come or are brought for help and can identify potentially important risk and protective factors. But clinical studies cannot determine the prevalence in the community or the relative contributions to suicide risk in the general population. Information on the general population is important to identify social causes of suicidality and to develop population-based methods of prevention. Community studies on mental health find that many individuals never come for help, preferring to deal with problems on their own or with the aid of family and community resources. Those who do contact the health care system are seen mainly in primary care, not in psychiatry or mental health settings. It is therefore necessary to conduct community surveys to determine the true prevalence of suicide attempts and to study the effectiveness of family and community resources, as well as professional interventions (Goldberg and Huxley, 1992). Studying the pathways to care may also identify problems in recognition of distress and differences in treatment, and so improve the delivery of appropriate care.

Epidemiological Research

Epidemiological surveys offer the best methods for identifying risk and protective factors that function at the level of the vulnerable individual, as well as factors at the levels of family, social network, cultural community, society, or nation that may affect whole populations. Most epidemiological studies of suicide, however, have focused on factors affecting individuals rather than communities (Borges, Anthony, and Garrison, 1995).

Current epidemiological research methods in psychiatry emphasize structured diagnostic interviews and systematic recording of details of personal history and experience (Tsuang and Tohen, 2002). Unfortunately, individual memory is surprisingly poor even for personally significant events, and recall is biased by present concerns and conceptions (Rogler, Malgady, and Tryon, 1992). Thus, when a person is depressed, the

individual recalls similar periods of depression and despair in his or her life, but when a person is feeling better, memory for such times may be vague and the person may forget even serious episodes. This selective recall serves adaptive functions in that it allows people to put painful experiences behind them to some extent, but it hampers accurate assessment of individual histories. People may also be reluctant to divulge behaviour and experience they feel is shameful, embarrassing, or puts them in a bad light. These factors set limits on the reliability of psychiatric surveys.

This is illustrated by recent epidemiological studies on two American Indian reservation populations (Beals et al., 2005a; 2005b; 2005c). The survey involved 3,084 people in two closely situated Northern Plains tribes and a large southwestern tribe. Depression was assessed with the Composite International Diagnostic Interview (CIDI), a structured diagnostic interview widely used in international and cross-cultural research. Lifetime rates of depression varied from 3.8 to 7.9 per cent; 12-month rates varied from 2.1 to 4.9 per cent. Contrary to the researchers' expectations, these rates were about 30 per cent lower than those found in the general population with similar methods. Participants in the study found it difficult to answer the CIDI question that asks which symptoms of depression co-occurred during the same time period as feelings of sadness or depression. As a result, the diagnostic module did not appear to function as designed. The authors produced alternative estimates based on less stringent criteria that did not require the symptoms of depression to co-occur. This yielded much higher rates that varied from 7.2 to 14.3 per cent for lifetime prevalence and from 3.9 to 8.8 per cent for 12-month prevalence. Even these rates remain lower than those found in the general population and the validity of these alternative criteria remains unclear.

Self-report questionnaires of symptoms, which the person can fill out privately, can also be used to identify suicidal behaviour and associated mental health problems. The quality of the information obtained depends on how well the questionnaire is constructed and on the level of trust and confidence in the people who are conducting the survey. There is evidence that young people are more likely to report suicide attempts when questionnaires are anonymous and when the wording asks about "ending your life" rather than "attempted suicide" (Safer, 1997; Evans, Hawton, and Rodham, 2005a). When survey questionnaires have not been culturally adapted and validated, and when individuals are unsure about how the data collected will be used, the accuracy of the information collected may be compromised.

Studies of deaths by suicide require special methods to retrospectively reconstruct the suicide victim's personality, psychopathology, recent life events, and living circumstances by interviewing family, friends, and others who knew the deceased. This reconstruction of past events is called a "follow-back study" or, sometimes, a "psychological autopsy" (Brent et al., 1988). Usually, retrospective studies are designed as case-control studies in which suicide victims are compared with a group of peers or age-mates who did not die by suicide (Cavanagh et al., 2003). Without this "control group" for comparison, it may be tempting to relate the suicide to any aspect of the individual's personal history that appears distinctive or distressing. Only careful comparison with others in similar circumstances using statistical analyses can clarify which factors are actually associated with suicide and which are simply common forms of adversity with no particular contribution to suicidality.

All retrospective studies have limitations due to the lack of complete and accurate information in medical charts, family or informant recollection, official records, and so on. For example, many studies have found low correlations between parents' reports of their children's distress and children's self-reports. While parents are often aware of symptoms of emotional distress in adolescent suicide attempters, parents tend to be unaware of—or may deny or refuse to report—their adolescent's suicidal ideation and even suicide

attempts (Marttunen, Aro, and Lönnqvist, 1992; Velez and Cohen, 1988). A study of youth who had made serious suicide attempts found that the parents tended to be aware of the adolescents' substance use and disruptive behaviour, but were less likely to recognize major depression and alcohol abuse (Velting et al., 1998). Depression is often associated with social withdrawal and decreased interaction or communication that may go unnoticed by others preoccupied with their own concerns. Thus, psychological autopsy studies may tend to underestimate the relative importance of depression and alcohol abuse or other factors that family and friends are unaware of or reluctant to talk about.

Retrospective case studies of deaths by suicide that involve intensive interviews with bereaved family members also raise special practical and ethical issues (Beskow, Runeson, and Åsgård, 1991). Interviews may be stressful for family and friends, and it is crucial to insure that such interviews are conducted by mental health professionals equipped to recognize and deal with intense responses to loss. Properly conducted, such research can provide bereaved families with an opportunity to work through their loss and reach a better understanding of the events. Indeed, as will be discussed in a later chapter, current recommendations for suicide *postvention* (aimed at preventing recurrent suicide or suicide clusters and reducing the long-term consequences for others) emphasize giving the bereaved family and friends opportunities to talk about their feelings and make sense of the suicide.

Many deaths recorded as "accidents" are really suicides. This error in classification or record-keeping is due both to the difficulty of determining intent retrospectively and to a general reluctance to acknowledge suicide because of its social stigma. The issue of suicide masquerading as accidental, violent, or drug-related death is particularly important in assessing the extent of the suicide problem in Aboriginal communities where rates of accidental death and injury are up to 4 times that of the general population (Medical Services Branch Steering Committee on Native Mental Health, 1991a). The film *Between Two Worlds* (National Film Board of Canada, 1990), recounting the life of Joseph Idlout, provides a striking illustration of this problem. After his life as a hunter is dismantled by the forces of colonization, Idlout dies in a skidoo accident that his son, Peter Paniloo, insists could only have been a suicide. Although it is not possible to make firm estimates, a Medical Services Branch report (1991b) suggests that as many as 25 per cent of accidental deaths among Aboriginal people represent suicide.

A partial solution for this problem of distinguishing between accidental death and suicide involves reassessing the official cause of death by standardized criteria (Cheifetz et al., 1987). Such criteria can be applied in other settings to allow comparisons that are not distorted by local variations in coroners' judgments and reporting practices. For example, it was claimed that Newfoundland had a very low suicide rate. Aldridge and St. John (1991) suggested that this might simply be due to high rates of under-reporting. They produced a more thorough count of the total number of suicides by supplementing official suicides with a systematic reassessment of records of accidental deaths, death certificates not transmitted to archives, and records of pathologists' examinations not sent to the chief forensic pathologist.

Cases were included as suicide if death had been caused by firearms, hanging, jumping in front of a speeding vehicle or jumping from high places. Deaths by other less lethal self-destructive methods such as recreational or prescription drug overdose, asphyxia or drowning were considered to be suicide if one or more of the following were found in the record: a suicide note or record of a note having been found; record of a previous suicide attempt; evidence of previous psychiatric hospitalization or psychiatric treatment; statements that the person had suffered from a psychiatric illness before or at the time of

the suicide. Alcohol and drug abuse were included as psychiatric illness because of their association with suicide in young people (Aldridge and St. John, 1991:433).

This procedure revealed that fully 58 per cent of suicides were not reported initially. While this type of careful reassessment gives a more accurate estimate of suicide prevalence rates, it also introduces bias into studies of the causes of suicide, since psychiatric morbidity and substance abuse become criteria for defining a death as suicide. In effect, it combines suicidal and parasuicidal behaviours that may have occurred without suicidal intent.

In most populations, suicide rates show great variation with age, gender, and other socio-demographic characteristics. Comparisons across regions and groups—or between groups and the general population—must adjust the crude suicide rate to account for differences in the demographic composition of the population. Alternatively, comparisons among groups must be made for specific age and gender subgroups. Further, breakdown of group comparisons by type of suicide may also be important where there are clinical or public health reasons for identifying the role of specific risk factors or the effectiveness of specific interventions (Tousignant and Mishara, 1981).

A general problem with cross-sectional epidemiological research is that correlations between variables at one point in time cannot establish whether one factor is the cause of another. In fact, studies that simply report correlations between specific risk factors and suicide rates may be useful in developing indices of prediction, they may also be misleading when one attempts to determine the causes of suicide. There may be nothing specific in the factors that are identified as associated with suicide; similar factors may be associated with other co-existing or antecedent problems, like substance abuse or interpersonal conflict. In the case of attempted suicide, longitudinal studies permit greater confidence in identifying antecedents and consequences of factors presumed to contribute to suicide. Ultimately, however, determining causality depends on developing causal models of the pathways and processes from cause to effect. These causal models are usually derived from social or psychological theory, clinical experience, and detailed knowledge or case studies of communities.

Ethnographic Research

Ethnographic studies use anthropological techniques of participant observation, in-depth interviews and qualitative data analysis to explore the meaning of events and actions to the individuals, groups, or communities involved. They examine actions as *situated*—that is, the meaning of actions depends on a specific social context. In the case of suicide, ethnographic studies do not assume that suicide has a universal meaning, but focus instead on the specific meanings of suicidal behaviour within a given community. While older anthropological approaches were concerned with belief systems, contemporary psychiatric anthropology focuses on the local construction of meaning through action. A cultural system does not affect everyone identically—it emerges from processes of invention, transmission, negotiation, and contestation of shared beliefs and practices. People of different ages, gender, background, and personality find different possibilities and positions within any given community or social world. Understanding behaviour and experience at this level may resolve some of the inconsistencies across studies of suicide and mental health based on communities with different histories, cultural practices, and current social, political, and economic situations.

A central problem for cross-cultural research concerns the meaningful translation of concepts, categories, and questionnaires (Canino, Lewis-Fernandez, and Bravo, 1997; Kirmayer, 1989). Generally, this has been dealt with by having bilingual or bicultural people translate questionnaires, which are then checked by “blind” back-translation (i.e. by a person who has not seen the original) to identify and resolve discrepancies in meaning (Brislin, 1986; Westermeyer and Janca, 1997). The properties of the resulting questionnaires are confirmed by the statistical methods of psychometrics (more recently with latent variable methods like item analysis). However, this approach may still be insufficient. Ethnographic work to explore the local meanings of symptoms and modes of expressing distress may be essential to develop adequate research measures. Questionnaires must employ items that are culturally meaningful in that they utilize familiar language and tap cultural “idioms of distress”—local ways of expressing and understanding problems (Manson, Shore, and Blum, 1985; O’Neill, 1996). Without this modification of instruments, it is possible to conclude that symptoms or disorders similar to those found in other cultural contexts exist while nevertheless missing a whole range of concerns that are expressed in culturally distinctive ways—a problem that medical anthropologist Arthur Kleinman has referred to as “category fallacy” (Kleinman, 1987).

The most valid methods of determining the prevalence, nature, and correlates of suicidal behaviour require integrating epidemiological and ethnographic methods. To date, this comprehensive approach has been used in only a few studies of Native American groups (Manson et al., 1985; O’Neill, 1989). It has not yet been applied to the problem of suicide among Aboriginal people in Canada. Systematic work of this type is essential because, without it, one must rely on impressions that may be subject to many forms of observer bias (Dion, Gotowiec, and Beiser, 1998). Many individuals have convictions about what the most important contributors are to suicide and what needs to be done for prevention; but, without careful study, it is difficult to choose among competing alternatives and to determine whether explanations and solutions that fit one situation can be applied more broadly.

Outline of This Report

In Chapter 2, basic epidemiological data on suicide among Aboriginal people compared to the general population in North America are presented. Variations in the prevalence of suicide and attempted suicide by age, gender, socio-economic status, and other demographic factors are summarized. Particular attention is given to the marked changes in rates of suicide that have occurred in recent times, as well as to the wide variations across geographical regions and communities.

Suicide is never the result of a single cause, but arises from a complex web of interacting personal and social circumstances. Chapter 3 summarizes what is known about the causes of suicide at the individual level. From the perspective of prevention, the contributors to suicide can be thought of in terms of risk factors that increase the likelihood of suicidal behaviour, and protective factors that reduce it. These risk and protective factors include: the physical and social environments; individual constitution, temperament, or developmental experiences; interpersonal relationships; alcohol and substance abuse; suicidal ideation and previous suicide attempts; and co-existing psychiatric disorders. The individual factors that affect suicide in Aboriginal people are no different than those found in other populations and communities, but the prevalence and interrelationships among these factors differ for Aboriginal communities due to their history of colonization, and subsequent interactions with the social and political institutions of Canadian society.

What is most distinctive about suicide among Aboriginal people in Canada is the pattern in which large numbers of young people in some communities have been affected. This suggests that variations in individual factors are not sufficient to account for the high rates of suicide. Accordingly, Chapter 4 considers the role of social and cultural factors in suicide, including: social structure and economic factors; specific cultural traditions; the impact of cultural change; and the consequences of forced assimilation and dislocation. In particular, the impact of the residential school system, systematic out-adoption, and other culturally oppressive practices on the mental health and well-being of Aboriginal individuals and communities are examined. Although direct links to suicidality are difficult to demonstrate, the potential transgenerational links between these social practices and suicide are traced.

What is known about the effectiveness of interventions for suicide prevention is summarized in Chapter 5. An introductory section outlines types of interventions that have been proposed. The detection of individuals at risk in clinical and community settings, including primary, secondary, and tertiary prevention, and postvention (i.e. help for the bereaved) are then considered. The conclusion to this chapter presents a summary of a comprehensive “state-of-the-art” approach to prevention that takes into account the unique features of Aboriginal communities and urban populations. In the concluding chapter, an integrative socio-cultural perspective on suicide that can guide future efforts in research, policy, and prevention is offered.

The Epidemiology of Suicide Among Aboriginal People in Canada

You know, I often wonder, how in the past twenty years, how many people committed suicide? And nobody did anything about it eh? So sad. The last time I got a call somebody committed suicide and we found this note he left behind and it really hurt me ... then I figured, well, I'm one of the band leaders here, I bet I can do something about this (First Nation adult).

This chapter reviews what is known about the prevalence, geographic distribution, and age and gender patterns of suicide among Aboriginal people. With the recent surveys there have been some improvements in data available on attempted suicide. However, there are still many gaps in the information available on suicide and other mental health problems among Aboriginal people in Canada.

The original Aboriginal Peoples Survey conducted by Statistics Canada and the 1997 First Nations Regional Longitudinal Health Survey did not inquire into suicide nationally. Labrador, Nova Scotia, Ontario, Manitoba, and Saskatchewan asked about some aspects of mental health, but only Manitoba and Labrador asked about suicide. The second Aboriginal Peoples Survey (APS2) conducted between 2001 and 2003 did ask about suicide, but addressed primarily the non-reserve population.

The 2002/2003 First Nations Regional Longitudinal Health Survey (RHS) yielded new information on attempted suicide and its correlates in many (but not all) participating Aboriginal communities across the country (First Nations Centre, 2005). Although there are some studies of individual communities and regions, including recent unpublished studies in Nunavut and Nunavik, the RHS is the best currently available data across Canada.

What follows is a focus on individuals directly involved in suicidal behaviour, but it is crucial to recognize that the impact of suicide reaches far beyond the individual to affect families, communities, and nations. Before reviewing available information on suicide rates and socio-demographic correlates, it is useful to have in mind a picture of the demographic characteristics and diversity of the Aboriginal population in Canada.

The Demography of Aboriginal People in Canada

Aboriginal people in Canada number approximately 1 million and comprise about 3.3 per cent of the total population (Statistics Canada, 2003).³ In comparison, Aboriginal people make up 1.5 per cent of the population in the United States, 2.2 per cent in Australia, and 14 per cent in New Zealand. For governmental purposes, Aboriginal people in Canada include four main groups: status Indians registered under the *Indian Act* (Imai, 2003), non-status Indians, Métis, and Inuit. In 2004, there were over 734,000 people registered as First Nation, of whom about 57 per cent were living on reserves (Indian and Northern Affairs Canada, 2006). In the 2001 Census, the Inuit population was 45,070, and there were 292,310 Métis (mostly living in urban areas). First Nations make up 62 per cent of the Aboriginal population, Métis make up 30 per cent, and Inuit make up 5 per cent (the remainder are from more than one group

³ The Aboriginal population was “under-covered” in the 2001 Census because enumeration was not permitted or was interrupted before it was completed on 30 Indian reserves and settlements (Statistics Canada, 2003). The impact of this under-representation is greatest in the counting of status Indians.

or, despite their heritage, do not identify themselves as Aboriginal). Although some demographic data are available for all four groups, systematic health data collection systems for non-status Indians and Métis do not exist; hence, there is little mention of these populations in the statistics summarized below. Existing statistics do not provide a complete picture of the evolution of health care problems even for status Indians.

There is great diversity among Aboriginal groups with over 600 First Nation communities, 11 major language groups, and more than 50 distinct dialects (Frideres, 1998). About 1 in 4 Aboriginal people can speak an Aboriginal language and there are 14 Aboriginal languages with more than 2,000 speakers each (Statistics Canada, 2003). Since 1950, the average size of reserve communities has grown somewhat, but most First Nation communities have a population that is less than 500 (Frideres, 1998). Although most communities face similar problems of rapid cultural change, there are substantial variations in geography, ecology, and economics. Throughout this report, it is essential to keep in mind this great variation across communities because it may affect the relevance or applicability of findings made in one community, cultural group, or socio-economic situation. What is true of one region, community, or nation may not apply to other Aboriginal groups.

The overall demography of the Aboriginal population is distinct from that of the general Canadian population in several important respects. Due to a demographic transition to lower birth rates and increased life expectancy at a later date than the general population—that is, not until the 1940s to 1960s—a greater proportion of Aboriginal people are young, with an average age of 24.7 years as compared to 37.7 years for the general Canadian population in 2001. The median age for the Aboriginal population is 24.7 years, 13 years younger than that of the non-Aboriginal population. For Inuit, the median age is 20.6, 17 years younger than the non-Aboriginal population. As a result of this high proportion of young people, Aboriginal children account for 5.6 per cent of all children in Canada (Statistics Canada, 2003).

The birth rate among Aboriginal people remains about 1.5 times higher than the rate of the general population. Aboriginal groups have significantly higher mortality levels resulting in a life expectancy about 10 years shorter than the rate of the average Canadian. Life expectancy for status Indians at birth has been steadily increasing since 1975, when it was 59.2 years for men and 65.9 years for women, and reached 68.9 and 76.3 respectively in 1998 (Statistics Canada, 2003).

There is also a difference in the geographic distribution between Aboriginal people and the general Canadian population, in which Aboriginal people are located largely in rural areas. In the 1986 Census, 61 per cent of those describing themselves as “Native only” in origin and 46 per cent of those with “mixed” (Native and non-Native) heritage lived in rural settings compared to 23 per cent of the overall population (Norris, 1990). About 60 to 70 per cent of individuals who identified themselves as of Native origin *only* lived on reserves and settlements. Over time, there has been a net movement into cities; the 2001 Census found that 49 per cent of those identifying themselves as “Aboriginal” live in urban areas. There is considerable circulation of people between rural communities, reserves, and urban settings and, overall, Aboriginal people are more mobile than other Canadians. The 2001 Census found that 22 per cent of Aboriginal people had moved in the preceeding 12 months compared to 14 per cent of their non-Aboriginal counterparts, although most of these moves were within the same community. Women are more likely than men to leave the reserve. In recent years, however, the net flow of the Aboriginal population has been from rural non-reserve areas to both reserve and large urban locations (Statistics Canada, 2003).

In eastern Canada, Aboriginal people living off-reserve tend to resemble the local general population in demographics, employment, and prosperity. In western Canada, there continues to be a large gap between the economic status of Aboriginal people and the local general populations, even when Aboriginal people leave the reserve. Although the situation is improving, on average, Aboriginal adults receive less education than non-Aboriginal adults. The 1986 Census indicated that 37 per cent of all adult status Indians had less than a grade 9 education, more than twice the total Canadian rate of 17 per cent; about 45 per cent of status Indians on-reserve were functionally illiterate compared to 24 per cent of Indians off-reserve (Medical Services Branch Steering Committee on Native Mental Health, 1991b). In 1996, 52 per cent of non-reserve Aboriginal people aged 20 to 24 had not completed high school. This decreased slightly to 48 per cent by 2001 (O'Donnell and Tait, 2003).

Living conditions on many Aboriginal communities and reserves are poor. Crowded dwellings are approximately 16 times more common among Aboriginal groups than Canadians in general (Medical Services Branch Steering Committee on Native Mental Health, 1991b). Despite recent improvements, provision of adequate water supply and sewage disposal also continues to be a problem in many settlements. About 17 per cent of Aboriginal people in non-reserve settings in 2001 lived in crowded housing compared to 7 per cent of all Canadians. Over-crowding is an especially severe problem in the Arctic, affecting 53 per cent of Inuit in 2001 (O'Donnell and Tait, 2003). In 1995, about 44 per cent of the Aboriginal population lived in low-income situations (Statistics Canada, 1998). Aboriginal people living in urban settings are also more likely to experience poverty; in 2000, the low-income rate among Aboriginal people living in urban centres was 42 per cent compared to 17 per cent for the general population (Siggner and Costa, 2005).

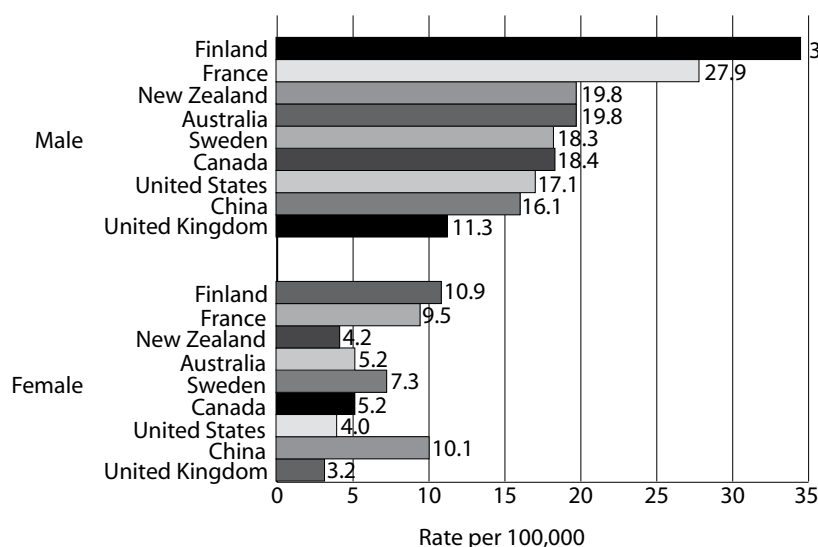
The circulation of Aboriginal people between rural and urban, and between reserve and non-reserve communities, means that these locations must be considered part of a larger system when considering the epidemiology of health problems, both in terms of identifying the affected population and understanding the significant stressors, help-seeking, resources, and supports.

The Prevalence of Suicide in Aboriginal Populations

Suicide is a concern internationally, and it is instructive to view Aboriginal suicide in this larger context (Anderson and Jenkins, 2005). Globally, over 800,000 people die by suicide each year, and the global suicide rate in the year 2000 was estimated at 14.5/100,000 (Krug et al., 2002). In many parts of the world, recent decades have seen an increase in the suicide rate, usually due to an increase among young males. A major exception is China where young women in rural areas have had a higher rate than men (Ji, Kleinman, and Becker, 2001; Phillips, Li, and Zhang, 2002).

Rates of suicide in Canada as a whole have generally been somewhat higher than in the United States, although in the mid-range in cross-national comparisons (De Leo and Evans, 2004) (see Figure 2-1). From 1979 to 2000, the rate of suicide in Canada declined somewhat from 16.7 to 12 per 100,000 (Figure 2-2). In 2001, the overall rate of death by suicide in Canada was estimated at 11.9/100,000, with gender-specific rates of 18.7/100,000 for males and 5.2/100,000 for females (Statistics Canada, 2001; World Health Organization, n.d.b).

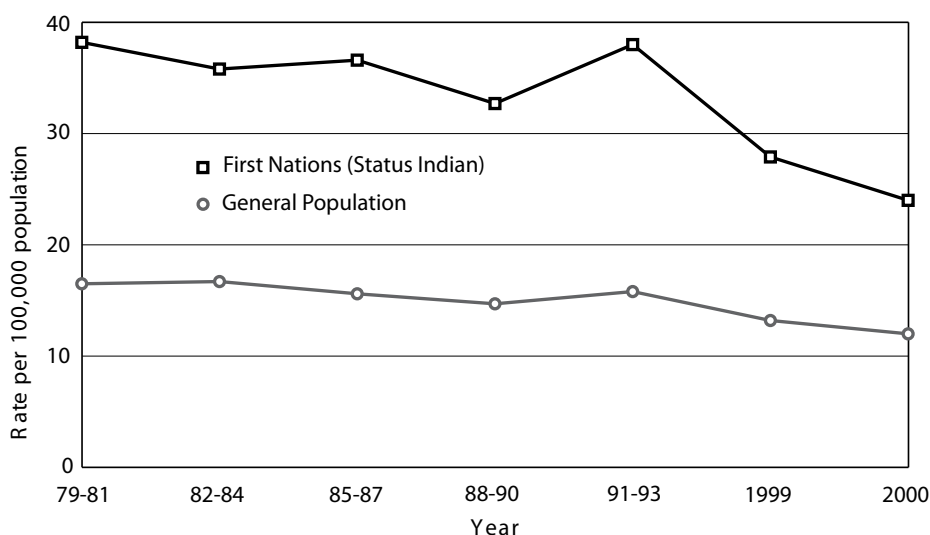
Figure 2-1) Comparison of National Suicide and Self-Inflicted Injury Rates, 2000



Source: World Health Organization, n.d.a (based on most recent data available).

Over the last 20 years, rates of suicide among Aboriginal people in North America have been consistently higher than the average of the general population and higher still among Aboriginal people in Canada. In 2000, the First Nation suicide rate was 24/100,000, which was 2 times the general Canadian rate of 12/100,000. From 1999 to 2003, the suicide rate in Inuit regions across Canada averaged 135/100,000, over 10 times the national rate (Government of Canada, 2006). Annual suicide rates in recent years for all Canadians and for status Indians are shown in Figure 2-2. For comparison, in the United States between 1998 and 1999, Indian Health Service estimates the rate of death by suicide for the American Indian population as 19.3/100,000, about 1.5 times the rate of 11.2/100,000 for the general population (Indian Health Service, 1998–1999).

Figure 2-2) Comparison of Suicide Rates of First Nations and General Population in Canada, 1979–2000



Source: Medical Services Branch Steering Committee on Native Mental Health (1991a); Government of Canada (2006); Health Canada (2003).

No study to date has systematically compared suicide rates across Aboriginal groups in Canada. Table 2-1 summarizes some published reports on suicide rates in specific Aboriginal populations or communities. These rates are not directly comparable because of different methodologies, time frames, and sample characteristics. However, they all indicate much higher rates than those found in groups of the same age and gender composition in the general population. These studies also show wide variations in suicide rates among communities, even within the same geographic region. For example, there is a three-fold difference between southern and northern Alberta (Bagley, Wood, and Khumar, 1990). In Newfoundland, all cases of suicide among Aboriginal people were found in a few communities in northern Labrador that comprise only 25 per cent of the Aboriginal population (Aldridge and St. John, 1991). There are five isolated coastal communities in northern Labrador, one of which is Innu while the others are mainly Inuit. These communities have severe problems with crowded housing, alcohol and solvent abuse, and other social problems arising from relocation (Samson, 2003; Wadden, 1991). Among Aboriginal communities in British Columbia, the rates of death by suicide over an 8-year period from 1993 to 2000 varied from zero to 120/100,000, with 12 per cent of communities accounting for 90 per cent of all suicides (Chandler and Lalonde, in press).

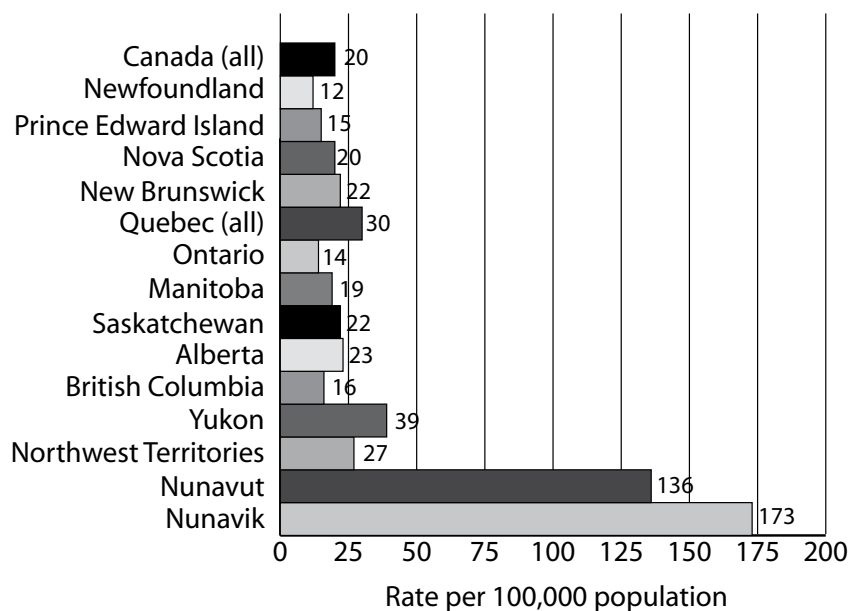
Table 2-1) Rates of Suicide Reported Among Aboriginal Groups in Canada

Region	Group	Period	Source	Suicide Rate* (per 100,000)
Labrador	'Native Peoples' Ages 15–24	1979–1983	Wotton, cited in Aldridge and St. John, 1991	337
	Innu, Inuit Labrador Ages 10–19	1977–1988	Aldridge and St. John, 1991	180
Quebec	Indian	1984–1988	Medical Services Branch Steering Committee on Native Mental Health, 1991a	25.4
	Inuit (Nunavik)	2002	Nunavik Regional Board of Health and Social Services, 2005	82
Ontario	Ojibwa	1975–1982	Spaulding, 1986	62
	Wikwemikong	1975	Ward and Fox, 1977	267
Manitoba	Northern Manitoba, status Indians	1981–1984	Ross and Davis, 1986	77
	Natives Ages 18–20	1971–1982	Thompson, 1987	177 M 32 F
	Native youth Ages <24	1984–1988	Sigurdson et al., 1994	60
		1988–1994	Malchy et al., 1997	32
	First Nations	1996–1997	Health Canada, 2001	21
Alberta	Northern Alberta Natives Ages 15–34	1980–1985	Bagley et al., 1990	80 M
Saskatchewan	First Nations	1996–1997	Health Canada, 2001	19
British Columbia	First Nations	1996–1997	Health Canada, 2001	33
Nunavut	Inuit	2002	Inuit Tapiriit Kanatami, 2005; Hicks, forthcoming, 2007	77
Northwest Territories	Total Population Ages 15–24	1970–1980	Rodgers, 1982	120 M 40 F

* Rates rounded to integers; M = males, F = females

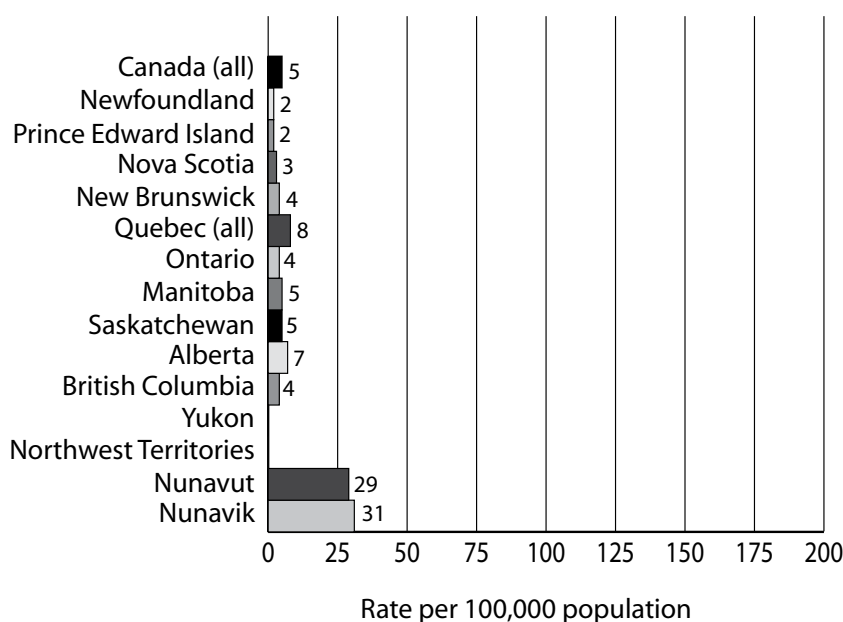
Despite the overall pattern of elevated rates, it is important to emphasize that there are enormous variations in suicide rates among Aboriginal groups in North America—even among communities in the same region or belonging to the same nation or cultural group (Bachman, 1992; May and Dizmang, 1974; Pine, 1981; Shore, 1975; Spaulding, 1986; Wallace et al., 1996; Webb and Willard, 1975).

Figure 2-3) Age-standardized Suicide Rate for Males by Region, 1997



Source: Statistics Canada, CANSIM II series 102-0203

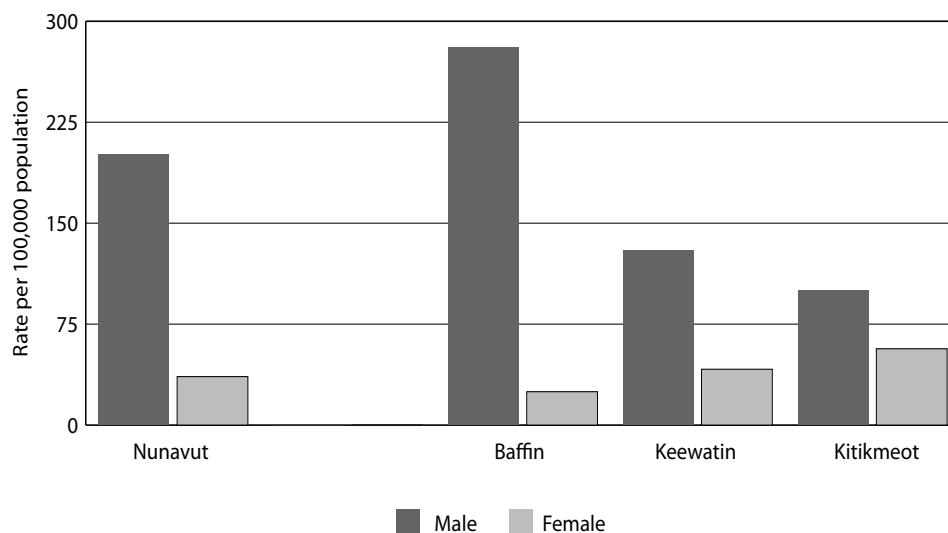
Figure 2-4) Age-standardized Suicide Rate for Females by Region, 1997



Source: Statistics Canada, CANSIM II series 102-0203

As shown in Figures 2-3 and 2-4, there are also marked geographical variations in suicide rates in the general population across Canada. While some Aboriginal communities or bands have suicide rates comparable to or even lower than the general population (e.g. the Cree in Quebec), studies in geographical regions where there are both Aboriginal and non-Aboriginal populations generally find the Aboriginal suicide rates to be much higher. Suicide rates tend to be higher in provinces with a greater proportion of Aboriginal people and they are highest in Nunavut and Nunavik. Even within Nunavut, however, there are large regional differences (Figure 2-5).

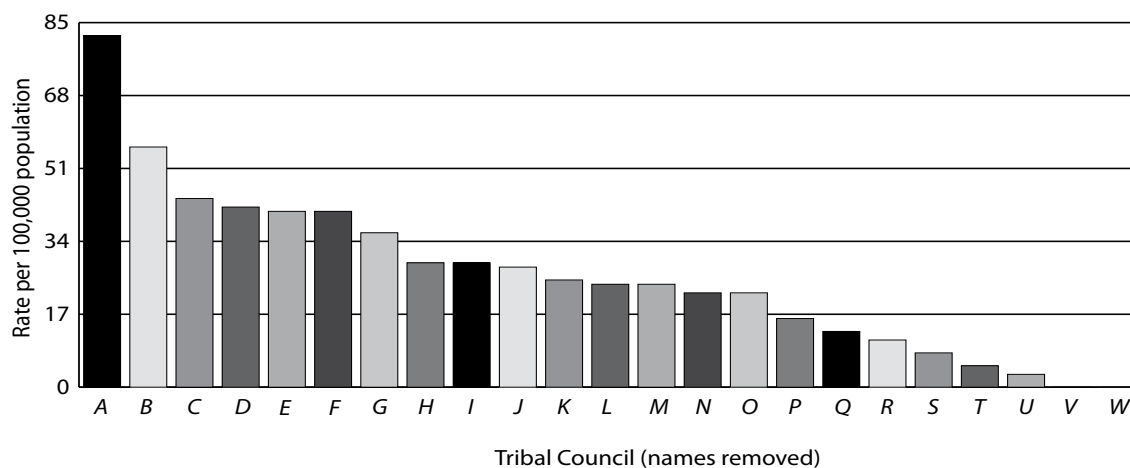
Figure 2-5) Average Annual Suicide Rate Among Inuit in Nunavut by Region, 1999–2003



Source: Hicks, forthcoming, 2007.

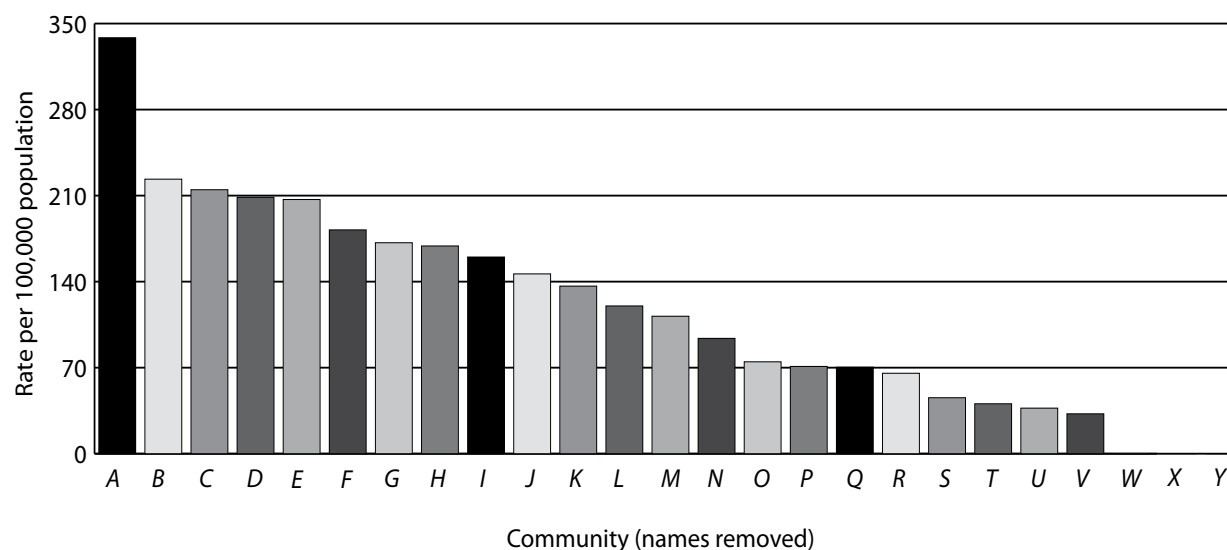
Some of the regional differences may reflect inconsistencies in reporting practices, but this cannot account for all the reasons of the variation. In a single provincial jurisdiction of British Columbia, Chandler and colleagues (1998; 2003) note an enormous difference in rates of death by suicide across communities, ranging from no suicides at all to rates of 700 to 800 times the national average (Figure 2-6). Similar wide variations across communities, bands, and nations have been found in other regions including Nunavut (Kral, 2003) (see Figure 2-7) and Quebec (Petawabano et al., 1994).

Figure 2-6) Average Annual Suicide Rate in British Columbia First Nations by Tribal Council, 1993–2000



Source: Lalonde, 2001.

Figure 2-7) Average Annual Suicide Rate Among Inuit in Nunavut by Community, 1999–2003



Source: Hicks, forthcoming, 2007.

Local suicide rates may fluctuate dramatically due to suicide clusters.⁴ For example, in the Grassy Narrows community of northwestern Ontario, Shkilnyk (1985) found that prior to 1970 no suicides had been reported. From 1974 to 1978, there were 4 suicides for a rate of 204/100,000 compared to the overall rate in Canada for the same period of 12.1/100,000 and for the registered Indian population of 30.1/100,000. In the 12-month period from June 1977 to May 1978, 26 youth aged from 11 to 19 made suicide attempts. This involved 17 per cent of the population in that age range. These estimates were based on records from

⁴ The practice of reporting suicide rates per 100,000, while meaningful for large populations, results in dramatic figures for small communities. A single death in a community of 1,000 gives a rate of 100/100,000.

the local detachment of the Ontario Provincial Police, and Shkilnyk noted that this under-represents the number of suicide attempts, particularly in cases precipitated by sexual abuse where the victims were especially reluctant to talk to police.

A study of the Inuit on the East Coast of Hudson's Bay, based on a review of the medical charts of all deceased individuals from 1982 to 1996, yielded a rate of 55/100,000 (Boothroyd et al., 2001). For 1982 to 1986, the rate was 32.3/100,000, while for 1987 to 1991, it was 87.9/100,000. Most of this increase was due to a cluster of 10 suicides in 1991. The unadjusted rate thus jumped from twice to more than five times the national average. Fully 90 per cent of suicides occurred in the 15–25 year age group. If “possible” suicides are added to the suicide group, then the rate rises to 86/100,000 over 10 years (46 for 1982 to 1986 and 126 for 1987 to 1991); again, 83 per cent of suicides occurred among youth. Since 1991, the rate has continued to rise (Boothroyd et al., 2001 [unpublished data]). From 1982 to 1996, the rate of suicide among Inuit in northern Quebec rose five-fold and doubled again from 1996 to 2001 (Kouri, 2003). Similar dramatic increases have occurred among Inuit in Nunavut and Nunavik (though not in the Western Arctic), rising from about 63/100,000 in 1985 to 104/100,000 in 1995 and 125/100,000 in 2003 (Hicks, forthcoming, 2007; Turecki et al., 2006) (see Figures 2-10 and 2-11).

The Prevalence of Suicidal Ideation and Attempts

Suicidal ideation and attempts are much more frequent than death by suicide and have a wide spectrum of severity. A study comparing random samples of households in nine different countries in the 1980s found that the lifetime prevalence of suicide ideation was 16.5 per cent in the United States and 11.3 per cent in Canada; while the prevalence of suicide attempts was 4.8 per cent and 3.8 per cent, respectively (Weissman et al., 1999). A meta-analysis of 128 published studies involving over 500,000 adolescents (ages 12–20) worldwide found average rates of lifetime suicidal ideation of 29.9 per cent and suicide attempts of 9.7 per cent; the 12-month rates were 19.3 per cent for suicidal ideation and 6.4 per cent for suicide attempts (Evans et al., 2005). A study in northern Nova Scotia found 12-month rates of suicidal ideation of 16.6 per cent and suicide attempt of 5.1 per cent (Wang et al., 2003).

In 2001, 19 per cent of youth in the United States reported seriously thinking of suicide, 8.8 per cent made a suicide attempt, and 2.6 per cent made a suicide attempt that required medical attention (Grunbaum et al., 2002). Rates among Aboriginal youth are much higher. The U.S. Adolescent Health Survey, administered to approximately 13,000 American Indian and Alaskan Native high school students living in non-urban settings, indicated that 17 per cent had attempted suicide at some time (Blum et al., 1992). The National American Indian Adolescent Health Survey conducted in 1990 included 11,666 American Indian and Alaska Native youth attending grade 7 through 12 in schools on reservations serviced by the Indian Health Service throughout the United States. Overall, 21.8 per cent of girls and 11.8 per cent of boys reported one or more suicide attempts (Borowsky et al., 1999). More recently, a survey of 1,638 people in two Northern Plains Indian reserve communities in the United States found a lifetime prevalence of suicide attempts of 6.6 per cent among males and 10.7 per cent for females; 1.4 per cent of those 15–24 years of age had made a suicide attempt in the last year (LeMaster et al., 2004). The first study to examine rates of attempted suicide in Native Hawaiians surveyed 3,092 students in grades 9–12 and found that Native Hawaiians had a significantly higher rate of suicide attempts (12.9%) compared to non-Natives (9.6%) (Yuen et al., 2000).

Until recently, there has been little good data on the prevalence of suicide attempts among Aboriginal groups in Canada since most studies are limited to people who are brought to medical attention and who

are only a portion of those affected. For example, admission records of a regional hospital in northwestern Ontario showed average rates of hospitalization for attempted suicide by drug overdose of 35.7/1,000 (range 20.7–44.2) for five Native communities compared to 4.3/1,000 for non-Native communities in the same geographical region (Shkilnyk, 1985).

A study of the general population in Labrador (of which 34% is Aboriginal) found that 210.2/100,000 per year had been hospitalized for suicide attempts over the three-year period from 1998 to 2000 (Alaghebandan, Gates, and MacDonald, 2005).

The Quebec Health Surveys of the Cree in 1991 and the Inuit in 1992 found that the Inuit had greatly elevated rates of attempted suicide, while the Cree had lower rates of suicide attempts than the general population. The Cree survey involved a random sample of 400 households in 9 Cree communities of James Bay. On average, 2 per cent of Crees reported a suicide attempt in the preceding 12 months; suicide rates ranged from 3.9 per cent among 15 to 24 years old to 0 per cent of those 45 years of age or older (Clarkson et al., 1992). The 1992 Santé Québec Inuit survey, which obtained data on 203 persons between the ages of 15 and 24 years of age, found that 38 per cent of the sample had suicidal ideation, 22 per cent reported having attempted suicide in their lifetime, and 13 per cent had attempted suicide in the year before the survey (Kirmayer, Boothroyd, and Hodgins, 1998). A community survey of 99 Inuit youth (ages 14–25) in one settlement on the east coast of Hudson's Bay, using an adaptation of the U.S. Adolescent Health Survey instrument, found a lifetime rate of attempted suicide of 34 per cent (Kirmayer, Malus, and Boothroyd, 1996). As an index of severity, 11 per cent of suicide attempts resulted in an injury. Fully 5 per cent of individuals reported that they had made a suicide attempt in the last month. Only 16 per cent of those who had ever made an attempt reported seeing a doctor, nurse, or other health professional in relation to this attempt.

In a population survey in the Calgary region from 1999 to 2002, Aboriginal people were 3 times more likely than the general population in the Calgary Health Region to sustain injuries due to suicide (Karmali et al., 2005). The 2002/2003 Regional Longitudinal Health Survey of 10,962 First Nation adults found that 15.8 per cent had made a suicide attempt in their lifetime (First Nations Centre, 2005). Females were more likely than males to have made an attempt (18.5% vs. 13.1%). Fully 30.9 per cent of people reported having had suicidal thoughts during their lifetime and there was no significant gender difference.

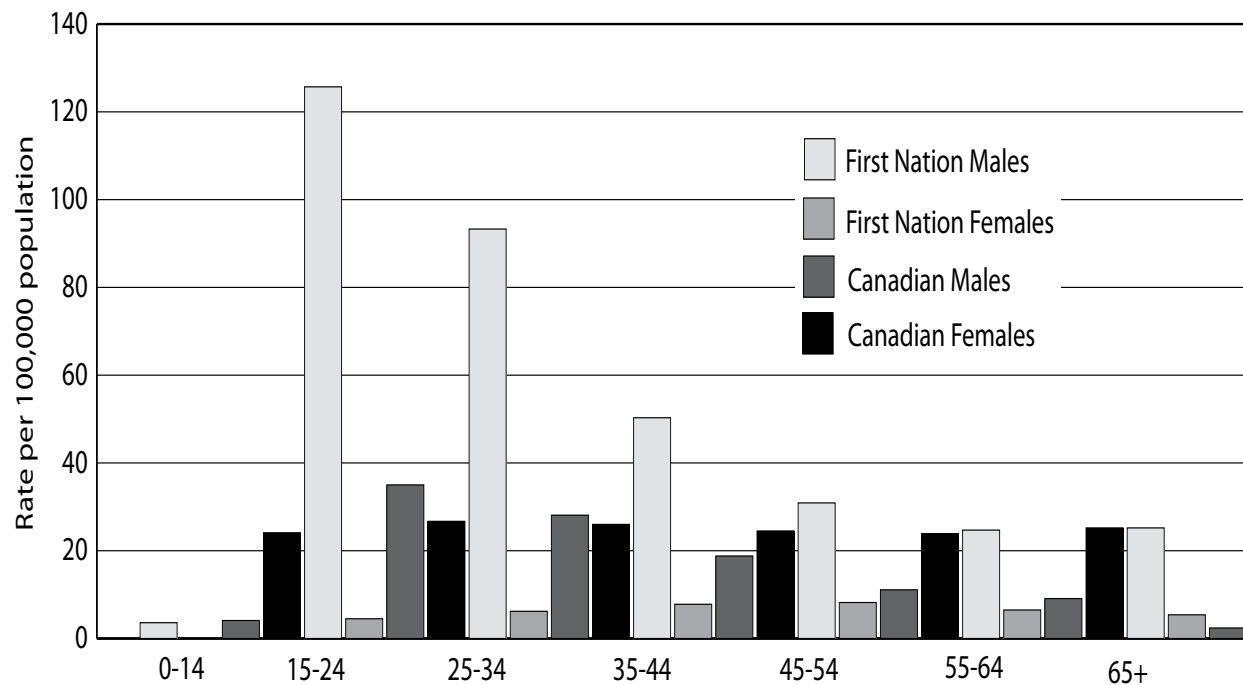
Age Differences

Suicide among Aboriginal people in Canada mainly affects youth from the ages of 14 to 24. In the First Nation population in 2000, 22 per cent of all deaths in youth (aged 10–19) and 16 per cent of all deaths in early adults (aged 20–44) were due to suicide (Health Canada, 2005).

In the North American general population, suicide rates vary markedly over the lifespan. Suicide under the age of 12 is very uncommon (Hawton, 1986; Ryland and Kruesi, 1992). The rate increases over the teenage years to reach a peak at about the ages of 23 to 25 and then declines until 60 to 65 when it shows a second smaller peak (Tsuang, Simpson, and Fleming, 1992). Between 1980 and 1994, rates of suicide for both men and women, and both blacks and whites, had a bimodal distribution with increasing rates of suicide among the young (10–19) and the elderly (75+) (Chaudron and Remington, 1999). Suicide is the second leading cause of death, following accidents, among 15 to 24 year olds in North America (Rosenberg et al., 1987).

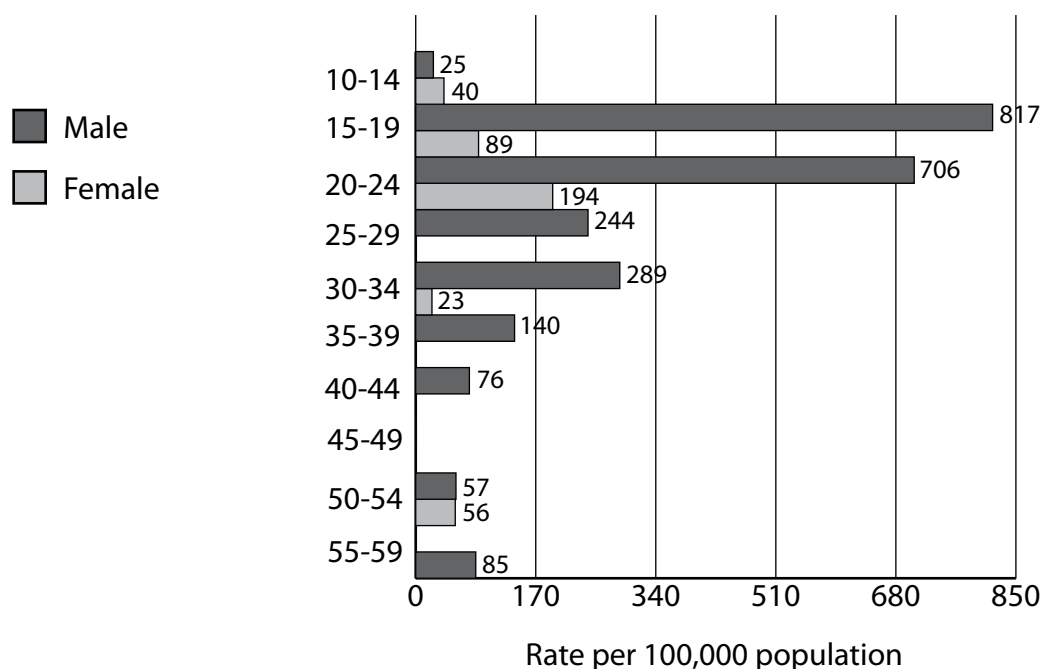
This pattern of age trends is similar but amplified in the Aboriginal population (see Figures 2-8 and 2-9). A status Indian adolescent is five to six times more likely to die from suicide than the average Canadian adolescent. After age 70, the rate among status Indians actually drops below that for the general population. This same pattern has been found among American Indians and Alaska Natives in the United States (Group for the Advancement of Psychiatry, 1989; Kettl and Bixler, 1991). The rate of completed suicide among American Indian elders is significantly lower than the rate among their non-Native counterparts in the general population (Baker, 1994).

Figure 2-8) Comparison of Suicide Rates by Age Group, First Nations and Canadian Population, 1989–1993



Source: Lemchuk-Favel, 1996.

Figure 2-9) Suicide Rates in Nunavut by Sex and Age Cohort, 1999–2003



Source: Hicks, forthcoming, 2007.

In a Manitoba study reviewing 1,029 suicides, Aboriginal people who died by suicide were generally younger than their non-Aboriginal counterparts: the average age for suicides among Aboriginal people was 27.0, while the average age for non-Aboriginal people was 44.6 ($p < 0.001$) (Malchy et al., 1997). A case-control study of suicides among the Inuit population in Nunavik between 1982 and 1996 found that the majority of cases were between 15 and 24 years of age (72%) (Boothroyd et al., 2001). Similar patterns of suicides occurring primarily among youth have been found in Nunavut and all other Aboriginal communities studied.

The variation by age group in rates of attempted suicide and suicidal ideation parallels these differences in suicide deaths. In a community survey in Nunavik of 100 Inuit aged from 14 to 25, there were no significant differences in prevalence of suicidal ideation or attempts between the ages of 14 to 19 years and those between the ages of 20 to 25 years (Kirmayer, Malus, and Boothroyd, 1996). Nevertheless, the younger cohort was more likely to report multiple suicide attempts (28% vs. 8%, $p = 0.02$) and suicidal thoughts during the last 6 months (36% vs. 11%, $p = 0.007$), suggesting that suicidal behaviour was more severe in the younger cohort. More recent data from surveys in northern Quebec and Nunavut confirm that attempted suicide predominately affects youth (Hicks, forthcoming, 2007).

Gender Differences

Many studies worldwide show a pronounced gender difference in suicide with females more likely to make suicide attempts, but males more likely to die by suicide (Cheifetz et al., 1987; Garrison, 1992; Krug, et al., 2002; Weissman, 1974). This difference is largely accounted for by the fact that males tend to use more lethal means (firearms, hanging, jumping from a height) than women (drug overdose, wrist slashing) (Velez and Cohen, 1988). A comparison of community surveys in nine countries found that rates for suicide

ideation were slightly higher in females than males at all sites; whereas, there was a significant two- to three-fold increase in risk of suicide attempts for females compared to males at most of the sites (Weissman et al., 1999). However, the gender ratio is sensitive to social and cultural factors. For example, the rate of death by suicide in rural regions in China is higher among young females than males (Ji, Kleinman, and Becker, 2001; Qin and Mortensen, 2001; Phillips, Lesyna, and Paight, 2002; Prichard, 1996; Shiang et al., 1998). This has been attributed to the difficulties faced by young women in Chinese society; suicide attempts in rural areas often use agricultural poisons with high lethality. This example is a clear illustration of the profound impact of social factors on suicide.

The gender differences in suicide rates among Aboriginal people amplify the pattern of male predominance seen in the general population. The majority of deaths by suicide are among young men. In Manitoba between 1984 to 1988, males comprised 83.8 per cent of all completed suicides among youth (Sigurdson et al., 1994). Similarly, among the Inuit of Nunavik from 1982 to 1996, 83 per cent of all completed suicides were males (Boothroyd et al., 2001). However, a review covering the period from 1988 to 1994 found that 30 per cent of suicides in the Aboriginal population were female compared to 19.2 per cent in the general female population (Malchy et al., 1997).

Female adolescent status Indians are 7.5 times more likely to die by suicide than female adolescents in the total population. In the age range of 20 to 29, the suicide rate for female status Indians is 3.6 times the rate for all Canadian females. Female status Indians have higher suicide rates than all female Canadians up to 69 years of age. Rates for male status Indians are higher than the total male population from ages 10 to 50. Adolescent males are more than 5 times as likely to die by suicide than the average Canadian male adolescent (Medical Services Branch Steering Committee on Native Mental Health, 1991a).

In Aboriginal populations, suicide attempts are generally more frequent among women than men, although this is owing to a greater tendency to use more lethal means, and the gender difference is not as large as in the general population (Clarkson et al., 1992). In a survey of 11,666 high school students on reservations in the United States, 21.8 per cent of girls compared to 11.8 per cent of boys reported one or more suicide attempts for a ratio of 2:1 (Borowsky et al., 1999). Two studies among the Inuit of Nunavik actually found a slightly *higher* rate of attempted suicide among Inuit males compared to females (Kirmayer, Malus, and Boothroyd, 1996) or no significant difference in rates (Kirmayer et al., 1998). As will be discussed in Chapters 3 and 4, this cultural and regional variation in gender ratio likely reflects specific stressors that differentially affect young Aboriginal males and females. Males have experienced greater discontinuity in social roles with rapid cultural change; females are more liable to have suffered domestic violence and abuse, but are also more likely to seek out help for depression or other forms of emotional distress.

Marital Status

In the general population, suicide is more frequent among both men and women who are single, separated, divorced, or widowed compared to those who are married (Trovato, 1991). Those who are married with children have still lower rates. Suicide attempters are more often single, separated or divorced, and live alone (Wasserman, 1988). Community surveys in nine countries found that both suicidal attempts and ideation were two to four times more prevalent among divorced individuals (Weissman et al., 1999). The rate of suicide is correlated with divorce rates across Canadian provinces (Leenaars and Lester, 1999). Indeed, the rising rate of suicide in some parts of Canada in recent years has been linked to the increase in the divorce rate (Sakinofsky and Leenars, 1997).

An analysis of Canadian data covering three decades (1951–1981) supported the hypothesis that marriage (i.e. a change from single or widowed to married status) reduced suicide risk for men significantly more than for women (Trovato, 1991). In the case of a transition from divorced to married status, both sexes benefited equally in reducing suicide potential. However, the analysis was confined to the population aged 35 years and older because comparable information for younger ages was not available. As well, it is unknown to what degree common-law “marriage” or other forms of cohabitation and informal liaisons confer the same benefits as legal marriage. In many Aboriginal communities, extended family and kinship networks may take the place of the reliance on a spouse or a partner in nuclear families. As a result, it is unclear to what extent these data can be generalized to Aboriginal populations. The majority of people who attempted suicide among Alaskan Natives (81%) were single (Gregory, 1994), as were deaths by suicide among the Inuit of Nunavik (83.1%) (Boothroyd et al., 2001).

Changes Over Time: Period and Cohort Effects

Variations in the prevalence of suicide over time and across different age groups may reflect both period effects and cohort effects (Tsuang and Tohen, 2002). Period effects are changes in response to some factors at one point in time that affect the whole population, but may have particular effects on some vulnerable groups in the population; for example, youth at a particular stage of development. Cohort effects arise from factors that influence a specific birth cohort or generation and may involve events that occurred long before the observed change in prevalence. In practice, it may be difficult to disentangle age, period, and cohort effects (Portrait, Alessie, and Deeg, 2002).

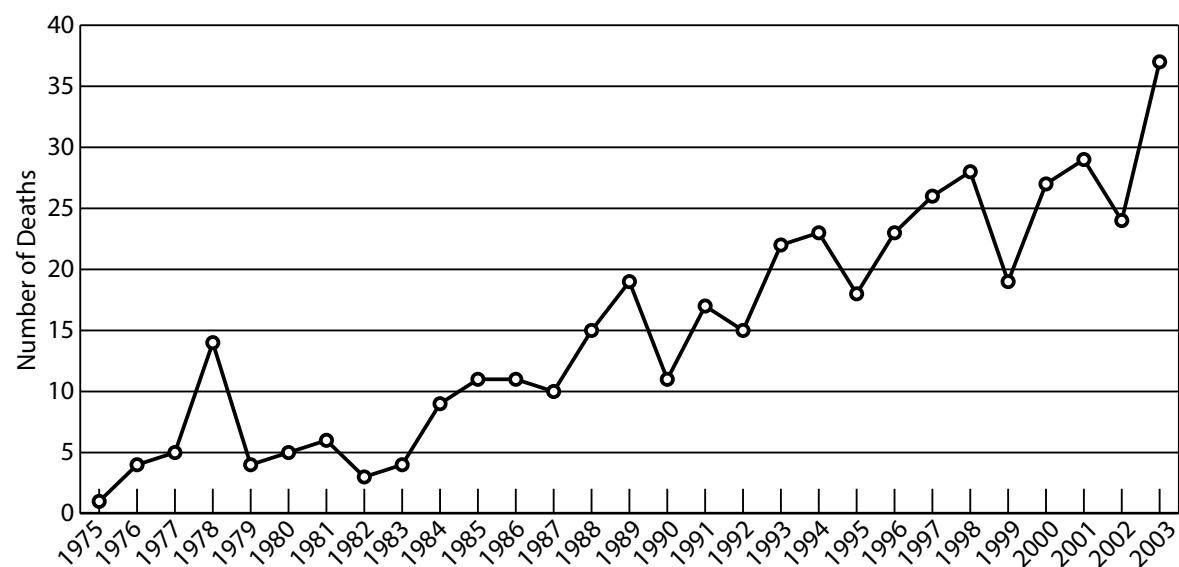
Suicide attempts increased in prevalence in the United States from 1960 until the late 1980s. While the overall rate of completed suicide was stable from 1950 to 1980, the rate actually decreased among older individuals and increased 200–300 per cent among 15 to 24 year olds (Rosenberg et al., 1987). The rate for young people continued to increase more gradually throughout the 1980s (Tsuang et al., 1992). A smaller increase in the rate of suicide also occurred in the age group from 25 to 34 over this same period. Suicide rates also continued to increase in early adolescence (Velez and Cohen, 1988). These increases have affected both males and, to a lesser extent, females. The rates for males over age 20 stabilized in the 1990s. In the last decade, the suicide rate for white males has dropped from about 20/100,000 in 1988 to 14/100,000 in 2000. A similar decrease in youth suicide rates of 20 to 30 per cent has occurred in England, Finland, Germany, and Sweden. This improvement has been attributed to the greater availability and use of antidepressant medication (Gould et al., 2003).

In contrast to this trend, increasing suicide rates among youth, especially young males, have been reported among many Indigenous people internationally, including American Indian and Alaska Natives (Gessner, 1997; Kettl and Bixler, 1991), Inuit in Greenland (Grove and Lynge, 1979; Thorslund, 1990; Lynge, 1994), Aborigines in South Australia (Cawte, 1991; Clayer and Czechowicz, 1991), and the Indigenous people of Micronesia (Rubinstein, 1983; Tousignant, 1998). These changes do not affect just Aboriginal groups, although they are greatly amplified among both male and female Aboriginal youth (Jilek-Aall, 1988).

In Canada, the overall suicide rate increased from 1950 to 1995 and then remained steady or declined slightly. However, over the last several decades, rates among young males have increased substantially, particularly since the mid-1970s (Dyck, Newman, and Thompson, 1988). These changes have been much more marked in some Aboriginal populations, in part, because of their demography.

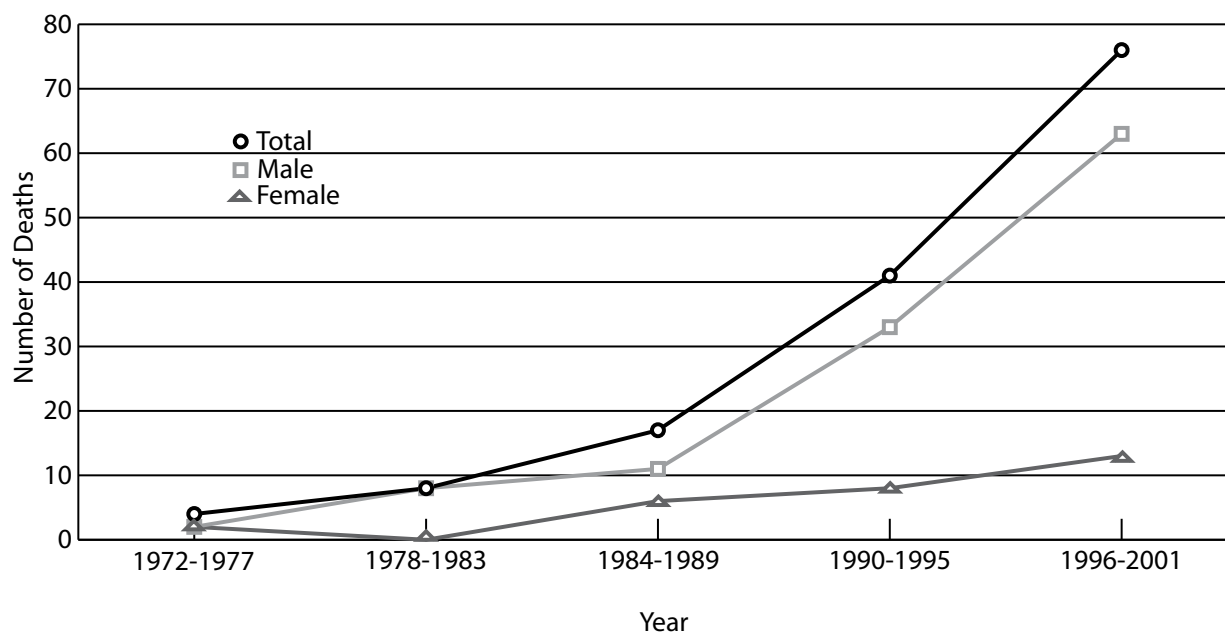
Dramatic increases in rates of suicide have been seen in recent years among Inuit in Nunavut (see Figure 2-10) and Nunavik (Figure 2-11). The greatest increase in suicide rates have been seen in those aged from 15 to 24 years (Figure 2-12). Similar increases have been seen in some First Nations. For example, in the Nishnawbe Aski Nation communities of northern Ontario, the number of suicides went from 6 in 1986 to 25 in 1995 (Figure 2-13). However, other First Nations have shown steady or even falling rates (Figures 2-14 and 2-15). This overall pattern may still hide persistent problems; for example, the overall decline in the rate of suicide in British Columbia First Nations has occurred among young women, while the rates among young men have remained high in many communities. These regional-, reserve-, and community-level variations are of great importance for identifying needs for services and intervention. Understanding the reasons for these variations may also reveal social determinants of health that can guide effective prevention.

Figure 2-10) Number of Deaths by Suicide in Nunavut, 1975–2003



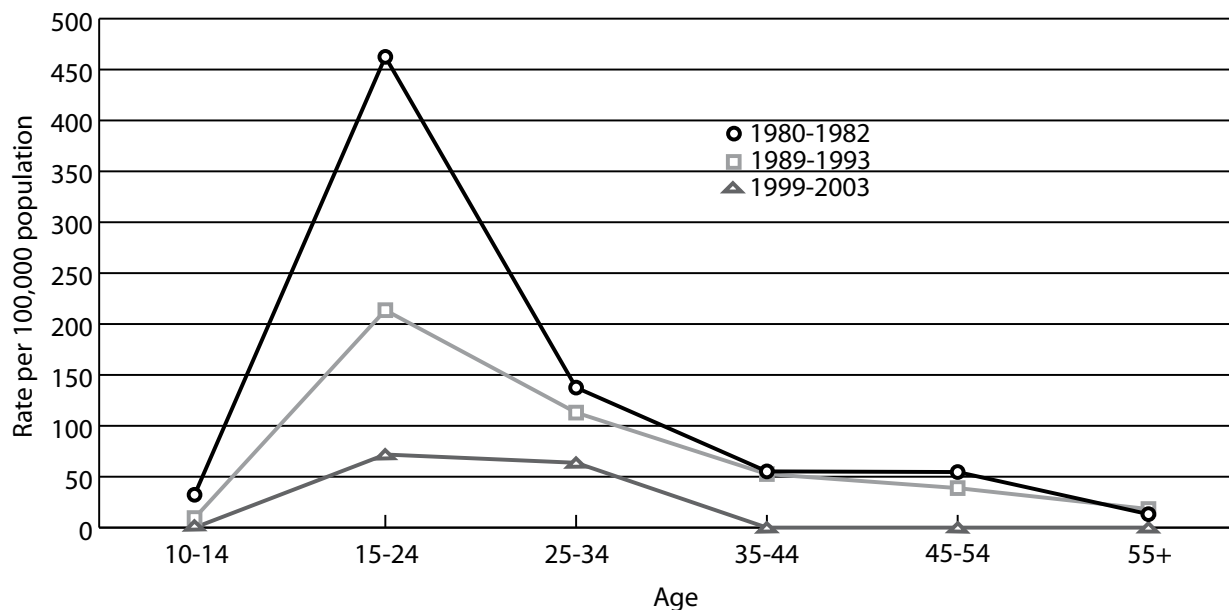
Source: Hicks, forthcoming, 2007.

Figure 2-11) Number of Deaths by Suicide in Nunavik, 1972–2001



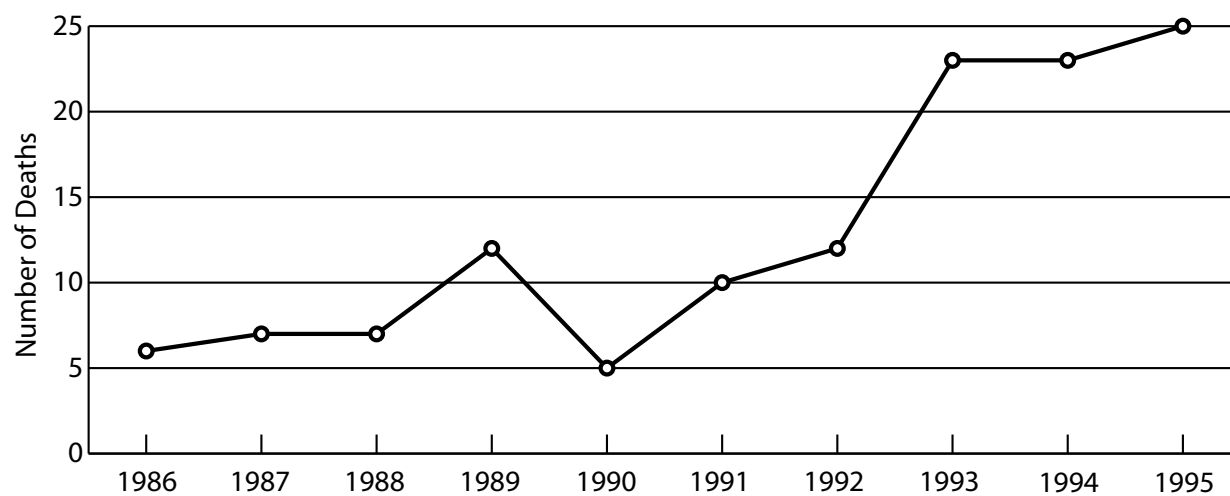
Source: Hicks, forthcoming, 2007.

Figure 2-12) Suicide Rate in Nunavut by Age, 1980–2003



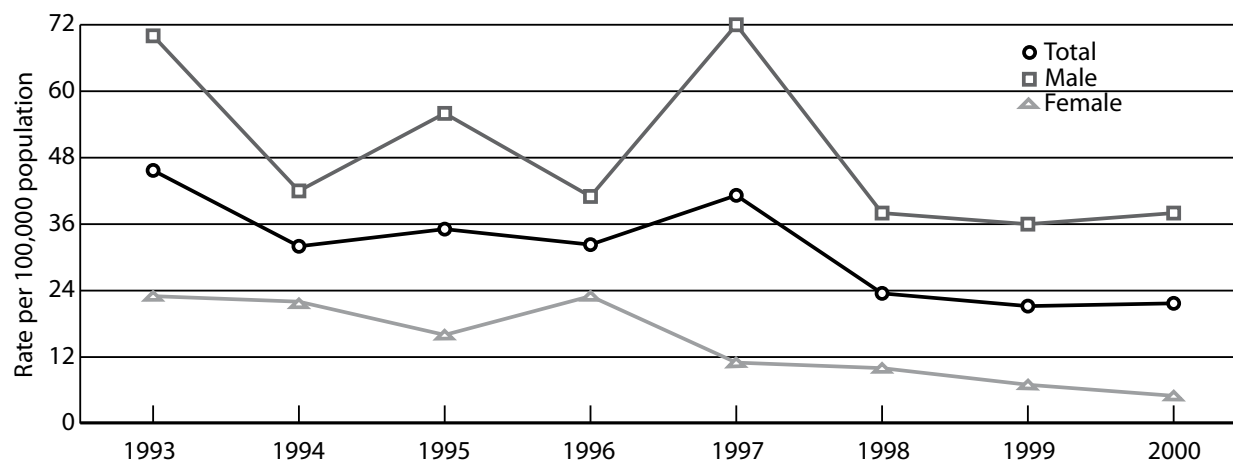
Source: Hicks, forthcoming, 2007; Turecki et al., 2006.

Figure 2-13) Number of Deaths by Suicide in Nishnawbe Aski Nation, 1986–1995



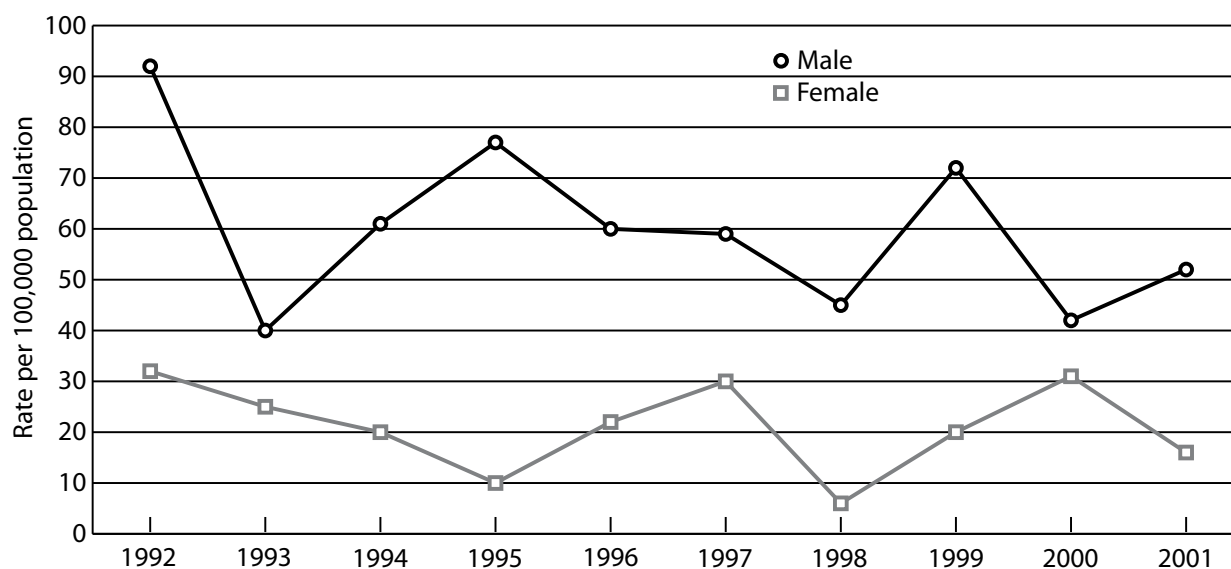
Source: Nishnawbe-Aski Nation Youth Forum on Suicide, 1996.

Figure 2-14) Suicide Rates in British Columbia First Nations, 1993–2000



Source: Lalonde, 2001.

Figure 2-15) Suicide Rates in Alberta First Nations, 1992–2001



Source: Alberta Mental Health Board, 2005.

Holinger and Offer (1982) argue that the suicide rate is related to the composition of a population; specifically, the suicide rate for youth increases with the proportion of the population that is adolescent. Recent analysis of regional data in the United States supports this hypothesis (Holinger and Lester, 1991). An attempted replication with an international sample, however, did not support this finding cross-nationally (Lester, 1992). These results were also not confirmed in a Canadian study, which found an inverse relationship between the size of the youth cohort and regional suicide rates (Hasselback et al., 1991). A study of British Columbia communities found that Aboriginal suicide rates increased with the percentage of Aboriginal people living in a given census area and with the percentage of the Aboriginal population living on reserves (Lester, 1996). The Aboriginal suicide rate was not related to the absolute size of the Aboriginal population.

The observation that, in the United States, the rate of youth suicide correlates with the proportion of population in the 15–24 age range suggests an hypothesis of “relative deprivation” (Walker and Pettigrew, 1984; Petta and Walker, 1992) in which greater competition for limited opportunities and resources leads to disadvantage and demoralization and, hence, to increased rates of suicide. Elderly people are not involved in the same competition to establish themselves, and so may benefit instead from the social solidarity and increased political-economic representation associated with a larger cohort.

Data from Alberta indicate that similar trends of increasing suicide rates among adolescents and young adults in Canada cannot simply be explained by shifts in the age composition of the population. These data also suggest that there is a cohort effect (Solomon and Hellon, 1980).

As will be discussed in Chapter 3, suicide is strongly associated with major depressive disorders. There is some evidence that rates of depressive disorders have been increasing in many urbanized countries over the last century (Fombonne, 1994). Both cultural and social factors have been implicated. The factors

that contribute to depression may be especially significant for young people who face the challenges of establishing their identity in a world in flux, and achieving social competence and economic stability. All of these challenges may be especially complex for Aboriginal youth.

Both period and cohort effects may be important for the current generation of Aboriginal youth who face unique circumstances. Their parents often went to residential schools, while they are more likely to be educated in their communities. This difference, along with other social and cultural changes, accentuates the generation gap. They are a large cohort entering the workforce during economically depressed times. Finally, they are living at a time of increasing awareness of the economic disparities between Aboriginal communities and the dominant society through mass media and a growing sense of concern over political issues such as land claims and self-government.

Suicide Clusters

Suicides in Aboriginal communities often occur in clusters with several individuals affected in the same community or geographical region in the same time period (Bechtold, 1988; Wissow et al., 2001). This phenomenon also occurs in the general population. Examination of mortality data for 1978 to 1984 from the U.S. National Center for Health Statistics Mortality Detail files reveals significant clustering of suicides in time and location (Gould, Wallenstein, and Kleinman, 1990). There is some indication that the frequency of suicide clusters increased over this period of time. The transmission of increased suicidality may occur through media exposure, as well as personal ties and emotional identification with the predicament and actions of suicide victims (Wilkie et al., 1998).

The prominent display of a suicide in the newspaper, television, or other mass media leads to a predictable increase in deaths over a one- to two-week period following the display (Eisenberg, 1986; Gould et al., 1990; Phillips and Carstensen, 1986; Schmidtke and Schaller, 2000). The relationship is dose responsive; that is, the more intense the media coverage, the greater the increase in suicide rate (Phillips, Lesyna, and Paight, 1992; Schmidtke and Schaller, 2000; Stack, 2003). This adverse effect of media attention has been noted in recent Native American suicide clusters (Tower, 1989).

Suicide clusters appear to involve individuals who were previously at risk (Davidson et al., 1989). However, the choice of methods, time, and place for the suicide may be strongly influenced by exposure to previous suicides. In a sense, suicidal behaviour results from the spread of an idea, but the idea must be internalized and acted on (Kral, 1998). The internalization of an idea or behavioural model depends on how closely one identifies with the model. Suicide clusters pose a special problem for Aboriginal communities in which many individuals are closely related and share the same social predicaments so that the impact of one suicide is deeply felt within the whole community. This increases the risk of a cascade effect leading to a cluster of suicides.

Methods of Suicide

I was sitting in my house thinking I can't take this no more. I sat there for about 15, 20 minutes, then I went to my room, I grabbed my gun, 12-gauge gun, put a bullet, cocked it, sat there and thought about why I wanted to do this. But I didn't think about the consequences, I was in this whole mood that I wanted to kill myself (First Nation youth).

There are only a handful of studies reporting the methods used by Aboriginal people who die by suicide. A report on unintentional and intentional injury amongst First Nation people of Canada (Health Canada, 2001) found that, from the period of 1991 to 1993, the most common method of suicide was hanging. Hanging accounted for almost half of all deaths in First Nation males (49.2%) and females (45.8%), followed by firearms in males (35.3%) and drug overdose (30%) in females. This pattern held true in an examination of the general population in the Northwest Territories and Nunavut for the period of 1982 to 1996 where there was an increase in the rate of suicide by hanging, while rates of other methods declined slightly. Hanging replaced gunshot wounds as the most common method chosen; among the Inuit in this study who had died by suicide, 68 per cent died by hanging and 29 per cent died by gunshot wound (Isaacs et al., 1998). Supporting this trend further, a study of suicide in Manitoba revealed similar findings, indicating that the method used in more than 50 per cent of all suicides amongst Aboriginal people in Manitoba from 1988 to 1994 was hanging or asphyxiation (Malchy et al., 1997). This method was the most common on- or off-reserve, and was much less common amongst non-Aboriginal people. The authors indicated that earlier studies conducted in Manitoba found firearms to be the most common method used by Aboriginal people, indicating a recent increase in hanging (Malchy et al., 1997). In a study of suicide among the Inuit of northern Quebec from 1982 to 1996, 54.9 per cent of those included in the study died by hanging, while 29.6 per cent shot themselves. Other methods included carbon monoxide poisoning and drowning. For approximately 11.3 per cent of the individuals included in the study the method was unspecified (Boothroyd et al., 2001).

Alcohol use may interact with the method chosen—suicide victims who use firearms are more likely to have been drinking (Brent, Perper, and Allman, 1987). In one study among Alaska Natives, 76 per cent of suicides were due to gunshot wounds, and suicide by firearms was associated with elevated blood alcohol levels (Hlady and Middaugh, 1988). A study of alcohol and suicide death amongst American Indians of New Mexico from 1980 to 1998 detected alcohol in 69 per cent of completed suicides, over 90 per cent of whom had a blood alcohol level that indicated intoxication (May et al., 2002). Alcohol use prior to suicide was more common for men than for women and was less common among those who died by overdose or who were using other drugs at the time of the suicide.

Summary

At present, about 4,000 people in Canada per year die by suicide, of whom between 6 to 10 per cent are Aboriginal. Epidemiological information on suicide among Aboriginal populations in Canada remain limited. While Health Canada and Statistics Canada have collated information on deaths by suicide for periods up to 1993, only limited data are readily available for more recent periods. Basic data on rates of suicide among non-status Indians and Métis are not available. Few data on attempted suicide are available for any Aboriginal group. Access to data is affected by concerns over ownership and autonomy. The development of the First Nations Regional Longitudinal Health Surveys by the National Aboriginal Health Organization and the Assembly of First Nations promises to provide better quality and systematic information that will be under Aboriginal control.

In recent decades, suicide rates among Aboriginal people in Canada have averaged more than three times the rate of the general population. Suicide occurs much more commonly among the young than the elderly, and the rates among the young in many communities are continuing to rise. Although the gender difference is smaller than among the non-Aboriginal population, males are more likely to die by suicide, while females make attempts more often. Suicides most often occur in association with heavy alcohol consumption, and

are carried out by highly lethal means (hanging and firearms). There are wide regional variations in suicide rate. Compared to the general population, suicide in Aboriginal adolescents may be more likely to occur in clusters.

While suicide clusters command most of the attention of media and observers, this obscures the fact that some communities have lower than average rates while others have higher rates. As discussed at length in Chapter 4 of this report, the wide variation in rates across communities provides important clues to the origins of suicide for Aboriginal youth. Analysis of these regional and community differences might help uncover specific problem areas and successful strategies for preventing suicide in Aboriginal communities.

Suicide is just one indicator of distress in communities. For every suicide there may be many more people suffering from depression, anxiety, and other feelings of entrapment, powerlessness, and despair. At the same time, every suicide has a wide impact affecting many people—family, loved ones, and peers who find echoes of their own predicament, and who sometimes may be prompted to consider suicide themselves in response to the event. The circle of loss, grief, and mourning after suicide spreads outward in the community. In small Aboriginal communities where many people are related, and where many people face similar histories of personal and collective adversity, the impact of suicide may be especially widespread and severe.

Origins of Suicide: Individual Vulnerability and Resilience

Just having discussions and educating people on what to do if you have a friend [who is suicidal], that's a really good idea. Maybe even trying to tackle the problem, like, what causes people to be suicidal? I don't know how viable that is, but just like, trying to stop things like, boredom. Like, having a centre where people can go to instead of just being bored and turning to drugs and becoming suicidal or trying to stop abuse and stuff like that. It could be one way to try to stop suicide (First Nation youth).

Suicide is the outcome of multiple forces at work within the person, as well as in their interactions with others in the family, community, and wider social spheres. Some acts of suicide are deliberate and planned, others are sudden and impulsive. Most occur in the context of intense emotional pain and misery, but this may be the result of long-standing intolerable life circumstances, a briefer period of severe depression, or a crisis of anger, agitation, and despair aggravated by intoxication. Even in such sudden crises, however, a wide range of influences and experiences over the person's whole lifespan may contribute to the suicidal act.

Factors that increase the likelihood an individual will commit suicide are termed *risk factors*; while those factors that decrease risk or make the individual more resilient are termed *protective factors*. Risk and protective factors may be thought of in terms of the timing of their impact on suicide: *predisposing factors* (e.g. major depression, family violence) increase the person's vulnerability to commit suicide; *contributing factors* (e.g. impulsivity, lack of social supports) amplify the risk in already vulnerable individuals; *precipitating factors* (e.g. loss of a close relationship, rejection, getting into trouble with the law) are the immediate triggers or provocation for the suicidal act; and *enabling factors* (e.g. availability of firearms, intoxication) make it possible for the person to commit suicide.

The Royal Commission on Aboriginal Peoples (1995) organized their discussion of risk factors commonly associated with suicide into four broad groups: psychobiological, situational, socio-economic, and cultural. This chapter focuses on psychobiological and situational factors that affect individuals. Chapter 4 will discuss broader social, economic, political, and cultural factors. It is important to emphasize that this division is only for convenience. Suicide, like any human experience, emerges from a dense web of interactions of biological, psychological, social, and cultural processes. These factors influence the person from infancy onward, increasing resilience or making individuals more vulnerable to the effects of stress, conflict, violence, and loss. Social, economic, cultural, and political factors also may create predicaments that drive vulnerable individuals to suicidal behaviour.

Because suicide is ultimately an individual act and because the disciplines of psychiatry and psychology have tended to think in terms of individual functioning, most research on suicide has focused on determinants at the individual level. Often, this work is framed in terms of risk and protective factors that increase or decrease the likelihood of suicidal behaviour in a population or group of individuals. Risk factors are associated with vulnerability, while protective factors contribute to resilience.

Research on suicide in other populations may contribute much to our understanding of the problem among Aboriginal people. This section, therefore, reviews work on risk and protective factors in the general population that is relevant to Aboriginal people, along with those few studies that directly address Aboriginal people in Canada. The challenge is to explain why most young people do not succumb to suicide even in

communities with very high rates. Identifying the relevant crucial risk and protective factors can provide a starting point for understanding vulnerability and resilience, as well as potential directions for suicide prevention. This chapter will address the influence on suicide of psychiatric disorders, previous suicide attempts, suicide ideation, alcohol and substance abuse, factors influencing development in childhood, cognitive factors, reasoning, and sexual orientation. This chapter will then conclude with a discussion of resilience factors as well as the interaction between risk and protective factors.

Psychiatric Disorders

Although there is no single cause of suicide, the most important factor in the general population is the mental health of the individual. Many studies concur that the majority of people who die by suicide suffered from a psychiatric disorder that contributed to their death (Evans, Hawton, and Rodham, 2004; Fleischman et al., 2005; Gould et al., 1998a; 1998b; Lesage et al., 1994). In particular, both major depression and drug and alcohol abuse are strongly correlated with both suicide and suicide attempts. In the 2002 Regional Longitudinal Health Survey, First Nation individuals who had experienced feeling sad or depressed for at least two weeks in a row in the previous year were more than twice as likely as others to report suicidal ideation or a suicide attempt (First Nations Centre, 2005). Unfortunately, few studies on Aboriginal populations in Canada have used current psychiatric diagnostic methods to determine the prevalence of common mental disorders, including major depression. As a result, it is not yet possible to know the relative contribution of different psychiatric disorders, and discussion must rely on extrapolations from studies in other populations. Recent studies in Canada and the United States have produced new data on the prevalence of depression that will address these questions in the next few years.

Follow-back studies in several countries using methods of reconstructing histories through family interviews and medical records have identified mental disorders in 70 to 95 per cent of youth suicides (Cavanagh et al., 2003; Houston, Hawton, and Sheppard, 2001; Runeson and Rich, 1992). Across studies, the most common diagnoses are mood disorders (42%; especially major depression), substance-related disorders (41%), and disruptive behaviour disorders (21%; including conduct disorder, attention deficit disorder, oppositional disorder, and identity disorder). About 18 per cent of youth who die by suicide have no evidence of psychiatric disorder (Fleischmann et al., 2005). This may reflect limitations in retrospective diagnosis or milder clinical or social problems. Some of these youth may have a history of excessive performance anxiety and perfectionism, along with a poor response to stress and dislocation (Hawton, 1986). These individuals may make a suicide attempt when faced with a significant failure or setback at school or in other activities.

Retrospective studies of deaths by suicide in adolescents and young adults find high rates of specific disorders with ranges from 43 to 79 per cent for affective disorders (major depression and bipolar disorder with depression), from 26 to 66 per cent for alcohol and drug abuse, from 3 to 61 per cent for conduct problems or personality disorder (usually borderline or antisocial personality disorder), and less commonly, (0–17%) schizophrenic disorders (Ryland and Kruesi, 1992; Cavanagh et al., 2003; Brent et al., 1994). The wide range in rates reflects differences in diagnostic methods and criteria as well as the limitations of making diagnoses with retrospective data. A case-control psychological autopsy study of 75 young men (aged 18–35) in Quebec who died by suicide found that 88 per cent had a psychiatric diagnosis and 38.7 per cent had major depression (compared to 5.3% of controls) (Lesage et al., 1994).

Anxiety disorders also carry a significant risk of suicide (Weissman et al., 1989). An analysis of data from the U.S. National Institute of Mental Health (NIMH) Epidemiologic Catchment Area Study revealed

that diagnoses of either panic disorder or sporadic panic attacks were also associated with an increase in both suicidal ideation and suicide attempts (Weissman et al., 1989). This increased risk was independent of co-existing major depression or alcohol abuse. Among patients with panic disorder, the risk of suicidal behaviour is increased when there is also alcohol abuse or other psychiatric disorders including major depression or personality disorder (Warshaw, Dolon, and Keller, 2000). Panic disorder is associated with increased risk for suicide in adolescents as well (Gould et al., 1996). Studies have also found an association between generalized anxiety disorder and post-traumatic stress disorder and adolescent suicide, although some of this relationship may be due to other co-existing disorders, including depression (Giaconia et al., 1995; Mazza, 2000; Wunderlich, Bronisch, and Wittchen, 1998).

About 10 per cent of patients with schizophrenia eventually die through suicide (Hawton, 1987). The time of greatest risk is early in the course of the illness, often during a relatively non-psychotic period. Those most at risk had high educational attainment prior to their illness, which may have led them to have higher expectations of themselves for the future. In contrast to the situation for depression or other affective disorders, these findings emphasize the need for careful follow-up of individuals with schizophrenia during periods of remission as well as relapse; when schizophrenic patients are not delusional, some may assess their prospects as bleak and contemplate suicide. Despite the high risk associated with the disorder, schizophrenia is not a major contributor to the numbers of youth suicide because it is much less common than depression.

The importance of specific psychiatric disorders for suicide also varies across the lifespan. For example, the rate of personality disorders is significantly higher among youth suicides compared to older suicides. In one retrospective study, 55 per cent of adolescent female suicides suffered from personality disorders or identity disorder (Marttunen et al., 1991). A Quebec study of young male suicides by Lesage and colleagues (1994) found that fully 28 per cent met criteria for borderline personality disorder. Among those with personality disorders who die by suicide, most have co-existing major depression and/or substance abuse disorders (Runeson and Rich, 1992).

Compared to deaths by suicide, attempted suicide is somewhat less strongly associated with major psychiatric disorders. The diagnoses most often linked to non-fatal suicidal behaviours are personality disorders (21–48%), dysthymic disorder (22%), and substance abuse (20–50%) (Tanney, 1992).

A community survey of two American Indian tribes in the United States conducted from 1997 to 2000 found that the overall rate of psychiatric disorders was roughly comparable to those of the general population, but the rates of specific diagnoses differed (Beals et al., 2005b; 2005c). Compared to the general population, alcohol dependence and post-traumatic stress disorder were more frequent in the American Indian communities, while depressive disorders were actually less frequent.

As noted earlier, there are few studies on the prevalence of psychiatric disorders in Aboriginal communities in Canada, so it is not possible to determine what proportion of suicides are associated with psychiatric disorders (Dion, Gotowiec, and Beiser, 1998). Experiences with psychiatric consultation in Aboriginal communities indicate high rates of major depression and dysthymia in many communities (Armstrong, 1993; Sampath, 1974; Young et al., 1993). Schizophrenia, bipolar disorder, generalized anxiety, and panic disorder may also be contributors to suicide in these communities. The diagnosis of personality disorder is difficult to make with certainty in the context of endemic social problems, but it is probably common and an important contributor to suicidality. Individuals with depression or other psychiatric disorders may be more

vulnerable to the demoralizing effects of social problems experienced by Aboriginal people. These social problems may cause or contribute to suicide even in the absence of diagnosable psychiatric disorders.

Surveys with symptom measures suggest high rates of common mental disorders, with as many as 27 per cent of individuals in some communities suffering from current depression (Haggarty et al., 2000). Data from the Canadian Community Health Survey in 2001 indicate that 12 per cent of First Nation people living on-reserve had an episode of major depression compared to 7 per cent of the general population (Government of Canada, 2006). The 1997 First Nations and Inuit Regional Longitudinal Health Survey found elevated rates of depression (18%) and problems with alcohol (27%) (First Nations Centre, 2004). The 2002 Regional Longitudinal Health Survey found that 30 per cent of First Nation individuals had experienced a period of two weeks or more in the previous year when they were sad, blue, or depressed—a cardinal symptom of depression. People who reported having had a time when they felt depressed for two weeks or more were more than twice as likely than others to report suicidal ideation or a suicide attempt (First Nations Centre, 2005).

Among Inuit in Nunavik, close to 25 per cent of individuals who died by suicide had received at least one psychiatric diagnosis (primarily depression, personality disorder, or conduct disorder) in their lifetime, and close to 50 per cent had a past psychiatric history (Boothroyd et al., 2001). A study of suicides in the Northwest Territories from 1981 to 1996 found that 64 per cent had a history of emotional distress or depression and 40 per cent had made previous suicide attempts (Isaacs et al., 1998).

In a survey of Inuit youth in Nunavik, suicide attempters were found to be significantly more likely to report having had personal or mental health problems during the previous year compared to those who never attempted suicide (40% vs. 12%, $p=0.001$) (Kirmayer, Malus, and Boothroyd, 1996). In Manitoba, Aboriginal people (both on- and off-reserve) who died by suicide were less likely to have received previous psychiatric treatment than their non-Aboriginal counterparts (6.6% vs. 21.9%, respectively, $p<.0001$) (Malchy et al., 1997).

Several studies on suicide in the general population have suggested a distinction between: 1) individuals with major pre-existing psychiatric disorders, and 2) individuals who have less severe psychiatric disorders but more recent stressful life events and alcohol use (Bagley, 1992; Duberstein, Conwell, and Caine, 1993; Kienhorst et al., 1993; Marttunen et al., 1998). This typology raises the question of whether suicides among Aboriginal people are more often of one type than the other. This question has important implications for prevention strategies, but the data available to date are not sufficient to resolve the issue.

Previous Suicidal Ideation and Attempts

Most people who die by suicide have previously expressed suicidal thoughts or made suicide attempts (Cavanagh et al., 2003). Shafii and colleagues (1985) found that 85 per cent of adolescent suicide victims had previously expressed a wish to die, and 40 per cent had made a previous attempt. Although most suicidal acts have an immediate trigger or precipitant and many acts are impulsive, suicide often occurs in the context of persistent or recurrent thoughts and plans about suicide. Among patients hospitalized for a suicide attempt, the seriousness of their plans for suicide at their “worst point” are predictive of their ultimate risk of dying by suicide (Joiner et al., 2003).

Many of the factors associated with suicidal ideation are the same as those for suicide attempts and deaths (Gunnell et al., 2004). Among adolescents, however, suicidal ideation may be so common that it does not serve as a useful index of high suicide risk (Ladame, 1992). For example, a study of high school students in the United States found that 27 per cent reported suicidal ideation in the last year (Ryland and Kruesi, 1992). It is important, therefore, to distinguish between serious suicidal ideation or suicidal crises and thoughts about suicide that express quandaries and concerns that are less urgent and life-threatening.

Suicidal ideation is strongly associated with major depression in the general population (Goldney et al., 2003), as well as with low levels of social support and unemployment (Gunnell et al., 2004). Among adolescent patients with major depressive disorder, suicidal ideation tends to fluctuate with the severity of depression rather than representing an independent cognitive state (Myers et al., 1991). In a multivariate study of 558 French-Canadian adolescents and 150 adults, suicidal ideation in adolescents was found to be positively associated with depression. Also, there were associations of suicidal ideation with stressful life events, low self-esteem and dissatisfaction with social supports (de Man, Leduc, and Labrèche-Gauthier, 1992). In contrast, suicidal ideation in adults was associated with self-esteem and life events, but not with depression.

Suicidal attempts may range from mild “gestures” with minimal lethal intent to serious attempts in which death is averted only by happenstance. It is important for both research and clinical practice to characterize the severity of attempts to assess their potential lethality. Clinically, this involves estimation of a “risk-to-rescue ratio”—that is, the relative risk of death of the means used divided by the relative likelihood of discovery and rescue by someone else. An example of a high-risk/low-rescue attempt might involve going off with a shotgun into the bush without telling anyone; in contrast, a low-risk/high-rescue attempt might involve taking a few sleeping pills in the presence of a spouse. In epidemiological research on suicide, efforts have been made to develop questions that assess severity of attempts retrospectively to better understand the significance of the very high levels of mild attempts found among youth (Meehan et al., 1992).

A previous suicide attempt is the single best predictor of subsequent attempts and of death by suicide. However, this criterion is of limited use for suicide prevention: 75–90 per cent of all deaths by suicide occur on the first recorded attempt (Maris, 1992). Compared to attempters, people who die by suicide are more likely to be male, older, unmarried, divorced or widowed, living alone, and retired or unemployed (van Egmond and Diekstra, 1990).

Approximately 50 per cent of people who attempt suicide make a second attempt (Kreitman and Casey, 1988). Individuals may be at highest risk for a repeated suicide attempt in the first three months or so following an attempt. Repeaters tend to have previous psychiatric diagnoses and treatment, a history of other self-destructive behaviour, a history of alcohol and substance abuse, and to be isolated and unemployed (Kreitman and Casey, 1988). Psychological characteristics of patients hospitalized for a suicide attempt who make a repeat attempt within three months of the initial episode include low frustration tolerance, internal locus of control, and a view of self as powerless (Sakinofsky and Roberts, 1990; Sakinofsky et al., 1990). Repeaters also have more externally directed hostility. There is some evidence that lethality tends to increase with each successive suicide attempt (van Egmond and Diekstra, 1990).

Patients who make multiple non-lethal suicide attempts may differ from those who make a single or a few highly lethal suicide attempts. Clinicians tend to view the former as having a personality disorder (typically, borderline personality disorder), and as having a tendency to use suicide attempts as an angry or dramatic gesture in a somewhat calculated or manipulative way (Dingman and McGlashan, 1988). However, one

cannot dismiss the risk of suicide in patients with personality disorders as they are much more likely to die by suicide compared to the general population (Paris, Brown, and Nowlis, 1987; Tanney, 1992).

Alcohol and Substance Use

The main reason why suicides happen is alcohol and drugs ... But I'm the kind of person that likes to help and I get frustrated sometimes too. Like for instance I get upset at parents. I guess we all grew up in different ways and I get so angry at especially the alcohol and drugs that are going on in our community ... when a person is sober, they're so different ... you see all the goodness in them. You know they have that potential, they have that wisdom ... But when they're drinking and when they're in these prescription drugs, they're so different. I got a friend, she's a real good parent, she's a real good person to talk to. She loves the kids, but when she's drinking ... she's so different and I tend to back away from her ... because of that alcohol, that's the — for me, I don't like that alcohol (First Nation adult).

The consumption of alcohol and other intoxicating substances is often a contributing factor to suicide for several reasons. Alcohol and other central nervous system depressants can reduce inhibitions, increase impulsivity, and intensify negative emotions (e.g. sadness, depression, anger, and anxiety). They may also decrease a person's fear of death and an ability to imagine the consequences of their actions. Taken together with other drugs, alcohol can increase the lethality of over-the-counter and prescription medications or drugs that are often used as instruments of suicide. On occasion, people who have been drinking without serious suicidal intent may impulsively attempt suicide while intoxicated. The frequency and amount of alcohol consumption is also a factor. In a representative sample in the United States, it was found that heavy alcohol drinkers were more likely to die by suicide than those who were light or moderate drinkers (OR=1.64; 95% CI=1.16–2.33) (Kung et al., 1998).

The use of other substances may also be associated with suicide risk or contribute to suicidality. A study of high school students in Texas showed that alcohol, marijuana, cocaine, and steroids were associated with an increased risk of attempted suicide among different ethnic and gender subpopulations (Grunbaum, Basen-Enquist, and Pandey, 1998). In addition to their direct effects on mood and behaviour, alcohol and substance use may also be an indication of pre-existing psychological distress and social problems that contribute to suicidal behaviour.

Alcohol intoxication has been noted to be a major factor contributing to suicide in most studies of Aboriginal people, including: the Cree of northern Ontario (Ward and Fox, 1977); the Ojibwe of northern Ontario and Manitoba (Spaulding, 1986; Thompson, 1987); the Inuit of Greenland, Alaska, and the Northwest Territories (Aoun and Gregory, 1998; Isaacs et al., 1998; Kettl and Bixler, 1991; Kraus, 1972; Rodgers, 1982; Sampath, 1992; Thorslund, 1990); and numerous studies of American Indian groups in the United States (Brod, 1975; Group for the Advancement of Psychiatry, 1989). A case-control study on Alaska Natives who died by suicide between 1980 and 1984 found that approximately half of them had a documented history of alcohol abuse in their medical records, which was significantly more than the control group (Kettl and Bixler, 1993). In the Alaskan study conducted by Gregory (1994) of all known patients of Eskimo⁵ ethnic origin who attempted suicide in the region over a 6-month period in 1993, 57 per cent of the suicide attempts were preceded by alcohol consumption. Over the period from 1980 to 1998 in New Mexico,

⁵ Eskimo is a term used in the United States for the Indigenous people of Alaska who include Inupiat and Yup'ik.

alcohol was implicated in two-thirds (69%) of deaths by suicide among American Indians compared to 44 per cent of deaths by suicide in the general population (May et al., 2002). Similarly, in a study in Manitoba, substance abuse was a significantly more prevalent risk factor among Native/Métis (44.4%) than among non-Native suicides (23.8%) (Sigurdson et al., 1994).

Blood alcohol levels at the time of death were investigated in a sample of 182 Aboriginal and 583 non-Aboriginal suicides in Manitoba that occurred during the period from 1988 to 1994 (Malchy et al., 1997). The mean alcohol blood level among Aboriginal suicides was 28 compared to 12 among non-Aboriginal ($p < 0.0001$). An alcohol level above 17 (legal limit for driving in Manitoba) was detected in 28.3 per cent of the non-Aboriginal people and 65.4 per cent of the Aboriginal people who died by suicide. Severe intoxication (a level more than 43) was detected in 10.3 per cent of non-Aboriginal and 30.2 per cent of Aboriginal suicides. However, Aboriginal people were more likely to be tested for alcohol level, and this would result in an underestimate of rates of alcohol intoxication in the non-Aboriginal cases.

The strong association of alcohol intoxication and suicide among Aboriginal people reflects the high prevalence of substance abuse in many communities with an earlier age of first use (May et al., 2002). Compared to the general population, a smaller proportion of Aboriginal people consume alcohol (79% vs. 66%). However, the rate of problem drinking is higher in the Aboriginal population, with 16 per cent of First Nation individuals reporting heavy drinking on a weekly basis compared to 6.2 per cent of the general population (First Nations Centre, 2005). The Northwest Territories Health Promotion Survey found that 33 per cent of Aboriginal persons in the Northwest Territories were considered heavy drinkers as compared to 16.7 per cent in the non-Aboriginal population. In the same survey, use of marijuana or hash was also greater for Aboriginal persons (27.3%) as compared to non-Aboriginal persons (10.8%). The survey also asked about the history of solvent use, and found that the percentage of Aboriginal people who had used solvents was particularly high at 19.0 per cent compared to 1.7 per cent among non-Aboriginal people (Northwest Territories Bureau of Statistics, 1996).

A survey of drug use in Manitoba assessed Aboriginal (Indian and Métis residents off-reserve) and non-Aboriginal adolescents over four consecutive years from 1990 to 1993 (Gfellner and Hundleby, 1995). The Aboriginal groups had consistently higher rates of use of marijuana, non-medical tranquilizers, non-medical barbiturates, LSD, PCP, other hallucinogens, and crack. For both LSD and marijuana, the average rate of use for Aboriginal adolescents was over three times higher than the corresponding non-Aboriginal rate. In the same survey, glue sniffing was higher among the Aboriginal group compared to the non-Aboriginal groups.

Inhalant use (e.g. gas, glue, solvents) is an increasing problem among young people worldwide. In the general population, the prevalence of inhalant use among youth aged from 12 to 17 increased from 7.2/1000 in 1983 to 21.5/1000 in 1993 (Neumark, Delva, and Anthony, 1998). Inhalant or solvent abuse is much more common in many Aboriginal communities than in the general population (Howard et al., 1999; Weir, 2001; Zebrowski and Gregory, 1996). The typical user of solvents is an adolescent male with low self-esteem and a family background of violence and alcoholism. In our survey of Inuit youth in one community in Quebec, 37 per cent reported having used solvents at one time and 5 per cent used them at least once a month (Kirmayer, Malus, and Boothroyd, 1996). In statistical models, individuals who had used solvents were 8 times more likely to have made a suicide attempt. It is unknown whether the cognitive impairment or other neuropsychological consequences of solvent abuse (Byrne et al., 1991) independently increase suicide risk or whether solvent abuse simply indicates severe personal, family, and community problems that also may lead to suicide.

Risk factors for substance use include close relationships with peers who use alcohol and drugs, a family history of alcohol abuse, poor school performance, weak identification with culture and community, and lack of hope for the future (May et al., 2002). These risk factors are common among Aboriginal youth and overlap with the factors that may contribute directly to suicide.

Gambling

Pathological gambling may be another important contributor to suicide in some Aboriginal communities. Aboriginal individuals are more likely than those in the general population to suffer from pathological gambling (Wardman, el-Guebaly, and Hodgins, 2001). A study of American Indian and Alaska Native Veterans in the United States found that fully 10 per cent had a history of pathological gambling over their lifetime; 70 per cent of these individuals also had one or more other psychiatric disorder (Westermeyer et al., 2005). A large survey of the general population in Edmonton found that a history of pathological gambling was associated with previous attempted suicide, and that the association appeared to be due to an underlying psychiatric disorder (Newman and Thompson, 2003). There is clear evidence that the growing availability of gambling activities leads to an increase in the numbers of individuals with pathological gambling (Korn, 2000). The development of gambling through on-site casinos or the Internet as a source of revenue for some Aboriginal communities raises concerns about the long-term impact on community mental health because of this economic strategy (Shaffer and Korn, 2002).

Developmental Factors

I guess one of the keys to self-esteem is ... not just for the youth ... It could be for the parents ... The generation of parents who were in residential schools, their parenting skills were just completely wiped out. And I think sexual abuse in my opinion is like a chain. You're abused and you're going to do it to somebody else ... and that somebody is going to do it to somebody else, and so on and so forth. And communication is the key to break that chain (First Nation youth).

There is evidence that specific personality traits, developmental disorders, and traumatic experiences can contribute to suicidality either directly or by increasing the risk of depression, interpersonal conflict, poor school performance, and other life difficulties. Follow-back studies find that a high proportion of first- and second-degree relatives of people who die by suicide have made suicide attempts (Cavanagh et al., 2003). This may reflect both shared vulnerabilities and adversity. Twin studies demonstrate a contribution of heritable traits to suicidality that interact with environmental factors and life stress (Gould et al., 2003). People who die by suicide tend to have had more complicated birth histories, parental alcohol and tobacco use, and received less prenatal care than their peers (Hawton, 1986). They are also more likely to have had poor physical health as adolescents (Earls, Escobar, and Manson, 1991; Blum et al., 1992).

In addition to the genetic contributions to bipolar disorder, depression, and other psychiatric disorders, specific temperamental or behavioural traits, particularly impulsivity and aggressivity, may have a specific impact on suicidality (Turecki, 2005). As with other complex behaviour, it is likely that the role of genetic and constitutional factors must be understood in terms of interactions with other biological, psychological, and social factors over the course of individual development.

Temperament and Personality Traits

Individuals show distinctive temperamental traits from early infancy, which may provide the basis for the elaboration of more complex personality traits over the course of development (Paris, 1996). Certain temperamental or personality traits may contribute to suicide risk (Ryland and Kruesi, 1992). Recent studies have found an association between a tendency to impulsive aggression and attempted suicide in those with alcohol abuse, major depression, or borderline personality disorder (Brent et al., 1994; McKeown et al., 1998; Sourander et al., 2001; Turecki, 2005). Young people who engage in suicidal behaviour tend to be impulsive, prone to angry or aggressive behaviour, socially withdrawn, and hypersensitive or perfectionistic (Hamilton and Schweitzer, 2000). Impulsivity may make individuals more liable to respond to an emotional crisis with intense emotion and abrupt action, including self-injury or suicide (van Heeringen, 2001).

While impulsivity contributes to the risk of suicide attempts, there is some evidence that withdrawal, hypersensitivity, and behavioural inhibition are also common personality traits among those who die by suicide (Hoberman and Garfinkel, 1988; Shafii et al., 1985). Inhibition and withdrawal may contribute to suicide risk by impairing social functioning and relationships, leading to diminished self-esteem and problem-solving ability, social isolation, and a lack of social supports.

In some traditional small-scale hunter societies like the Inuit, strong control over anger and avoidance or suppression of interpersonal conflict was crucial for survival (Briggs, 1970). This may have conferred some advantage on individuals with retiring or reserved styles. In general, ethnocultural differences in emotional expression probably reflect differences in cultural style rather than temperament (Ferrara, 1999; Kirmayer, 1987; Preston, 1975; 2002). As discussed in the next chapter, social changes in some Aboriginal communities or migration to cities may make some styles of coping and modes of interaction that worked well in one setting difficult to sustain or less adaptive in the new context.

Fetal Alcohol Effects

Increased risk of suicide in adolescent and adult populations has been associated with prenatal alcohol effects, particularly fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE) (Royal Commission on Aboriginal Peoples, 1996a). Social and emotional problems associated with prenatal alcohol effects, especially poor impulse control, depression, and alcohol or drug problems, may place these individuals at increased risk (Kelly, Day, and Streissguth, 2000). However, follow-up and longitudinal studies of persons diagnosed with FAS have not identified suicide or suicidal ideation as a significant problem (for example, see Habbick, Nanson, and Snyder, 1997). A difficulty in determining whether persons with FAS or other alcohol-related birth defects (ARBD) are at risk of attempting suicide is that only a small percentage (less than 1%) of the estimated population of persons who are believed to have FAS/ARBD are currently diagnosed in North America. Because of this, as well as attention to FAS/ARBD in adolescent and adult populations being quite recent, information concerning prenatal alcohol effects as a contributing factor to attempted or completed suicides has not been studied (Tait, 2003).

Parenting and Child Rearing

Parental psychopathology, substance abuse, and history of suicide attempts are all associated with increased risk of suicide among youth (Gould et al., 2003). The quality and consistency of parenting over the course of child and adolescent development has a significant impact on subsequent risk for suicidal behaviour. In a study

of Quebec youth, Tousignant and colleagues (1993) found that increased risk of suicidal behaviour (defined as “serious” ideation or attempt) was associated with poor care by the father in both adolescents and young adults. For adolescents, poor care by the mother and parental divorce was less strongly linked with increased risk.

Styles of child rearing differ across Aboriginal families, communities, and cultural groups. In some Inuit communities, for example, child-rearing practices aimed at developing self-control, sharing, and socially appropriate behaviour involve teasing or playful threats of abandonment that may also foster insecurity about relationships and intense dependency needs (Briggs, 1982; 1998). Similarly, socialization may also inhibit other-directed aggression and increase the likelihood of self-directed aggression in times of frustration or loss (Briggs, 1983). In the context of a stable extended family grouping, these child-rearing strategies may be adaptive; but coupled with changes in the structure of communities and new demands for competitive performance, they may leave individuals vulnerable to depression and self-harm in situations of loss or failure.

Presumably, child-rearing practices interact with the temperamental differences discussed above to make individuals more or less vulnerable to suicide. While child rearing has undergone profound changes as a result of the impact of government intervention, the residential school system and, most recently, mass media, some distinctive practices may persist. However, the impact of cultural variations in child rearing on personality remains a controversial issue. Certainly, sedentarization and other changes in Aboriginal settlement life have rendered some traditional child-rearing practices less effective. These issues are discussed further in Chapter 4.

Childhood Separation, Loss, and Family Disruption

Suicide is associated with a history of early separations, losses, family breakdown, and emotional deprivation (Gould et al., 2003). Grossi and Violato (1992) found that adolescent suicide attempts were significantly related to a greater number of residential moves, a greater number of grades failed, and an earlier age of separation from parents. Tousignant and colleagues (1993) found the effect of frequent residential moves on suicide risk did not hold when the control group consisted of adolescents with family problems, suggesting that the level of family functioning or distress is the essential factor. Parental loss may be particularly damaging when it leads to persistent disorganization of the household (Adam, 1985).

A case-control psychological autopsy of 120 youth who died by suicide in the New York city area found that, compared to their peers, they were more likely to come from non-intact families and to have had poor communication with their mothers (Gould et al., 1996). Poor communication with fathers was an important factor for youth older than 16. However, parental psychopathology (depression in mothers, alcoholism, and anti-social behaviour in fathers) was a stronger risk factor and, when this was taken into account, there was little additional risk associated with family breakdown or divorce (Gould et al., 1998a).

Single-parent families are more common in Aboriginal communities than in the general population. In 2001, about 35 per cent of Aboriginal children living on reserves lived with only one parent, compared to 17 per cent of non-Aboriginal children (Statistics Canada, 2003). However, the impact of single parenthood depends on local social and cultural factors that determine the degree of support by extended family, relatives, elders, and other members of the community. In some Aboriginal communities—notably the Inuit—adoption may be extremely common and less stigmatized, and so may not be associated with the same increased risk for suicide seen in the total population.

Studies among American Plains Indians found that youths who died by suicide were much more likely to have had a change of caretaker during their childhood or adolescence (May and Dizmang, 1974; Resnick and Dizmang, 1971). As discussed in detail in Chapter 4 of this report, Aboriginal populations have experienced a high frequency of separations due to education in boarding schools and prolonged hospitalization out of their communities for tuberculosis and other chronic illness (Dickason, 1992; Kleinfeld and Bloom, 1977; Manson et al., 1989). The residential school system exposed Aboriginal children to prolonged separations from family and kin, physical and sexual abuse, and active suppression of their language and cultural identity (Coleman, 1993; Haig-Brown, 1990; Knockwood, 1992; Lomawaima, 1993).

Childhood Physical and Sexual Abuse

Clinical and population studies support an association between a childhood history of physical and sexual abuse and later suicidal ideation and behaviour (Cleary, 2000; Dieserud et al., 2002; Evans, Hawton, and Rodham, 2005a; Santa Mina and Gallop, 1998). An association of childhood physical abuse with suicide has been found for adolescents in both case-control (Brent et al., 1999) and prospective longitudinal studies (Brown et al., 1999; Johnson et al., 2002). Most research on the association of childhood sexual abuse with suicidality has involved clinical studies, which introduce biases both because of the limitations of retrospective recall and because clinical samples do not include people with a history of abuse who have not sought mental health services (Rogers, 2003). The most recent studies in the general population, however, have found a significant relationship between childhood sexual abuse and later suicidality (Fergusson et al., 2000; Molnar et al., 2001; Goldsmith et al., 2002; Evans, Hawton, and Rodham, 2005a). Although sexual abuse is more common among females, it may have an especially strong association with suicidality for males (Evans, Middleton, and Gunnel, 2004). Abused children are more likely than non-abused children to be later victims of abuse or to become sexual aggressors themselves. Thus, there seems to be a transgenerational pattern of repetition of sexual abuse.

Factors associated with risk of sexual abuse for a child include the family's socio-economic status, change in family composition, difficulty in communication and attachment between the child and parent, parents' criminal behaviour, substance/alcohol abuse, and psychological disorders. Aboriginal youth in Canada are more likely than non-Aboriginal youth to witness family violence and to be subjected to physical and sexual abuse (Fischler, 1985; Lujan et al., 1989; MacMillan et al., 1996). Approximately one-half of Aboriginal children witnessed family violence, and the majority were female victims; 57% of Aboriginal women reported that their children had witnessed the violence compared to 46% of non-Aboriginal women (Trainor and Mihorean, 2001). The 1997 First Nations and Inuit Regional Longitudinal Health Survey in Ontario found that 59 per cent of First Nation adults had experienced physical abuse during their childhood and 34 per cent had suffered sexual abuse. The same survey found rates of sexual abuse among youth—14 per cent for boys and 28 per cent for girls (First Nations Centre, 2004). Urban Aboriginal people also experience high rates of physical and sexual abuse and violence, especially those who endure homelessness and prostitution (Farley, Lynne, and Cotton, 2005).

In studies of the general population, the type and severity of abuse and the relation of the perpetrator to the child affect the impact of abuse on mental health (Finkelhor, 1995). Multiple, repeated exposures to different forms of trauma and abuse have a cumulative effect causing more severe outcomes (Turner, Finkelhor, and Ormrod, 2006). Some of the effects of childhood abuse on suicide is due to the presence of psychiatric disorders like depression, but abuse may contribute to suicide even in the absence of obvious psychiatric disorders. However, a study by Brent and colleagues (2002) suggests that childhood sexual

abuse is associated with additional risk for suicide even in very high-risk groups, such as the offspring of parents with mood disorders that made suicide attempts.

Research that examines this link in Aboriginal populations is sparse. Prevalence rates of child abuse within the Aboriginal population vary widely and there is no consensus on whether or not the rates exceed those of the general population. In most recent studies, rates of abuse range widely from 12 per cent in women and 2 per cent in men (rates comparable to those found in the general population in the U.S. National Comorbidity Study) to 50 per cent of women and 14 per cent of men (which are higher but still comparable to rates reported in some general population studies) (Molnar et al., 2001; Robin et al., 1997; Grossman et al., 1991; Hobfoll et al., 2002; Manson et al., 2005). This variation reflects genuine differences across communities and also the differing methods of data collection. As most studies rely on self-report, it is possible that these numbers are under-representations. The close interpersonal and family ties in some communities may make disclosure less likely, and reluctance to make one's community look bad might discourage reporting of abuse to outsiders (Robin et al., 1997).

Despite indications of high rates of exposure to childhood physical and sexual abuse in the Aboriginal population, there has been little systematic investigation of the effects of childhood abuse specific to this population (Robin et al., 1997). The few relevant studies have shown behavioural and psychological effects similar to those documented in the general population studies, including suicide attempts as well as increased rates of depression, substance use, and anxiety disorders—conditions which increase the risk of suicidal behaviour (Robin et al., 1997; Pharris, Resnick, and Blum, 1997). Two studies found childhood physical (but not sexual) abuse to be related to later depression (Roosa et al., 1999; Hobfoll et al., 2002).

There has been some study of factors contributing to resilience in abused Aboriginal individuals. Pharris and colleagues (1997) found that perceived attention and caring from family and other adults were associated with the absence of suicidal ideation and attempts among American Indian and Alaska Native youth with a history of sexual abuse. Hobfoll and colleagues (2002) suggest that social support may have a more positive effect on Aboriginal victims of abuse because of the central role of family and community in Aboriginal cultures.

Further studies clarifying the complex meanings and social context of abuse in Aboriginal communities are needed. Owing to their geographic isolation and complex web of family relations, it may be exceptionally difficult for individuals to disclose and confront family violence and abuse. This might increase the feeling of being trapped and so contribute to suicide.

Hopelessness, Problem Solving, and Reasons for Living

At the time of a suicide attempt, individuals typically describe a narrowing or constriction of thinking with an inability to generate alternatives or imagine themselves in the future. The world shrinks down to an intense knot of pain with no prospect of relief. In conjunction with thoughts of death as a means of escape and of suicide as a way to send others a message of anger and despair, this cognitive constriction makes the act of suicide possible. These attitudes toward death and suicide and the tendency toward cognitive constriction, pessimism, and hopelessness may begin long before the suicide attempt.

Cognitive variables that have been linked with attempted suicide in adolescence include the tendency to think in a relatively inflexible or rigid fashion, to have poor problem-solving ability, to be present rather than future-oriented, and to have a negative self-concept (Weishaar, 2000). Demoralization, lack of self-efficacy

and problem-solving ability, cognitive distortions, lack of social support and lack of reasons for living all predispose an individual to suicidal behaviour, while interpersonal stress and intense hopelessness appear to be more immediate causes (Malone et al., 2000).

In fact, hopelessness may be more directly related to suicidality than depression itself (Thompson et al., 2005). In a prospective longitudinal study of 207 hospitalized psychiatric patients followed over 5 to 10 years, a significant correlation was found between high scores on the Beck Hopelessness Scale and eventual suicide (Beck et al., 1985). The scores on two additional instruments, the Beck Depression Inventory and the Scale for Suicide Ideation, did not correlate with eventual suicide, although the single item of the Beck Depression Inventory on pessimism did appear to have predictive value. Studies comparing adolescents after a serious suicide attempt with controls have found higher levels of hopelessness, neuroticism, and external locus of control in the patient group (Beautrais et al., 1999; Csorba et al., 2003). Neuroticism is a personality trait associated with the tendency to be anxious, be worried, and report emotional distress. External locus of control refers to the tendency to view one's behaviour as controlled by factors outside one's self and, hence, reflects diminished feelings of competence or self-efficacy.

A study that compared psychiatric outpatients who had made suicide attempts with those who had not identified two pathways to suicide. On one path, low self-esteem, loneliness, and separation or divorce led to depression and, in turn, resulted in hopelessness and suicidal ideation that culminated in a suicide attempt (Dieserud et al., 2001). The second path to suicide attempts began with low self-esteem and a poor sense of self-efficacy, which resulted in poor interpersonal problem-solving skills.

In a study of high school students in New York state, those who were exposed to a suicidal peer had more maladaptive coping strategies and less tendency to seek help (Gould et al., 2004). Poor coping strategies included the idea that one should not tell others about feeling depressed, the use of drugs or alcohol to cope with negative feelings, and the consideration of suicide as an option.

Having positive reasons for living may protect people during depression from suicidal thoughts and action. In a study of people hospitalized for major depression, patients who had not attempted suicide expressed stronger feelings of responsibility toward family, more fear of social disapproval, more moral objections to suicide, better survival and coping skills, and greater fear of suicide than patients who had attempted suicide (Malone et al., 2000).

The cognitive theory of depression emphasizes the role of specific patterns of thinking in generating and maintaining a depressed mood including helplessness, hopelessness, pessimism, and overgeneralization (Beck et al., 1979; Kovacs and Beck, 1978). Mood, however, also alters the content of thought and mode of cognition. An elated mood leads individuals to have more access to positive reasons for living, while a depressed mood leads to difficulty in recalling or generating such reasons (Ellis and Range, 1992). Mood also affects memory, with depressed mood increasing access to painful recollections (Watkins, Martin, and Stern, 2000; Ellwart, Rinck, and Becker, 2003).

People who make multiple suicide attempts have a large number of psychological deficits including pervasive hopelessness, poor interpersonal problem-solving skills, and poor ability to regulate their emotional state (Forman et al., 2004; Strosahl, Chiles, and Linehan, 1992). Underlying these deficits may be a tendency to remember and think of past negative experiences and reduced anticipation of specific positive experiences.

Although suicide often occurs during a state of acute intoxication or intense emotion in which the person is not thinking clearly, when interviewed afterward, individuals offer a range of reasons for their actions. Reflecting a different mix of motivations, suicide attempters tend to be angry while those who die by suicide tend to be described as having been depleted, withdrawn, and resigned.

Bancroft and colleagues (1976) examined self-reported motives for suicide. A list of possible reasons for suicide was presented to attempters who could endorse more than one reason. One-third reported they were seeking help, 42 per cent wanted to escape from an intolerable situation, 52 per cent were seeking relief from a terrible state of mind, and 19 per cent were trying to influence someone. This type of work needs replication and extension cross-culturally. However, individuals' conscious reasons for suicide must be interpreted with caution both because they are actually retrospective reconstructions and because suicidal behaviour is influenced by psychological and social factors of which the individual may sometimes be unaware. The individual's explicit reasons for suicide may only be part of the cause or may even be rationalizations that do not get at the core problems.

Clinically, some Inuit adolescents mention "boredom" as their reason for attempting suicide, giving the superficial appearance that it is a casual act (Kirmayer et al., 1994b). Boredom is a common complaint among youth who feel there is a lack of interesting activities or opportunities for them in their community. The use of the term "boredom" as a reason for suicide may reflect a cultural style of minimizing or denying distress, a reluctance to acknowledge difficulty in coping, or a simple description of feelings of alienation and emptiness. In many cases, further inquiry leads to more explicit expressions of suffering, and acknowledgement of loss of relationships, intolerable family circumstances, or depression. Boredom is recognized as a common symptom of depression among adolescents in primary care (Cosgrave et al., 2000) and may be associated with suicidal ideation (Choquet, Kovess, and Poutignat, 1993; Lester, 1993).

Sexual Orientation

The relationship between sexual orientation and suicide in Aboriginal communities has received limited attention. Recent studies in the general population have found that homosexual and bisexual youth are at increased risk for suicidal behaviour (Bagley and Tremblay, 1997; 2000; McDaniel, Purcell, and D'Augelli, 2001). Rates of suicidal behaviour among homosexual youth range from 20 to 42 per cent across studies (Remafedi, 1999). A longitudinal study found that gay, lesbian, and bisexual individuals had higher rates of suicidal behaviour, as well as major depression, generalized anxiety, conduct disorder, and narcotic dependence—all disorders which are known risk factors for suicidality in the general population (Fergusson et al., 1999). Other studies also support the association of homosexuality and bisexuality with substance abuse, dropping out of school, having peers who made suicide attempts, homelessness, stress, violence, running away from home, conflict with the law, and prostitution (Remafedi, 1999; Radkowsky and Siegel, 1997). A survey of a nationally representative sample of almost 12,000 adolescents in the United States that included questions on both sexual orientation and suicide confirmed this association, finding homosexual adolescents more than twice as likely as their same-sex peers to attempt suicide (Russell and Joyner, 2001). The association between sexual orientation and suicidality was explained in part by the higher prevalence among homosexual youth of common risk factors for suicide including depression, substance abuse, victimization, and exposure to suicide in their families or peers.

There have been few published studies on homosexuality and suicide in Aboriginal communities. A study in Vancouver found that Aboriginal men who have sex with men have a greater chance than non-Aboriginal

homosexuals of being unemployed, having a lower income, living in unstable housing, being depressed, reporting non-consensual sex or sexual abuse, or being involved in the sex trade (Heath et al., 1999). These risk factors might be expected to place them at greater risk of suicide than non-Aboriginal homosexuals. As well, other risk factors for suicide to which homosexual youth have increased exposure, such as depression, substance abuse, victimization, and exposure to suicide, are known to be prevalent in the Aboriginal population and are likely to affect the Aboriginal homosexual populations as well, contributing to their risks for suicidal behaviour (Russell and Joyner, 2001).

Extrapolating from studies of the general population to Aboriginal communities in this area must be done with caution, owing to the different meanings and contexts of sexual behaviour in Aboriginal communities. In many Aboriginal communities, homosexuality remains a taboo topic and is highly stigmatized. On the other hand, “berdache,” “two-spirited,” or “third gender” identities have played important roles in some Aboriginal communities in relation to spiritual guidance or protection, and this may provide some individuals with a positive model or self-image (Fulton and Anderson, 1992). Self-identification as a homosexual may also provide some social support and group belonging in urban settings or over the Internet (Fergusson et al., 1999; Russell and Joyner, 2001). However, a large survey among American Indian and Alaskan Native youth in the United States found that homosexual orientation was associated with an increased risk for suicide attempts among both male and female adolescents (Borowsky et al., 1999). Organizations like the Canadian Aboriginal AIDS Network in Ottawa and Healing Our Spirit in Vancouver are working to address the stigmatization of homosexuality and two-spirited people.

Interpersonal Factors

Social isolation increases the risk of suicide (Heikkinen et al., 1995). Several studies indicate that the quality of the individual's social network is a strong predictor of the risk of suicide attempts (Grossi and Violato, 1992; Hart and Williams, 1987; Magne-Ingvar, Öjehagen, and Träskman-Bendz, 1992). Put the other way, social support is an important source of resilience and protection against suicide. The impact of social networks must be understood in terms of age, gender, and the structures of family and community. For example, data from a large survey of adolescents in the United States showed that having few friends or being socially isolated increased suicidal ideation among girls but not boys (Bearman and Moody, 2004).

Among individuals with personality disorders who died by suicide, the immediate precipitant is often interpersonal, work, or financial problems (Heikkinen et al., 1997). Interpersonal conflicts, usually family or marital discord, the breakup of a significant relationship, or loss of personal resources are the most common precipitants of suicide attempts (Weissman, 1974). For adolescents, conflict with parents, loss and separation from family members, and rejection in relationships are the most powerful stressors.

Several studies confirm that the immediate precipitants of youth suicide are usually an acute disciplinary crisis, a rejection, or a humiliation (e.g. loss of girlfriend or other failure) (Gould et al., 2003; Hawton, 1986; Shaffer et al., 1988). In a case-control psychological autopsy study from New York, nearly half of the youth who died by suicide had experienced a recent disciplinary crisis (most commonly, suspension from school or appearance in juvenile court) (Gould et al., 1998b). In this study, an interpersonal loss (e.g. recent breakup or parental separation) was a significant risk factor only for boys.

Interpersonal factors identified in studies of American Indian suicide include a history of non-parental caretakers, arrests of caretakers, an early age of first arrest of the suicide victim, an arrest in the previous 12

months, and a recent loss of a relationship through conflict or death (May and Dizmang, 1974; Resnick and Dizmang, 1971). A study of seven victims of a suicide cluster in a Cree community found that all had evidence of low self-esteem, lack of intimate relationships, social isolation, and identity confusion. They were uncommunicative and withdrawn, sometimes since childhood (Ward and Fox, 1977).

A study of 124 adolescents (48% male) at a multi-tribal boarding school in the United States found that depression with suicide attempts was predicted best by family or parental conflicts, problems with the school environment or discipline, and interpersonal conflicts (Dinges and Duong-Tran, 1993). Depression with a recent suicide attempt was associated with loss of cultural supports, the adolescents' own problems in romantic relationships or pregnancy fears, and conflicts with family or parents.

The multiple losses brought on by disruption of families, communities, and traditions may lead youth to cling to each other in adolescent love relationships. The intensity of this dependence increases the risk of interpersonal conflict, various forms of abuse, and catastrophic emotional reactions when relationships founder.

In a study of 13,454 American Indian and Alaska Native youth on reservations across the United States, the factor most strongly associated with a history of attempted suicide for both male and female respondents was having a friend attempt or complete suicide (odds ratio=3.8 for boys, 4.52 for girls) (Borowsky et al., 1999). Other risk factors significantly associated with a history of attempted suicide by both boys and girls after controlling for other factors in the models were a history of sexual abuse (OR=2.17 for boys, 1.46 for girls) or physical abuse (OR=1.60 for boys, 1.73 for girls), having a family member attempt or complete suicide (OR=2.16 for boys, 1.92 for girls), having health concerns (OR=1.95 for boys, 1.78 for girls), frequent alcohol (OR=1.73 for boys, 1.85 for girls) or marijuana use (OR=1.82 for boys, 1.99 for girls), or ever using any other drug (OR=1.31 for boys, 1.39 for girls) (Borowsky et al., 1999). Factors that significantly reduced the odds of attempting suicide for both boys and girls included discussion of problems with friends or family members, having good emotional health, or having connectedness with family. Girls with a nurse or clinic in their school were also less likely to report a past suicide attempt.

Physical Environment

Suicide shows seasonal variation, with increased rates in the fall and spring in North America (Eastwood and Peter, 1988; Fossey and Shapiro, 1992). This may be related to seasonal variations in mood and affective disorder. Further, the suicide rate is correlated with geographic latitude (Davis and Lowell, 2002). Low mood and trouble sleeping during the short winter days are common in northern latitudes (Haggag et al., 1990; Hansen et al., 1987). Major depressive disorder triggered by a change in length of day has been described in the Arctic (Näyhä, 1985). Haggarty and colleagues (2002) found an increased prevalence of seasonal affective disorder (SAD) in a sample of 111 people in a community in Nunavut, but this represented only about one-quarter of those with depression. A study of suicides in Greenland from 1968 to 1995 found seasonal variation with the lowest rates in winter and peaks in June, when the long period of daylight may increase the likelihood of impulsive-aggressive behaviours (Björkstén, Bjerregaard, and Kripke, 2005).

Interpersonal conflict may also show some similar seasonal variation among the Inuit (Condon, 1982; Condon, 1983). Within Canada, suicide risk among Aboriginal people varies with the latitude of the community, being higher in more northern communities (Bagley, 1991). It is unclear whether these correlations reflect environmental, geographical, or socio-economic influences or variations in suicide

reporting. However, recent data from Nunavik, Nunavut, and the Northwest Territories show no clear seasonal variations in suicide (Kouri, 2003).

Resilience

Most research on suicide has focused on the maladaptive characteristics of suicidal persons instead of the adaptive, life-maintaining characteristics of those who do not attempt suicide or who go through a difficult period in their lives but eventually do well. There is a growing recognition of the need to focus on mental health and wellness rather than exclusively on pathology in order to identify useful approaches to suicide prevention (Advisory Group on Suicide Prevention, 2003). Thinking in terms of resilience leads to the consideration of the areas of strength and adaptation that can reduce the long-term effects of individual and collective adversity.

Resilience factors that have been related to positive mental health include a high level of general problem-solving ability, emotional stability or regulation, internal locus of control, self-esteem, sense of meaning or coherence, having many reasons for living, family attention and cohesion, positive parental expectations, positive attitudes toward school, good peer relations, good school performance, religiosity, and positive cultural identity (Charney, 2004; Iarocci, Root, and Burack, *in press*; Fergusson, Beautrais, and Horwood, 2003; Gould, 2003; Luthar, Cicchetti, and Becker, 2000; Vaillant, 2003).

Differences between ethnic and cultural groups can provide clues to individual and collective resilience. For example, African Americans have much lower suicide rates than whites despite facing economic disadvantage and endemic racism. In an exploratory study, Ellis and Range (1991) administered the Reasons for Living Inventory to 227 undergraduates at a large university in the southern United States. African Americans scored significantly higher than whites on two of the seven subscales: Survival and Coping Beliefs, and Moral Objections. Cultural beliefs that engender a sense of self-worth in the face of negative social perceptions may contribute to lower suicide rates among African Americans.

The study of reasons for staying alive when you are thinking of killing yourself may point toward both psychological and social interventions (Kralik and Danforth, 1992; Linehan et al., 1983). This type of work could be extended to Aboriginal communities in a search for reasons for living and means of coping with distress that fit local culture and social conditions.

Personal well-being and resilience have been linked to having a coherent, flexible, and durable sense of one's self. In childhood, mental health-promoting factors including self-esteem, successful coping, internal locus of control (a sense that one has control over one's life), and general intellectual ability are predictive of long-term adjustment (Cederblad et al., 1994). The conviction that life makes sense and has meaning may also contribute to coping with suicidal ideation (Petrie and Brook, 1992).

Antonovsky (1987) studied the sense of personal coherence and developed a measure that taps three related dimensions: manageability (the sense that life's ups and downs can be managed), comprehensibility (the sense that the world is consistent, predictable, understandable, and rational), and meaning (the sense that life is challenging and that it is worth making commitments). There is evidence that a sense of coherence is a stable personality trait distinct from depression and anxiety, but it can be affected by major life events (Flannery et al., 1994; Schnyder et al., 2000). While the measure of Sense of Coherence has some culture-specific elements and may not apply in all settings (Geyer, 1997), it has been successfully adapted for cross-cultural studies.

Sense of Coherence, especially the Meaning subscale, is negatively correlated with depression (Carstens and Spangenberg, 1997); that is, the more people report a sense of meaningfulness in their life, the less they are prone to depression. Suicidal ideation in people who have been hospitalized for a suicide attempt is associated with low levels of a sense of meaning (Petrie and Brook, 1992). In the same study, after a six-month follow-up, the dimensions of manageability and comprehensibility predicted suicidal ideation and behaviour along with depression, hopelessness, and self-esteem. A sense of coherence may contribute independently to suicidal ideation and behaviour as well as interacting with coping styles (Edwards and Holden, 2001). A sense that life is meaningful can buffer some of the negative effects of an emotional coping style in which individuals tend to respond to adversity by dwelling on emotions rather than problem solving.

Chandler and colleagues (1987) developed the notion of self-continuity as a central process in cognitive development. They noted that despite the fact people change profoundly in most respects over the course of the lifespan, they have a sense of personal continuity. This sense of continuity may be related not just to the content of one's personal narrative, but to its structure and to overarching ways of thinking that govern people's experience of temporality (Chandler, 2000). Chandler and colleagues (1987) designed an experimental study in which children listened to a story in which there was some change or transformation in a person (e.g. the story of Scrooge's confrontation with the ghosts of Christmas past, present, and future in Charles Dickens' *A Christmas Carol*) and then asked if the person was the same before as after the change. Children were then asked how they knew the person was the same. The researchers identified a clear pattern in the forms of reasons children offer to warrant continuity of identity. As they mature, children move from concrete reasons (he wore the same clothes, lived in the same house) to increasingly abstract reasons (he had the same memories). The transition to a more abstract mode of thinking about the continuity of self occurred in mid-adolescence in conjunction with the development of formal operational thinking. Strikingly, adolescents with suicidal ideation and behaviour tend to be less cognitively developed in their sense of self-continuity (Ball and Chandler, 1989; Chandler and Ball, 1990; Chandler, 1994). This specific cognitive-development problem may be closely related to suicidality. As discussed in Chapter 4 of this report, Chandler and Lalonde (1995; 1998) have gone on to relate this cognitive process to the impact of social and cultural changes on vulnerable individuals.

These notions of self-continuity, coherence, and temporality may be culture-dependent to some degree. For example, Enns and colleagues (1997) found comparatively low levels of hopelessness in a sample of Aboriginal youth hospitalized after a suicide attempt. They suggest that Aboriginal and non-Aboriginal adolescents may conceptualize the future differently. Traditional cultural notions of cyclical time, non-competitiveness, and respect for the land may contribute to a sense of personhood that works differently when faced with challenges of competence and control.

While cultural change and confrontation with the values of the dominant society have challenged Aboriginal notions of self, identity, and temporal experience, knowledge of traditions may still provide unique resources for coping if the values they are based on are embraced by individuals and communities and recognized by the larger society. There is evidence, for example, that a non-materialistic orientation contributes to psychological well-being (Kasser, 2002). The ecocentric and relational values of some Aboriginal groups may be one antidote to the negative effects of the materialism fostered by consumer capitalism.

The Interaction of Risk and Protective Factors

Suicide is most commonly linked to depression, hopelessness, and alcohol intoxication combined with a means (ready availability of firearms or hanging) and an immediate precipitant (often a loss of relationship or serious conflict). The single best predictor of a future attempt of suicide is a previous attempt. In the general population, suicide attempts have been shown to be strongly associated with interacting factors such as depression, substance use, loss of a family member or friend to suicide, availability of firearms, female gender, and a history of physical or sexual abuse. Thus, childhood sexual abuse tends to be associated with suicidal behaviour, but this association is mediated in part by other factors, particularly the presence of other psychological disorders.

Few studies have assessed the relative contributions of risk factors to completed suicide or suicide attempts among Aboriginal people. Analysis of data from the 1988 U.S. Indian Health Service Adolescent Health Survey identified multiple risk factors for suicide attempts. Drawing from self-report questionnaires completed by 7,254 students in grades 6–12 on Navajo reservations, the study found that close to 15 per cent of students reported a past suicide attempt and over half of these reported more than one attempt. Statistical methods (logistic regression) were used to identify the factors that independently contributed to having made a past attempt, which included: history of mental health problems (OR=3.2); having a friend who attempted suicide (2.8); weekly consumption of hard liquor (2.7); family history of suicide or suicide attempt (2.3); poor self-perception of health (2.2); history of physical abuse (1.9); female gender (1.7); and history of sexual abuse (1.5) (Grossman, Milligan, and Deyo, 1991).

Risk factors for completed and attempted suicide among Native Americans parallel those for youth in general and include: frequent interpersonal conflict; prolonged or unresolved grief; chronic familial instability; depression; alcohol abuse or dependence; unemployment; and family history of psychiatric disorder, particularly alcoholism, depression, and suicide (Earls, Escobar, and Manson, 1991). Among Aboriginal adolescents, suicide rates are higher for those with physical illnesses, those who have previously attempted suicide, those with frequent criminal justice encounters, and those who have experienced multiple home placements. However, the specific pattern of risk and protective factors vary across gender, setting, as well as communities and cultural groups (LaFromboise and Howard-Pitney, 1995; Howard-Pitney et al., 1992).

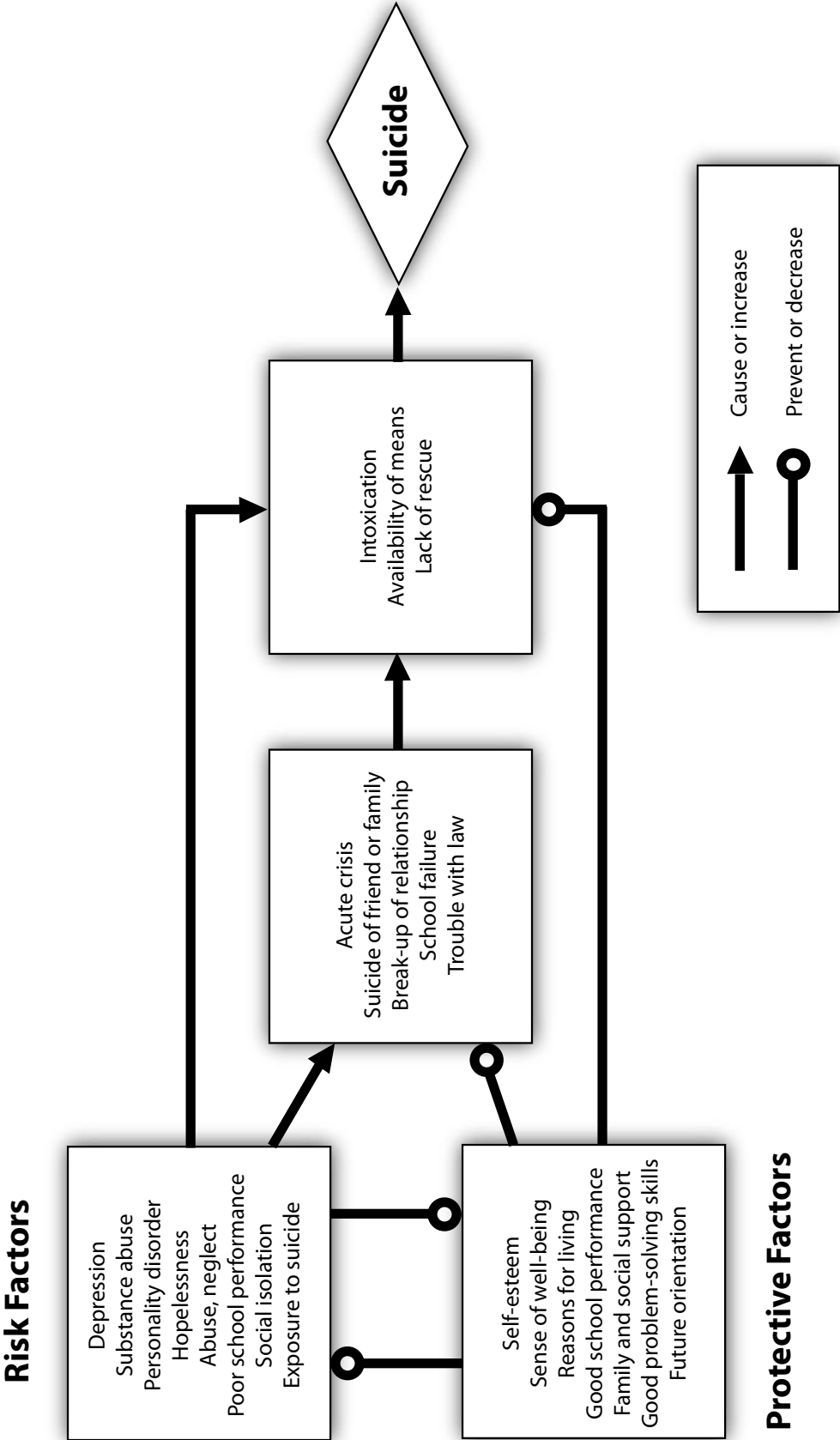
Table 3-1) Protective Factors Related to Mental Health in Aboriginal Youth

• good physical and mental health • self-esteem • future orientation, direction, and determination • family attention, support, and care • positive parental expectations • peer support	• caring exhibited by other adults and community leaders • positive attitudes toward school • good school performance • learning ability • coping/problem-solving skills
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Sources: Iarocci, Root, and Burack, in press; Pharris, Resnick, and Blum, 1997; Walker et al., 2006.

None of these factors can truly be understood in isolation. They interact in complex ways to give rise to the vicious cycles of escalation of distress and feelings of hopelessness, psychological pain, and despair that are the most immediate cause of suicidality. Figure 3-1 depicts some of these interactions that occur over the course of the individual's developmental trajectory and within the period of acute crisis.

Figure 3-1) Interaction of Individual Risk and Protective Factors in Suicide



Summary

In general, risk factors for suicide among Aboriginal youth are similar to those for suicide in the general population of young people (Borowsky et al., 1999; Strickland, 1997). These factors include depression, hopelessness, low self-esteem or negative self-concept, substance use (especially alcohol), suicide of a family member or a friend, history of physical or sexual abuse, family violence, unsupportive and neglectful parents, poor peer relationships or social isolation, and poor performance in school (Evans, Hawton, and Rodham, 2004). Two overlapping patterns of vulnerability to suicide can be identified in the existing literature: 1) severe depression is a key contributor to many suicides; and 2) life crises, substance abuse, and personality traits of aggressive impulsivity may play an important role in many suicides, especially among youth (Turecki, 2005). Protective factors that contribute to individual resilience include family harmony and cohesion, involvement in family activities, good communication and feeling understood by one's family, good peer relations, and school success.

This information allows for the identification of youth in the community who may be at greater risk for suicide; namely, those who have mental health problems (especially depression, but also substance abuse, anxiety, or conduct problems associated with impulsive and aggressive behaviour), a history of physical or sexual abuse, a friend or family member who has attempted suicide, poor relationships with parents, and poor school attendance or performance. Providing mental health services, mobilizing social support, and increasing community involvement for these youth and their families should reduce their risk of suicide. Early interventions with families and communities to support the healthy development of infants and children may reduce the prevalence of personality disorders and other mental health problems, which are more difficult to address in adolescents or adults.

However, this portrait of individual vulnerability and resilience is only half of the picture. Suicidal behaviour affects large numbers of young people in some Aboriginal communities, but not in others. This makes it clear that there are social forces at work at the levels of communities, regions, and nations that are of central importance. Understanding of the role of larger social factors is therefore crucial to identifying the most important contributors to suicide for any specific Aboriginal population, community, or individual.

Origins of Suicide: Social Suffering and Survival

I'd like to talk about the history ... of the bigger loss of culture, of the loss of parenting experience ... That was robbed from us. And we don't have any social norms and values any more. Like, they're kind of lost in between ... and it affects everyone (First Nation youth).

The sources of vulnerability and resilience discussed in Chapter 3 can help explain why some individuals in any given community may be affected by suicide while others are not. However, individual factors alone cannot account for the dramatically increasing rates of suicide in many Aboriginal communities in recent years or for the wide variations in rates across communities. To understand these variations, one must look for explanations at the level of the whole community and larger cultural, historical, and political processes. While the clinical literature on suicide emphasizes factors acting at the level of the person, there is a long sociological tradition examining the impact of social context on suicide within whole communities or populations. This chapter reviews the work on social and cultural factors that may contribute to suicide. It considers the social structure issues known to influence suicidality and then turns to the history of Aboriginal relationships with government and other social institutions that have contributed to the problem of psychological distress and suicide. In particular, this chapter examines the impact of policies of forced assimilation as embodied in the residential school system and the practice of out-adoption in the child welfare system.

Social Structure and Economy

French sociologist Emile Durkheim (1951) focused on the ways in which changes in economic and social structures interfered with those institutions and identities that serve to weave together or regulate the social order, and so maintain a sense of collective morale and shared meaning in life. Durkheim's theory that the suicide rate in a country or region "*varies inversely with the degree of integration of domestic society*" (1951:208) still provides a useful way to understand some of the harmful effects of social breakdown and disruption in Aboriginal communities that have come from colonization, forced assimilation, and relocation (Davenport and Davenport, 1987). In the field of social epidemiology, Durkheim's focus on social structure has been expanded to include dimensions of social solidarity and integration that may affect a wide range of health outcomes (Berkman et al., 2000).

Durkheim used the term "anomie" for a state of pervasive demoralization related to the breakdown of the moral order including religious, kinship, and other social institutions. Suicides due to such social breakdown and normlessness he termed "*anomic*." Durkheim contrasted anomic suicides with *altruistic* suicides, which occur in tightly knit groups in an effort to sustain the life of loved ones or the community, and *egoistic* suicides, which occur when the cultural concept of the person becomes overly individualistic and undermines communal values, ultimately creating an "empty self" (Cushman, 1990). Interdependence and positive integration within the family and the community should reduce both egoistic and anomic suicides.

Durkheim also noted the existence of *fatalistic suicide*, which occurs when individuals perceive no alternatives or possibilities for escape from intolerably painful circumstances. This corresponds to the situation of many Aboriginal youth faced with multiple problems and few options in their communities. Fatalistic suicide can occur in rigid and oppressive social situations with few options, while anomic suicide occurs in situations of

loss of social structure and norms. However, these situations are not mutually exclusive, since communities may be rigid in some respects and chaotic in others. The lack of order and direction in a community not only leaves youth aimless and disoriented, it limits their options in the larger society. Aboriginal communities are embedded in a larger social system that may have rigid rules and procedures and allow few positive roles and opportunities for Aboriginal people. Forms of institutional and bureaucratic rigidity, in turn, are embedded in a larger world system marked by rapid and unpredictable change. The distinct forms of suicide characterized by Durkheim may thus not capture the range of conflicting situations faced by youth confronted with local community politics, larger institutional structures, and constant exposure to mass media views of the larger world.

Poverty and Unemployment

In the general population, socio-economic disadvantage is associated with increased rates of suicide and attempted suicide (Agerbo, 2003; Hawton et al., 2001; Qin et al., 2003). This association is reduced but not eliminated when the influence of family history of mental illness or suicide is taken into account (Agerbo et al., 2002). Suicide rates have been found to be strongly correlated with the percentage of population below the poverty level among Native Americans in the United States (Young, 1990) and among Aboriginal people on 26 reserves in Alberta (Bagley, 1991).

In most studies of the general population, suicidality is strongly associated with unemployment for both men and women (Agerbo, 2003; Dyck et al., 1988; Hawton, Fagg, and Simkin, 1988). Although the effect of unemployment is generally stronger for men than for women (Cormier and Klerman, 1985; Wasserman, 1992), unemployment may have an additional indirect effect on women when men respond to this social stress with alcoholism and physical abuse of their spouses.

To examine whether suicide was associated with unemployment for Native Americans in the United States, Lester (1995) compared the suicide rates of three Indian tribes in New Mexico from 1958 to 1986 with the unemployment level for the United States. He found that the average suicide rate for the American Indian tribes was significantly correlated with the overall unemployment rates for the United States and New Mexico ($r=0.52$ and 0.63 , respectively).

Rates of unemployment are much higher among Aboriginal people than for the general population. In 1987, the percentage of status Indians living on-reserve and receiving social assistance was 2.5 times the total Canadian rate (Medical Services Branch Steering Committee on Native Mental Health, 1991b). The situation is similar among the Inuit (Irwin, 1989). However, Thompson suggests that "Unemployment is seldom reported as a problem in native male suicides because it is the "status quo" on most reserves and is no more of a problem for the victim than it is for the rest of his community" (1987:268). In communities where traditional subsistence patterns and values have been maintained, wage employment may be less directly linked to self-esteem and the impact of unemployment thereby lessened. Of course, this does not mean that lack of employment (or meaningful work) is not a factor in suicide among Aboriginal people, only that its effect may vary across communities, and it must be measured and interpreted in light of the economic history and values of specific communities (McDonald, 1994; Satzewich and Wotherspoon, 1993). Unemployment must be examined in terms of its implications for economic resources, social status, meaningful work, and personal goals.

Reserves, Settlements, and Urban Settings

Studies relating suicide to rural versus urban location find varying results in different countries. The proportion of individuals living alone in an urban community may be a demographic predictor of suicide (Kowalski, Faupel, and Starr, 1987). In contrast, extended family households may offer protection against suicide, particularly for elderly people (Dodge and Austin, 1990). The effect of isolated living arrangements, lack of social supports, and loss of relationships may be related both to increased loneliness and demoralization, and because of a lack of contact, communication or supervision to a lesser chance of being rescued during a suicide attempt (Grundlach, 1990). The impact of living arrangements, however, must be understood in the context of local economic conditions, family structure, and cultural values.

Aboriginal people living on-reserve have higher overall mortality rates than those living off-reserve (Frideres, 1998; Thornton, 1987)—although many possible factors could account for this observation. Forced relocation of entire communities has repeatedly been noted to have devastating effects on psychological well-being (Berry, 1993; Shkilnyk, 1985; Marcus, 1992; Dussault and Erasmus, 1994). The loss of power, social segregation, and marginalization intrinsic to being placed on reservations by a distant and paternalistic government has long been recognized by many authorities as contributing directly to suicide among Aboriginal people (Devereux, 1961).

Aboriginal people are overrepresented in the urban homeless population. For example, in Edmonton, Aboriginal people comprise about 6 per cent of the overall population, but 43 per cent of the homeless (Treasury Board of Canada Secretariat, n.d.). A study of 330 homeless people in Toronto found that about 61 per cent had suicidal ideation and 34 per cent had made a suicide attempt (Eynan et al., 2002). In a qualitative study of street youth, 46 per cent had attempted suicide at least once and the majority had made multiple attempts (Kidd, 2004).

Incarceration

In 2002–2003, Aboriginal people comprise about 18 per cent of the federally incarcerated population (Indian and Northern Affairs Canada, n.d.). The rates of incarceration of Aboriginal people in provincial institutions (for those serving less than two years) vary across the country, but in the western provinces, particularly Saskatchewan and Manitoba, Aboriginal men make up 68 to 80 per cent of the prison population (Beattie, 2005). Isolation and seclusion of people in custody puts them at considerable risk for suicide (Bonner, 1992). Individuals who commit suicide in prison are more likely to have histories of pre-existing psychiatric disorders, substance abuse, and previous suicide attempts (He et al., 2001). Given the gross overrepresentation of Aboriginal people in the corrections system, the confinement of individuals in prison is a substantial contributor to suicide among Aboriginal people (Medical Services Branch Steering Committee on Native Mental Health, 1991b; Satzewich and Wotherspoon, 1993). Encounters with the law affect both immediate and long-term suicide risk, and so addressing the impact of legal trouble and confinement is an important focus for suicide prevention (Duclos, LeBeau, and Elias, 1994).

Family and Religion

Since Durkheim's work, it has been observed that religion affects the suicide rate, with higher rates found among Protestants compared to Catholics and Jews. In a study of suicide rates in the United States, Stack and Lester (1991) found no effect from the type of religious affiliation, but more frequent church attendance

was associated with a lower rate of suicide. This effect of religiosity was independent of education, gender, age, and marital status. A study of people hospitalized for depression found that those with religious affiliations had lower lifetime suicide rates; this was related to greater moral objections to suicide and lower levels of aggression (Dervic et al., 2004). A high proportion of individuals without religious affiliation in a community has also been found to be associated with an increased risk of suicide (Hasselback et al., 1991). In a study of Inuit youth in one community in Nunavut, it was found that regular church attendance was associated with a lesser likelihood of suicide attempts (Kirmayer, Malus, and Boothroyd, 1996).

Quality of family life and religiosity are highly correlated (Stack, 1992). The impact of religion on suicide rates may arise, not only through the effect of specific beliefs about suicide, the meaning of suffering, and the afterlife but also as a result of the ways in which religious affiliations and practices organize social support networks (Pescosolido and Georgianna, 1989). Religiosity may reduce the suicide rate through its effects on strengthening social bonds through participation in community activities.

A recent study of more than 1,400 individuals of two Northern Plains Indian communities in the United States found that those who had strong cultural-spiritual orientations were significantly less likely than others to make suicide attempts (Garoutte et al., 2003). This positive effect of cultural-spiritual orientation (i.e. specific ways of looking at the world and oneself, such as “there is balance and order in the universe,” “I am in harmony with all living things”) persisted when age, gender, education, heavy alcohol use, substance abuse, and psychological distress were statistically controlled. The questions used to measure cultural-spiritual orientation in this study may tap general well-being and also have elements in common with measures of sense of coherence (discussed in Chapter 3). Nevertheless, this study lends support to the observation that engagement with cultural-spiritual practices can provide protection against suicide.

Social Disorganization and Traditionalism

Social disorganization and fragmentation may contribute to suicide in a population independently from poverty and economic deprivation (Evans, Middleton, and Gunnell, 2004). A study by Bachman (1992) of the correlates of suicide rates among Native American people and averaged over a period between 1980 and 1987 in 100 different reservation-counties in the United States examined three hypotheses:

- 1) the higher the rate of social disorganization within a reservation community, the higher the rate of suicide;
- 2) the higher the level of economic deprivation within a reservation community, the higher the rate of suicide; and
- 3) the more traditional and integrated a reservation community, the lower the rate of suicide.

Social disorganization was measured by the mobility rate (i.e. proportion of tribal members who did not live on their current reservation in 1979 or 1980). Economic deprivation was measured by three indicators:

- 1) the percentage of families below the poverty level;
- 2) the percentage of unemployed; and
- 3) the percentage of 16 to 19 year olds who had dropped out of school.

Traditionalism versus acculturation was measured by the percentage of the county population that was American Indian.⁶ This was intended to tap the degree of contact with non-Indian society. The percentage of the American Indian population between the ages of 18 to 24 was included as a demographic control since the suicide rate is known to be highest for this age group.

The first and third hypotheses were not confirmed. Mobility was not significantly related to the suicide rate. The percentage of the county that was American Indian was actually positively correlated with the suicide rate. The economic indicators that significantly related to the suicide rate included the unemployment rate and the percentage of families below the poverty line, and there was a trend for the school drop-out rate that also contributed. Further, homicide was closely related to suicide suggesting that some common factors increase the risk of violent death.⁷ In addition to such shared underlying factors as alcoholism and family violence, the loss of family members by violent death is more likely to lead to complicated grief reactions and increase the risk of subsequent suicide. When the homicide rate was added to the model, it was the most significant predictor of the suicide rate, followed by the economic indicators.

This study is limited by the crude measures of social disorganization and traditionalism; however, of the variables examined, economic deprivation emerges as the most important contributor to suicide risk. These results suggest it was neither acculturation nor traditionalism *per se* that contributed to suicide risk but the degree of economic deprivation. Economic hardship has its impact both through restricting individual resources and local infrastructure. In the larger context of a wealthy society, poverty creates feelings of relative deprivation with consequent damage to self-esteem and self-efficacy or competence.

Cultural-Historical Factors

One of the other things I realized is our Inuit culture, or our traditions ... I guess it was always helpful for the youth to go and talk to their elders a lot, and the elders, like a lot of people don't think that they may have gone through all these situations or what not. Really, they've gone through a lot and they know a lot more than we do, and I've had a lot of help from elders and maybe that's just one of the things I could suggest to anyone, is that if they ever needed someone to talk to, the elders can really help a lot too (Inuit youth).

Suicide must be considered in its contemporary and historical-cultural contexts for different Aboriginal groups (Hunter et al., 2001; LaFromboise and Bigfoot, 1988). In North America, historical and ethnographic records suggest that suicide was rare in pre-contact times, but data are very limited (Pine, 1981). Despite wide variations in beliefs and practices, most Aboriginal cultures had explicit negative attitudes and prohibitions against suicide. In many Aboriginal traditions, those who died by suicide were denied ordinary funeral and burial rites and their spirits were said to dwell in a separate realm from those who died by other means (Hultkrantz, 1979). This was the case for Athabaskans (Fortune, 1989) as well as the Huron and Iroquois nations (Tooker, 1991).

⁶ This measure of acculturation is actually a poor proxy for cultural change since the main reason non-tribal members currently live on reservations was the historical practice by the Bureau of Indian Affairs to allocate parcels of land to individual tribal members who could in turn sell these parcels to non-tribal members.

⁷ Suicide rates tend to be highly correlated with homicide rates in Native American communities, ranging from $r=.44-.52$ (Bachman, 1992; Young, 1990).

Altruistic suicide by the incurably ill or disabled was described in some early historical reports of Aboriginal people, but it usually seems to have been a response to desperate circumstances. Many accounts make no mention of this practice and its true prevalence is unknown (Vogel, 1990). In fact, the epidemics of contagious diseases brought over by European colonizers that decimated the Aboriginal population may have provoked many suicides through the utter despair felt by individuals who had lost their families and communities (Fortune, 1989; Thornton, 1987; Stannard, 1992).

In the boreal or subarctic regions, suicide was sanctioned, indeed institutionalized, as a response to insoluble marital problems or as an act of mourning for the loss of a loved one (Group for the Advancement of Psychiatry, 1989). Among the Tlingit, suicide was occasionally used as a calculated act of defiance: "An injured person who has no possibility of revenge, or someone who is pursued and sees no way out, takes his life with the thought that he is thereby injuring his enemy" (Krause, 1956:155). For the Huron in the early 1600s, two common reasons for suicide were excessive grief or vengeance for having been wronged by parents or relatives (Tooker, 1991).

Ethnographic accounts of the Inuit suggest that suicide was traditionally sanctioned when an individual became a burden to the group (Leighton and Hughes, 1955). Grief over the death of kin was also recognized as a legitimate reason for taking one's own life. Balikci (1961) described a group of Inuit with many suicides over a period of several decades, some for seemingly minor frustrations or casual reasons. However, reports of suicide occurring for insignificant reasons among Aboriginal people usually were made when linguistic and cultural barriers to communication left observers ignorant of the sufferer's predicament. For example, as noted in Chapter 3 of this report, contemporary Inuit youth sometimes report "boredom" as a reason for attempting suicide, giving the superficial appearance that it is a casual act (Kirmayer et al., 1994b). However, "boredom" may mask intense feelings of emptiness and alienation, and closer examination usually reveals significant family conflict and depression (Jervis et al., 2003). Certainly, the suicides of contemporary Inuit youth who represent the future of their people do not fit the traditional Inuit model of altruistic sacrifice by a sick and disabled elder when the family group faces starvation (Kirmayer, Fletcher, and Boothroyd, 1997).

The field of cross-cultural psychology has focused on the broad contrast between egoistic or individualistic cultures (making the individual always the central value) and those that are sociocentric or communalistic (emphasizing the value of the family or community). This model must be expanded to encompass the cultural knowledge and values of Aboriginal people. In some respects, many Aboriginal communities appear sociocentric in that the individual identity is deeply rooted in ties to family, band, or community. In other respects, Aboriginal values conceive the person as more autonomous than the Euro-American concept of the individual, in that traditional values of respect for the individuals' own choices and non-interference with their actions are central to the community (Brant, 1990; Briggs, 1983).

In addition to the contrast of individualistic and sociocentric versions of self, a third aspect, not adequately incorporated in current psychological models, concerns the role of the environment in the experience of the *ecocentric self*. In many traditional Aboriginal world views, the land, the animals, and the elements are all in transaction with self, and indeed in some sense, constitute aspects of the person (or rather, the human person participates in these larger more encompassing realities) (Martin, 1978; Stairs, 1992; Tanner, 1979). Damage to the land, appropriation of land, and spatial restrictions may all constitute assaults on the individual and collective sense of self of those who adhere to this ecocentric world view (Richardson, 1991; Wadden, 1991). These environmental attacks on self may have psychological consequences that are

equivalent in seriousness to the loss of social role and status in a large-scale urban society or to a farmer's loss of land, which simultaneously threatens both livelihood and identity. The result is certainly a potential loss of self-esteem, but also the undermining of a distinctive form of identity and self-efficacy that has to do with living on and through the land (Brody, 1975; 2000). The implication is that issues that may seem purely political or territorial for the dominant society may be fundamental issues of collective and personal identity and well-being for some Aboriginal individuals and communities.

Culture Change, Modernization, and Acculturation

I believe that culture is very important for each individual in the community because of identity? Like I was raised many years ago and I felt like I'm caught between two cultures. And when you look at it in a positive way, its good to know both sides, but it was very important to me to find out where I came from and have an identity. And have knowledge about my culture and get rooted. You know, to get rooted where I could stand up and say "this is me" and be proud of it. And you find a lot of students— I'm a school counsellor at home so I dealt with a lot of people, a lot of teens and students—identity's a big problem and culture ... is very important ... culture is very important for them to make a stand and have an identity. And that's what helps with suicide — to know who you are and not be mixed up or in between or something where you can't find your own balance (First Nation adult).

For Aboriginal people, cultural change has been driven both by their own economic interests and by tremendous external pressure from government, economic, educational, medical, and religious institutions at various points of their history (Adams, 1989; Berger, 1991; Crowe, 1991; Dickason, 1992; Miller, 2000; Moore, 1993; Satzewich and Wotherspoon, 1993; York, 1990). This process of cultural confrontation and change has usually proceeded at a pace dictated by interests outside the Aboriginal communities.

Changes have been particularly profound for Aboriginal groups that were hunter-gatherer societies organized at the level of extended family, clans, bands, or tribes. In most cases, these groups were accustomed to mobility across large territories with low population densities and relatively unstructured social systems. The process of sedentarization has changed all of these dimensions of traditional life. Communities of several hundred or a few thousand unrelated individuals living in overcrowded dwellings with complicated new political and bureaucratic institutions that restrict freedom of activity are now the reality for most Aboriginal people. These changes have disrupted traditional roles, identities, and patterns of interaction and support as well as social networks. Increasing rates of suicide and other social and psychological problems among Indigenous people worldwide have been attributed to such changes (Leineweber et al., 2001; Leineweber and Arensman, 2003).

Acculturation

"Acculturation" is a term for the accommodation of individuals from one cultural background to the encounter with a new culture. Berry (1993) notes that at the level of the group, acculturation may involve many types of changes:

- 1) changes in physical environment including location, housing, population density, urbanization, environmental degradation, and pollution;
- 2) biological changes in nutritional status and exposure to communicable diseases;

- 3) political changes, transforming or dissolving existing power structures, and subordinating them to the dominant society;
- 4) economic changes in patterns of subsistence and employment;
- 5) cultural changes in language, religion, education, and technical practices and institutions; and
- 6) changes in social relationships, including patterns of inter- and intra-group relations.

Berry (1976; 1985) described four different patterns of response to acculturation: integration, assimilation, separation, and marginalization. The choice (or emergence) of a particular response to acculturative stress is based on two variables:

- 1) whether traditional culture and identity are viewed as having value and are therefore to be retained; and
- 2) whether positive relations with the dominant society are sought.

In general, integration and assimilation are viewed as positive outcomes by the dominant society—integration involves a form of biculturalism while assimilation amounts to abandoning one's identification with one's culture of origin for the dominant culture. In fact, active efforts to maintain traditional culture may sometimes be protective against the disruption brought on by too rapid cultural change:

Groups that have maintained separationist responses, such as many of the Southwestern Pueblos and the Navajo, have experienced lower suicide rates than other Native Americans faced with the combined pressures of modernization, technological change, and acculturative stress (Group for the Advancement of Psychiatry, 1989:51).

However, as these same authors note:

Where traditional lifestyles and values have been eroded by displacement, disease, persistent unemployment, poverty, and religious and educational efforts to discourage "old ways," separationist and integrationist adaptations tend to break down. Many Native American groups have endured this situation for generations; with pathways to assimilation to the dominant society blocked, they have slipped or been forced into cultural marginalization. These groups have lost many essential values of traditional culture and have not been able to replace them by active participation in American society in ways that are conducive to enhanced cultural and psychological self-esteem. The feelings of loss, alienation, self-denigration, and identity confusion engendered by this situation are reflected in the escalating rates of suicide witnessed in many Native American communities (Group for the Advancement of Psychiatry, 1989:51–52).

The increase in rates of suicide among many Aboriginal groups in recent decades has paralleled the increase in culture contact and acculturative stress. Some authors have suggested that higher rates of suicide are found among Native American groups in greater contact with the dominant society (Group for the Advancement of Psychiatry, 1989; Van Winkle and May, 1986). Increasing rates of suicide among Inuit and Athabaskan people have been associated with greater contact with southern culture and with access to alcohol (Kraus and Boffler, 1979). However, this pattern may not be consistent across all groups. For example, among the Navajo, rates of suicide did not vary on different reservations with the degree of contact with the dominant society (Levy and Kunitz, 1971). Navajo culture has a long history of change, incorporating knowledge and practices from other groups with whom they came into contact (Webb and Willard, 1975). The crucial issue

may be the trajectory of the process of acculturation, which in turn depends both on traditional patterns of cultural change and on the pattern of negotiation with the dominant society.

As noted above, Bachman (1992) found that more traditional communities actually had higher suicide rates. In attempting to explain this finding, Bachman cites Berlin's cautions about the dilemmas of tradition versus modernity:

Traditional communities, however, may impose old values on adolescents and young adults that may also lead to suicides or suicide attempts. For instance, an important American Indian value is that people should not strive to be better than others and thus cause others to lose face. In school and even in athletic events, being singled out as a superior student or athlete may bring ostracism or even physical chastisement from the peer group. Thus, at times, traditional tribes' values may be used to the detriment of their young people (Berlin, 1987: 226).

However, many other explanations are possible. Bachman's (1992) measure of "traditionalism" was imprecise and may have also reflected segregation, political disempowerment, and the small size and social isolation of communities. Without further controls and a more direct measure of traditionalism and acculturation stress, the relationship is still inadequately tested. To a large extent, the problem is that acculturation does not involve only one aspect or dimension of life, but the process of change may go on to different degrees in different domains, with varying consequences for mental health and suicide risk.

A study of a community sample of 3,000 Native Hawaiians found that rates of attempted suicide were higher among those with a stronger cultural affiliation (Yuen et al., 2000). Ethnicity *per se* was not related to suicidality. This effect of cultural affiliation must be understood in terms of the demography of Hawaii and the significance of cultural identity and practices in the context of a larger society that devalues and discriminates against Indigenous people. Similarly, a study of behavioural problems among Sami youth in Norway, which found higher rates of problems among those with stronger ethnic identity, illustrates how the impact of the style of acculturation can only be understood in terms of the position of Indigenous people *vis-à-vis* the dominant society (Kvernmo and Heyerdahl, 2003). Although managing bicultural identities and allegiances is complex and demanding, exclusive identification to traditional culture and identity may be problematic for youth living in local and global social contexts where others do not understand or value their heritage.

Acculturation stress is a result of a change in the relationships, knowledge, languages, social institutions, beliefs, values, and ethical rules that bind people and give them a collective sense of who they are and where they belong. For Aboriginal people, such stresses have included: loss of land, traditional subsistence activities, and control over living conditions; suppression of belief systems and spirituality; weakening of social and political institutions; and racial discrimination (Novins et al., 1999). In an analysis of data from 18 Native American tribes, the correlation between suicide rates and an index of acculturation stress was 0.46 ($p < 0.05$), whereas the correlation between suicide rates and "traditional integration" was -0.64 ($p < 0.001$) (Lester, 1999). Thus, there may be a sort of "inverted U" relationship between traditionalism and suicide in which both very traditional and highly assimilated individuals or communities are protected from suicide, while those in the intermediate state experience greater conflict and confusion about identity resulting in increased risk for suicide.

Some authors, including John Berry (1980), have suggested that marginalization involves a sort of "deculturation" in which individuals acquire the skills, values, and tradition of no one culture. This describes

the situation of many Aboriginal youth—deprived of a deep education in their tradition, lacking the knowledge and linguistic skills of their elders, and distant or cut off from the mainstream of Canadian society by poverty, isolation, and educational barriers. Berry suggests that among Aboriginal youth in northern Ontario, suicide “is related to the situation of being caught between two cultures, and being unable to find satisfaction in either” (1993:17 as cited in Kirmayer et al., 1994b:55). Reflecting on Inuit youth suicides in Nunavik from 1989 to 1993, anthropologist and linguist Louis-Jacques Dorais writes: “Caught between life on the land, about which they do not know enough, and the modern labour market, whose doors seem reluctant to open up to them, many young people have developed a feeling of being totally useless” (1997:69). However, the notion of deculturation is misleading in that even in situations of rapid change or dislocation, people reconfigure or reconstruct cultural identity and practices (Del Pilar and Udasco, 2004). Contemporary Aboriginal youth are influenced by diverse family and community traditions as well as mass media and connections with other youth, both locally and globally through the Internet.

Education

In a representative sample of the general population in the United States, people who had at least a high school education were almost twice as likely to die by suicide than those who had less than a high school education (OR=1.91, 95% CI=1.37–2.67) (Kung, Liu, and Juon, 1998). An analysis of data on Cree communities in Quebec indicates that increasing education may place women at increased risk for psychological distress (Kirmayer et al., 2000). This may occur because of an increased burden of responsibilities and a greater frustration due to increasing expectations and barriers to opportunity.

Several observers have noted that suicides may occur among Aboriginal youth who have had more formal education than their Aboriginal peers, although they may have less education than their counterparts in the non-Aboriginal population (Travis, 1983). Brant suggests that these individuals suffered from a sense of failure because they “may have had ambitions about participating in mainstream society, but may have encountered difficulties competing for jobs or recognition because they were behind in terms of educational achievement” (1993:56). Similarly, in a discussion of the dramatic increase in the suicide rate in the Northwest Territories from 1971 to 1978, particularly among the Inuit, Rodgers (1982) noted that the person who died by suicide was often better educated, employed, and had spent time out of the community, all of which created a discrepancy between expectations and possibilities. Others saw him as a potential success, but he was unable to confide his self-doubts or fears due to the need to maintain an outward facade of self-reliance. The suicide victim thus maintains his or her image of success—to the satisfaction of the community—at the cost of a more basic level of acknowledgement and support from others.

Aboriginal people living on-reserve and in remote settlements are faced with the dramatic contrast between their immediate environment and cultural values and the larger world portrayed through mass media that reach into every community. In the transition to settlement life, young males may have experienced the greatest acculturative stress due to the discrepancies between traditional male roles of hunter, provider, and band member and the limited economic and job opportunities of contemporary settlement life. Young women may have found somewhat more continuity between traditional roles and those of mother and homemaker, which they still largely perform in addition to taking on wage-earning jobs (McElroy, 1975). Women’s traditional patterns of socializing during camp life may also have made them more receptive to professional skills and roles in health and social services; but women of all ages inevitably share in and suffer from the demoralization of the men in the community who are their fathers, husbands, and sons. For some Aboriginal groups, these changes have occurred quite recently—for the Inuit, in the last two

generations—and the contrast between the roles available in settlement life and when living on the land are still very apparent.

Forced Assimilation

The acculturation model implies that individuals and communities choose how they wish to adapt to contact with another culture; however, O'Neil (1985; 1986) has argued that this psychological view fails to consider the political context in which acculturation takes place. As a result, it exaggerates the extent to which individuals exercise choice in selecting traditional or modern values. In his work with Inuit youth, O'Neil found that the “coping styles” of young people were determined to a large extent by a colonial-political economy. He suggests that rather than viewing coping as a purely psychological process confined to the individual, it is better understood as the outcome of an interaction between the individual's choice or style of adaptation and powerful political economic constraints derived from both local and wider social forces (compare Moore, 1993; McDonald, 1994; Satzewich and Wotherspoon, 1993).

The pattern of acculturation also reflects the ideology of the dominant society (Berry, 1993). Canada has an explicit policy of recognizing Aboriginal cultures and languages and promoting multiculturalism, which should encourage individuals to maintain both their culture of origin and acquire new skills, values, and practices derived from the dominant society. Historically, however, government interventions (as well as the activities of educational and religious institutions) have been based on policies of assimilation or segregation (Adams, 1989; Dickason, 1992; Miller, 2000; Titley, 1986). The *Indian Act* (1876), the failed *White Paper* (Indian Affairs and Northern Development, 1969) and the residential school system represent major examples of legislation, policies, and processes that dramatically altered the “development” of contemporary Aboriginal communities. Despite changes in official policy, Aboriginal people in Canada have faced similar problems to those encountered by their counterparts in the United States and Australia. The next sections examine the history and impact of these policies of forced assimilation on the health of Aboriginal individuals and communities, and provide the background necessary to understand their broad impact on suicide.

The Impact of the Residential School System

Born out of the colonial relationship between the Canadian state and Aboriginal people, the residential school system was one of the most destructive tools fashioned by the federal government in its attempts to forcibly assimilate Aboriginal people (Miller, 1987; 1996; Furniss, 1995; Armitage, 1995; Feehan, 1996; Grant, 1996; Milloy, 1999).

Following the acceptance of the *Davin Report* in 1879, the federal government began the construction of church-run residential schools across Canada. These schools were the primary means of transmitting Canadian child welfare policy during the active assimilationist period (Armitage, 1995). The preference was for large residential schools located away from reserves as the federal government sought to minimize the amount of parent-child and elder-youth contact (Miller, 1987; 1996; Ing, 1991; Armitage, 1995; Grant, 1996; Milloy, 1999). School buildings were often hastily constructed with an eye more towards economy than for the safety of children (Graham, 1997; Milloy, 1999). Structures were erected using the cheapest and simplest materials and designs. Poor ventilation, overcrowding, and lack of safety equipment such as fire escapes were common. Despite the repeated recommendations of government investigators throughout the twentieth century, renovations on school buildings were rarely made, and Aboriginal children were forced to live, learn, and work in terrible conditions.

Residential schools were not geared toward academic achievement, but sought to train students for manual labour or industrial work. In some schools, children spent more time working in the fields than in the classroom (Milloy, 1999). The curriculum was designed to prepare Aboriginal children for assimilation, by conveying them from the perceived savagery in which they were living toward “civilization” (Milloy, 1999; Grant, 1996). Educational standards were significantly lower than those of neighbouring provincial schools, as the federal government and the Church operated under the assumption that there was a drastic difference between the intellectual capacity of Aboriginal children and that of non-Aboriginal children. Not surprisingly, most residential school students were unsuccessful academically (Haig-Brown, 1988; Bull, 1991; Knockwood, 1992; Miller, 1996; Fournier and Crey, 1997; Milloy, 1999).

The curriculum adopted by the residential schools ignored or openly denigrated the cultural heritage of students. Both the curriculum and the modes of instruction contrasted sharply with traditional forms of education in Aboriginal communities. Traditional education was based on respect, humility, sharing, caring, and cooperation (Grant, 1996). It was the responsibility of those with knowledge to pass it on, and the obligation of the young to learn. As such, Aboriginal elders were the primary educators of children in the pre-contact period and prior to the inception of formalized education (Johnston, 1988; Ing, 1991; Knockwood, 1992; Grant, 1996; Miller, 1996; Milloy, 1999). Looking, listening, and learning through modelling were the basic strategies of traditional Aboriginal education, while storytelling was the main teaching tool. Through their assault on Aboriginal languages, residential schools simultaneously threatened the transmission of traditional knowledge, the relationship between Aboriginal elders and children, and the collective memory of Aboriginal people (McLeod, 1998). With the physical and spatial separation of Aboriginal children from their communities, residential schools created conditions of a forced exile, leaving few bridges to sustain culture and identity (McLeod, 1998).

Reflecting the conservative Victorian values of the day, the Department of Indian Affairs held the ethnocentric view that Aboriginal cultures were “permissive,” and that Aboriginal parents lacked proper authority over their children (Milloy, 1999). Accordingly, discipline, regimentation, and punishment were the daily realities of the residential school student’s life. Residential school employees were encouraged to be firm with students, and, in many cases, this pedagogical philosophy was used to sanction and excuse extremes of violence and abuse.

Punishment was viewed as a mechanism that would transform wild, “uncivilized,” and permissive Aboriginal life into white Canadian order and civility (Colmant, 2000). To keep children in line and to prevent “insubordinate” activities, staff adopted practices such as deprivation of food, strapping, and solitary confinement (Milloy, 1999). Aboriginal children were harshly disciplined for many reasons including bed-wetting, communicating with a child of the opposite sex, stealing food, running away, talking back to staff, and being outside of school grounds. Among the most punishable offences was speaking an Aboriginal language (Haig-Brown, 1988; Bull, 1991; Knockwood, 1992; Feehan, 1996; Miller, 1996; Graham, 1997; Milloy, 1999).

Duncan Campbell Scott, Deputy Superintendent of Indian Affairs, proclaimed that it was the right and duty of the Canadian federal government to protect Aboriginal children against ill-treatment (Milloy, 1999). Despite this, there were no formal guidelines outlining the range of discipline permitted, and corporal punishment remained a dominant practice within the walls of the residential school (Miller, 1996; Milloy, 1999).

In 1921, a visiting nurse at Crowstand School discovered nine children “chained to the benches” in the dining room, one of them “marked badly by a strap.” Children were frequently

beaten severely with whips, rods, and fists, chained and shackled, bound hand and foot and locked in closets, basements and bathrooms (Johansen, 2000:18).

Incidents of this sort were not isolated, and were normally left unattended by the Department of Indian Affairs. There were several reasons for the hesitancy of the federal government to deal with such matters—some government officials were wary of church influence, while others sought to conceal the harsh treatment of Aboriginal children in the government records (Satzewich and Mahood, 1995). The residential school system was supposed to be evidence that the federal government was carrying out its obligations to Aboriginal people as wards of the Canadian state according to the *Indian Act*. Thus, it was imperative that the real conditions of the schools did not reach the Canadian public or, in more contemporary times, the international community.

The explicit intent of punishment was to cause pain and humiliation to undermine the oppositional self and force subjugation to the ideology of the school (Graham, 1997). Public humiliation is recalled as one of the most terrible experiences by residential school Survivors (Grant, 1996; Graham, 1997). For example, upon arriving at residential schools, children were given severe haircuts and issued numbers that were used to identify them (Johnston, 1988; Haig-Brown, 1988; Knockwood, 1992; Armitage, 1995; Miller, 1996; Graham, 1997; Milloy, 1999). In many Aboriginal cultures there was great symbolism attached to the hair; hence, the shearing of hair was a cause of great shame. This ritual constituted a direct assault on and negation of Aboriginal cultural values (Grant, 1996). At some schools, such as the Mohawk Institute Residential School and Mount Elgin Indian Residential School (both in Ontario), abuse was so frequent that students were classified based on the number of punishments they received and the reasons why they received them (Graham, 1997).

It was the professional responsibility of Indian agents to evaluate the conditions under which the students in their charge were living and learning. Indian agents had the power to recommend the dismissal of unsatisfactory teachers, principles, and staff to the Department of Indian Affairs, as well as the power to discharge students. The federal archives are peppered with negative reports filed by former Indian agents attesting to the cruel and inhumane conditions at many residential schools (Satzewich and Mahood, 1995; Milloy, 1999; Johansen, 2000). Unfortunately, there is little indication that Indian agents invoked their power to protect students with any regularity.

Sexual Abuse in Residential Schools

Although the exact number will probably never be known, a significant number of former residential school students endured sexual abuse (Haig-Brown, 1988; Knockwood, 1992; Miller, 1996; Grant, 1996; Fournier and Crey, 1997; Milloy, 1999; Johansen, 2000; Million, 2000). While the Canadian archives contain records of physical abuse filed by former Indian agents and government officials, official files virtually ignore the issue of sexual abuse (Milloy, 1999; Johansen, 2000). So too do the major “comprehensive” reports commissioned by the federal government: the *Bryce Report* in 1909 and the *Caldwell Report* in 1967. More often than not, official reports challenged the “moral aspect of affairs” (Johansen, 2000:19) or expressed concern over the perceived sexual abnormalities of Aboriginal children (Milloy, 1999). They also focused on the sexual behaviour of the children; specifically, sexual intercourse between boys and girls as well as homosexual behaviour among boys (Haig-Brown, 1988; Milloy, 1999). All of this served to hide or deflect attention from the adult perpetrators of sexual violence and exploitation.

The relatively recent acknowledgement of sexual abuse in residential school narratives raised questions about whether this reflected an unwarranted tendency to attribute distress to such abuse or even to recollect it when none actually took place. However, there is clear evidence that sexual abuse was a long-standing part of the residential school system (Miller, 1996). In the late nineteenth century, official records alluded to sexual misconduct on the part of an oblate recruiter, who was involved in the sexual exploitation of schoolboys (Miller, 1996). Abusers took many different shapes and forms, ranging from priests and nuns to students themselves. Types of abuse also varied. At the Moose Factory Anglican school, “a female staff member would take her showers with the younger Cree boys, ordering them to scrub her breasts and pubic area while she moaned ... An Ojibwa student at Shingwauk school in the 1950s recalled that one male supervisor was in the habit of sitting little boys on his lap and moving them about until he became sexually aroused” (Miller, 1996:330). Older students were also implicated in sexual abuse. Some older students who were socialized primarily in the system became abusers themselves and preyed on younger students (Haig-Brown, 1988; Piatote, 2000).

The collective silence about sex and specifically sexual abuse at residential schools allowed predatory sexual behaviour to take place over an extended period of time (Million, 2000). Nuns, priests, and administrators—people adhering to the moral narratives of the church and Canadian state—were all implicated in maintaining that silence. Most information about sexual abuse at residential schools has come from special inquiries and an examination of oral testimonies. These testimonies revealed that improper sexual conduct continued throughout the history of the system to the point where it has been concluded that sexual abuse at residential schools was systematic, not occasional or accidental (Miller, 1996; Milloy, 1999). The residential school system has been described as nothing short of “institutionalized pedophilia” (Fournier and Crey, 1997:72). Sexual abuse did not stay closeted at the residential school, but often made its way back into the communities as some of the victims who returned home became perpetrators (Feehan, 1996; Milloy, 1999).

Communities Without Children

At their peak, approximately one-third of all Aboriginal children between the ages of 6 and 15 attended residential school (Armitage, 1995). However, the impact of residential schooling extends much further. Children were away from their communities for approximately ten months out of the year. Students were often sent to schools located a significant distance away from their communities, making it very difficult for families to visit. The primary mode of communication between parents and children was letter-writing. School staff read these letters to ensure that complaints were not made of the quality of care or education their children were receiving (Haig-Brown, 1988; Miller, 1996; Milloy, 1999). The option of letter-writing was not available to many families, meaning that there was minimal communication between themselves and their children during the school year. This practice had profound effects on Aboriginal culture, community, and society.

Traditional Aboriginal communities were structured around the family. In the pre-residential school era, the extended family played a prominent role in child rearing (Haig-Brown, 1988; Bull, 1991; Ing, 1991; Grant, 1996). A general nurturing attitude was displayed towards all of the community’s children, even those who were orphaned (Bull, 1991; Grant, 1996). Government officials, particularly local Indian agents, historically failed to recognize the role of extended family and community in the area of child rearing. Using western European notions of family, Canadian officials focused their attention on the role of the nuclear family. This cultural misunderstanding shaped the perception that Aboriginal parents were unfit and resulted in the breaking apart of families and communities. Breaking up Aboriginal families by placing children in residential schools removed the traditional responsibility for child care from the community and placed it

in the hands of the church and the Canadian state. The practice of taking children from their families had an immediate impact on the structure of Aboriginal communities, and ushered in drastic changes in the parenting practices of many Aboriginal people (Ing, 1991).

The removal of Aboriginal children from their homes undoubtedly had painful and profound effects on their parents (Feehan, 1996). Haig-Brown (1988) argues that increased alcohol consumption amongst parents may have been the result of not feeling needed by their children, as well as the perception that their children blamed them for being sent to residential schools. She suggests that alcohol was used in an effort to cope with feelings of guilt and worthlessness that can be directly traced to the impact of the residential school system as well as to other experiences of oppression at the hands of the dominant society.

Intergenerational Effects of Residential Schooling

The institutional violence and sexual abuse that were pervasive throughout the history of the residential school system have been linked to much of the current suffering in Aboriginal communities. Central to this violence was the active suppression of Aboriginal culture and heritage that Aboriginal children were forced to endure at residential schools. Some scholars have concluded that cultural suppression was so severe at residential schools that it should more appropriately be examined within the frame of genocide (Haig-Brown, 1988; Grant, 1996; Chrisjohn and Young, 1997). The most profound example of cultural suppression surrounded the overt expression of Aboriginal culture. Aboriginal languages were the focal point of the federal government's assault on Aboriginal culture. Aboriginal languages were perceived to be examples of "cultural backwardness," and their use represented one of the most punishable offences and examples of insubordinate behaviour taking place at residential school (Miller, 1987; 1996; Haig-Brown, 1988; Johnston, 1988; Bull, 1991; Ing, 1991; Knockwood, 1992; Feehan, 1996; Grant, 1996; Fournier and Crey, 1997; Graham, 1997; Milloy, 1999; Colmant, 2000; Johansen, 2000).

The intense suppression of Aboriginal language and culture at Canadian residential schools has contributed to the contemporary situation in which several generations of Aboriginal people are unable to speak or understand their Aboriginal languages (Haig-Brown, 1988; Ing, 1991; Knockwood, 1992; Feehan, 1996; Grant, 1996; Fournier and Crey, 1997; Graham, 1997). Many parents, themselves the product of the residential school system, refused to teach their children their Aboriginal languages; they were conditioned to believe that "speaking" and "being" Indian were associated with punishment (Haig-Brown, 1988; Ing, 1991; Knockwood, 1992; Feehan, 1996; Grant, 1996).

The inability to communicate in Aboriginal languages created an immediate communication gap between Aboriginal elders and youth. This gap greatly diminished the opportunity for Aboriginal children to gain respect for their elders, their language, and their cultures leading to a rejection of traditional ideas, values, and practices (Ing, 1991). Many internalized a sense of inferiority and shame as intrinsic to their identity as Aboriginal people. The practical skills taught in residential schools prepared students for little more than menial jobs in a world that was not ready to accept them as equals. Unable to understand their Aboriginal languages or participate in cultural practices, they found themselves in a marginalized position as neither fully Aboriginal nor "mainstream."

Studies conducted in the United States have linked the child care problems now found among Aboriginal parents to the practice of separating children from their parents during the residential school era (Ing, 1991). Milloy (1999) contends that the strict regimentation that characterized the residential school education

produced individuals who were not capable of leading an independent life within their own communities or in the dominant society. Participants in a study by Theresa Feehan (1996) attributed their difficulty in expressing emotions to their experiences as residential school students where they refused to show emotion as a form of resistance. Similar accounts were given to Celia Haig-Brown (1988) in her work with former students at the Kamloops Indian Residential School in British Columbia. Personal testimonies contained in Elizabeth Graham's (1997) work tell of the cultural and emotional poverty of former students at the Mohawk Institute Residential School and Mount Elgin Indian Residential School, both in Ontario. They also indicate how many former residential school students feel unable to express positive emotions and, as a result, have had difficulty establishing functional adult relationships with companions or family members.

The practice of removing Aboriginal children from their families disrupted the role of the extended family and kinship networks in many Aboriginal communities, and may also have undermined traditional cultural sanctions against physical and sexual abuse (Fournier and Crey, 1997). Many have cited the residential school system as an origin of contemporary sexual abuse in Aboriginal communities. While the literature fails to generate solid statistics on the number of students sexually abused at residential schools, qualitative studies suggest that a significant percentage of students suffered from sexual abuse at the hands of educators, administrators, and fellow students (Haig-Brown, 1988; Knockwood, 1992; Satzewich and Mahood, 1995; Feehan, 1996; Grant, 1996; Miller, 1996; Chrisjohn and Young, 1997; Fournier and Crey, 1997; Milloy, 1999). Recent court cases against various branches of the Church have revealed the extent of the abuse that many former residential school students experienced.

The widespread abuse of students made its way back to many communities as students began internalizing, normalizing, and recreating the dysfunctional sexual relationships of the residential school in their communities (Bull, 1991). Many residential school students were victimized by those in positions of power (ironically those responsible for their nurturing) and later sought similar power over others. These practices resulted in the intergenerational abuse of many Aboriginal people. To the extent that individuals in positions of power and authority have perpetrated such abuse within communities, this has served to further undermine the safety and security of traditional cultural and community organization, including the role of Elders. Thus, not only was the residential school system responsible for the initial abuse that many were forced to endure, it has also contributed in some places to the breakdown of traditional cultural sanctions against such practices (Fournier and Crey, 1997).

Linking Residential Schools to Suicide

A wide range of contemporary problems including high incidences of physical and sexual abuse as well as suicide have been attributed to residential schooling (Haig-Brown, 1988; Bull, 1991; Knockwood, 1992; Feehan, 1996; Grant, 1996; Fournier and Crey, 1997; Colmant, 2000).⁸ Studies of former boarding school students in the United States have linked the residential school experience to high rates of mental illness, child abuse, and family breakdown (Colmant, 2000).

⁸ This is not to say that every Aboriginal person is directly affected by the residential school experience, nor does it mean that the residential school system should be considered responsible for every social problem afflicting Aboriginal communities today. Many former residential school students have been able to lead successful and healthy lives. Some scholars have suggested that the residential school education provided leadership skills to a generation of Aboriginal individuals who have been at the forefront in negotiations with the federal government (Miller, 1987; Grant, 1996). However, this positive attribution has been challenged by Chrisjohn who notes that since about half of all Indian children went to residential schools, it is not surprising that leadership qualities developed in some despite the adversity (Chrisjohn and Young, 1997).

The linking of individuals' current mental health problems to past residential school experiences has led some to speak of a "residential school syndrome" (RSS). This term began appearing shortly after the First National Conference on Residential Schools in Vancouver, British Columbia on June 18–21, 1991. However, the notion of RSS implies a consistency of symptoms and a simple one-to-one relationship between cause and effect that do not fit reality. There is no unique or specific set of symptoms or problems that result from the violence and privations of residential schools, nor was exposure to the hardship of the schools the only determinant of subsequent suffering. In fact, the negative consequences of residential schools stem as much from their transgenerational impact on the subsequent functioning of families and communities as from their direct impact on the individual.

The notion that there is a distinct residential school syndrome has evoked strong criticism from some scholars. By focusing on individuals suffering from the effects of residential schooling, the notion of RSS serves to deflect attention from the political significance of residential schooling, the immorality of forced religious indoctrination, and the paternalism that informed the system (Cariboo Tribal Council, 1990; Chrisjohn and Young, 1997). Using the metaphor of a medical syndrome also tends to remove responsibility for dysfunctional behaviour from the person diagnosed with RSS, and this may impede the search for personal meaning and the recognition of other social determinants of health and illness.

Despite the trauma that a significant number of former residential school students experienced, many have been able to lead successful and healthy lives. Although academic achievement was rarely a focus at residential schools, many people credit residential school education as having provided them with a foundation for future educational pursuits (Miller and Danziger, 2000). The variation in experience may reflect differences across schools as well as the age at which children were separated from their families to be sent to school, with early separation (ages 5–8) having the most severe effects on subsequent mental health (Ing, 1991).

There are very limited survey data that have examined the impact of residential schools on suicide directly. The 2002/03 First Nations Regional Longitudinal Health Survey found that 19.4 per cent of adults who had attended residential schools had attempted suicide at some time in their lifetime, but this did not differ significantly from the rate of those adults who had never attended a residential school. Among youth who had one or more parents attend residential school were more likely to have had suicidal ideation than those whose parents had no residential school experience (26% vs. 18%, respectively); however, there was no significant difference in rates of suicide attempt (First Nations Centre, 2005).

Dion Stout and Kipling (2003) assert that the residential school experience resulted in early death of many individuals, often through suicide. Life histories of individuals who experienced the residential school system suggest many potential links with subsequent mental health problems in the individual, their children, and the community as a whole (Haig-Brown, 1988; Furniss, 1992; Fournier and Crey, 1997; Milloy, 1999; Johansen, 2000; Piatote, 2000).

Suicide is associated with a history of separations, losses, and emotional deprivation early in life. The residential school experience was characterized by early separation of children from their parents and all that was familiar to them. Upon being removed from the comfortable environment of home, children were placed in environments of cultural and emotional poverty. They found themselves in environments that resembled prisons, where they were to stay ten months of the year for twenty-four hours a day (Grant, 1996). Total institutions, such as prisons and boarding schools, increase suicide risk when they isolate and seclude the individual (Bonner, 1992; Dinges and Duong-Tran, 1994; Kleinfeld and Bloom, 1977).

In addition to removing children from their parents for extended periods of time, the residential school system exposed students to physical and sexual abuse, as well as intense cultural suppression. Histories of severe childhood abuse are common among individuals with borderline personality disorder who are themselves prone to multiple suicide attempts (Paris, Nowlis, and Brown, 1989). At least one study in the United States has linked the impersonality and sterility of the American Indian boarding school experience to the development of personality disorders in former students (Krush et al., 1966). In another study on the effects of boarding schools on American Indian youth, Berlin (1987) contended that the poor conditions of the boarding schools have contributed to alarmingly high suicide and dropout rates.

These effects on the generations directly exposed have affected their children and communities in many ways so that the impact of the trauma, loss, and cultural suppression of residential schools has continued across generations. Table 4-1 lists some of the pathways by which residential school exposure may exert transgenerational effects on health and suicide risk.

Table 4-1) Transgenerational Effects of Residential Schools

♦ Enduring psychological, social, and economic effects on Survivors ♦ Models of parenting and child rearing based on institutional experiences ♦ Patterns of emotional responsiveness and expression ♦ Repetition of physical and sexual abuse ♦ Loss of cultural knowledge, language, and tradition ♦ Undermining individual and collective identity and self-esteem	♦ Devaluing and essentializing Aboriginal identity ♦ Individual and collective disempowerment, loss of control, and lack of efficacy ♦ Disruption of family and kinship networks ♦ Destruction of communities, nations, or peoples ♦ Damage to relationship with larger society – popular images, racism, stereotypes, government tutelage and bureaucratic control, and judicial and corrections system – sense of living in a just society
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The Child Welfare System and Systematic Out-Adoption

By the 1960s, social and human rights groups had begun to condemn the practice of placing “neglected” Aboriginal children in residential schools and the federal government had already begun to phase out the program. Most schools had been closed by the mid-1970s, although a few remained open until 1996. At the same time, government and policy-makers argued that alternative methods were needed to educate, provide “care,” and protect Aboriginal children from the destructive elements of their culture and reserve life. Beginning in the 1960s, large numbers of Aboriginal children were apprehended from their families and placed in the care of child welfare authorities and non-Aboriginal foster families in Canada and the United States. This period was dubbed the “Sixties Scoop” by Patrick Johnston (1983), a researcher with the Canadian Council on Social Development, and represents a contemporary source of social discord and identity confusion for many Aboriginal individuals, communities, and cultures (York, 1990; Royal Commission on Aboriginal Peoples, 1996a; Fournier and Crey, 1997; Bennett, 2005; Brant Castellano, 2002).

In 1955, there were 3,433 children in the care of British Columbia's child welfare branch, and less than one per cent of the total number were of Aboriginal ancestry (Johnston, 1983). Over the next three decades, the proportion of Aboriginal children in care in many Canadian provinces rose dramatically so that, by the conclusion of the "1960s, approximately 30 to 40 percent of legal wards in the child welfare system were Aboriginal status children" (Bennett, 2005:19). By the late 1970s, about one in four status Indian children could expect to be removed from their homes for most of their childhood, a figure that climbs to one in three if non-status and Métis children are included (Fournier and Crey, 1997). In Saskatchewan in the late 1970s, it was estimated that 66.8 per cent of children in care were Aboriginal (Johnston, 1983). By the early 1980s, about 40 to 60 per cent of all children removed from their natural families in western Canada were First Nation or Métis.

During this period, Aboriginal children were removed from their homes and placed in "care" for a variety of reasons. Like the residential school system where children were apprehended for such reasons as being orphaned, destitute, or having parents of questionable moral character, the need for welfare (child and economic) was often a result of perceived parental moral shortcomings. The Department of Indian Affairs expressed concerns about the ability of Aboriginal parents to provide proper "care" for returning residential school students following the closure of many schools. It was argued that because of such factors as alcoholism, lack of supervision, and parental immaturity, returning students required continued departmental supervision. This supervision came in many forms; one practice adopted by the department was to place responsibility for returning students into the hands of child care agencies. It was believed that finding foster homes for former students would be a cost-effective way to address the "void" left by the closure of residential schools (Milloy, 1999).

The child welfare system played an increasingly profound role in the lives of Aboriginal people with the decline of the residential schools. Indeed, many have argued that the child welfare system through its large-scale removal of Aboriginal children from their families, culture, and communities be considered a continuation of the policies of forced assimilation of the residential school system (Johnston, 1983; York, 1990; Fournier and Crey, 1997).

The Extension of Child Welfare to Aboriginal Communities

Federal and provincial legislation was integral to enabling the increased surveillance over Aboriginal people, and the subsequent apprehension of large numbers of Aboriginal children from their families and their placement in the care of child welfare agencies. Unlike the United States, where the 1978 federal *Indian Child Welfare Act*⁹ governed the extension and application of child welfare services to Indian tribes, jurisdiction over social services for status Indians in Canada was often unclear and a source of tension between the federal and provincial governments. This changed somewhat with the 1951 amendment to the federal *Indian Act* (1876) that extended the provision of provincial child welfare to First Nation

⁹ Similar to the situation in Canada, there was a disproportionately high number of American Indian children in the United States child welfare system. Between 1969 and 1974, approximately 35 per cent of Indian children were placed in "care;" between 1971 and 1972, 34,538 Indian children lived in institutional care facilities (Matheson, 1996). The 1978 *Indian Child Welfare Act* was put into place to reduce the number of Indian children who were removed from their families and placed in non-Indian homes (Johnston, 1983). The act places specific guidelines about the preferences for placing Indian children in adoptive homes, thus preventing the practice of the "wholesale separation of Indian children from their families" (as cited in Barth, Webster, and Lee, 2002:140; Matheson, 1996)..

people living on-reserve (Johnston, 1983; Crichlow, 2002) and served to make provincial laws generally applicable to reserve populations (Fournier and Crey, 1997; Milloy, 1999; Bennett, 2005). Prior to the 1951 amendment, provincial child welfare departments and Children's Aid Societies did not operate in reserve communities, resulting in a minimal number of Aboriginal children in the care of external child welfare officials (Johnston, 1983).

Before the application of provincial child welfare programs and standards to First Nation communities, many situations that required state intervention were addressed by local Indian agents. While there were minimal regulations in place governing how Indian agents were to address child welfare in reserve communities, the practice of "custom adoption" was a method employed by the local agent as was their continued placement of Aboriginal children in residential schools¹⁰ (Johnston, 1983; Fournier and Crey, 1997). "Custom adoption" was already a local practice in many Aboriginal cultures and, as an unofficial child welfare alternative, sometimes involved the Indian agent placing the child in the care of members of their extended family or another local family.

However "well-intended," the extension of formal provincial child welfare programs to First Nation communities did little to improve social problems in and welfare services available to reserve communities. The *Hawthorn Report* (Hawthorn, 1966), which examined the state of economic, political, and educational needs in reserve communities, argued that the state of child welfare services available to First Nations was unsatisfactory (Johnston, 1983). The absence of federal-provincial agreements in many provinces perpetuated jurisdictional problems and negatively affected the quality of care available to First Nation communities.

There were several other challenges to effective care present at the outset of provincial jurisdiction over child welfare. Provincial child welfare programs and authorities, most of whom had little knowledge of First Nation traditions and customs, had a very difficult time processing and understanding the nature of child-rearing practices and the significance and role of the extended family in Aboriginal communities (York, 1990). The extended family has historically played a vital role in the child-rearing process in Aboriginal communities and, in many circumstances, served as an institution of child welfare (Bennett, 2005). Aunts, uncles, grandparents, and cousins were key figures in the development and care of the community's children. However, it was non-Aboriginal values of what a family should be structured like and how parents should socialize their children that informed provincial child welfare programs. While there were clearly many instances of necessary and justified apprehension, it has been argued that the lack of cultural knowledge on the part of social workers and perceptions informed by a foreign value system resulted in the unnecessary seizure of many Aboriginal children from their communities (Johnson, 1983; York, 1990). Johnston states that many Aboriginal parents were perceived by child welfare agents to be unfit simply because of their economic status, and their children apprehended not because they were "unloved or unwanted or neglected" (Johnston, 1983:76), but simply because they were poor. Material and emotional poverty was a characteristic of most if not all reserves in the middle of the twentieth century, and continues to be present in many reserve communities across Canada.

¹⁰ It must be noted that by the 1950s, residential schools were being phased out by the federal government. Those that remained operational served more of a child welfare function, operating as "alternative parenting" institutions as opposed to educational institutions. For more information on the changing function of residential schools during the move towards integration see: Milloy, 1999:211–238.

Impact of the “Sixties Scoop”

The apprehension of Aboriginal children from their communities for child welfare purposes stripped some territories of almost whole generations of children.¹¹ Many Aboriginal families suffered multiple apprehensions and their children often placed in separate homes from one another. The comforting presence of siblings was not afforded, nor was the guarantee of adoption and a stable home. Greater numbers of Aboriginal children than non-Aboriginal children ended up “stuck” in the system and were bounced from home to home (Johnston, 1983).

These practices have had profound effects at individual, community, and wider cultural levels. Recognizing the unique nature of Aboriginal child-rearing practices, in particular, the increased role that the extended family plays, Johnston (1983) argues that individual Aboriginal children and their families have experienced removal more traumatically than their non-Aboriginal counterparts.¹² An examination of the narratives of those former children who were “scooped” out of their communities and placed in the “care” of strangers demonstrates the validity of Johnston’s argument and the similarities in experiences that child welfare wards shared with former residential school students. These narratives reveal that many former wards experienced cultural dislocation and liminality (marginalization), identity confusion, emotional emptiness, attachment disorders, abuse, substance addictions, racism from foster families, and self-hatred (York, 1990). Former Aboriginal child welfare wards are also overrepresented in Canadian penitentiaries. A 1990 study of Aboriginal prisoners in a Prince Albert penitentiary found that 95 per cent of them were products of group or foster care (Royal Commission on Aboriginal Peoples, 1996a). Graduates of the child welfare system also make up a significant portion of street kids and sexually exploited youth in Canada (Royal Commission on Aboriginal Peoples, 1996a; Brant Castellano, 2002).

The removal of Aboriginal children from their communities for educational and social welfare purposes lasted well over a century and resulted in great suffering and loss. The loss of children because parents were perceived to be unable to provide safety and care for them was shameful for Aboriginal families and communities (Royal Commission on Aboriginal Peoples, 1996a). Whole generations of Aboriginal parents were stripped of the right and responsibility to raise their children—who were not only precious to their individual parents, but also crucial for the future of the culture and community (Brant Castellano, 2002). The scale and persistence over time of the practice of removing Aboriginal children from communities jeopardized cultural survival, leaving Indigenous knowledge concentrated solely in the Elders.

Taken together, the policies of forced assimilation and other oppressive practices (e.g. legal prohibition of traditional religious practices) profoundly disrupted the transgenerational transmission of culture and identity. This rupture resulted in a collective loss of language and other forms of cultural knowledge. The mental health consequences of this discontinuity are only gradually being recognized by professionals and others outside Aboriginal communities. There is a need for much more research and reflection to understand the implications of the breaking of the bonds that link the generations and the ways in which these can be usefully reformed.

¹¹ This was the case with the Spallumcheen Band in British Columbia. In the 1960s, approximately 150 children—virtually an entire generation—were removed from the community and placed in non-Indian homes.

¹² Johnston (1983) contends that Aboriginal children were in a position of “triple jeopardy” from being removed from their respective families, communities, and cultures.

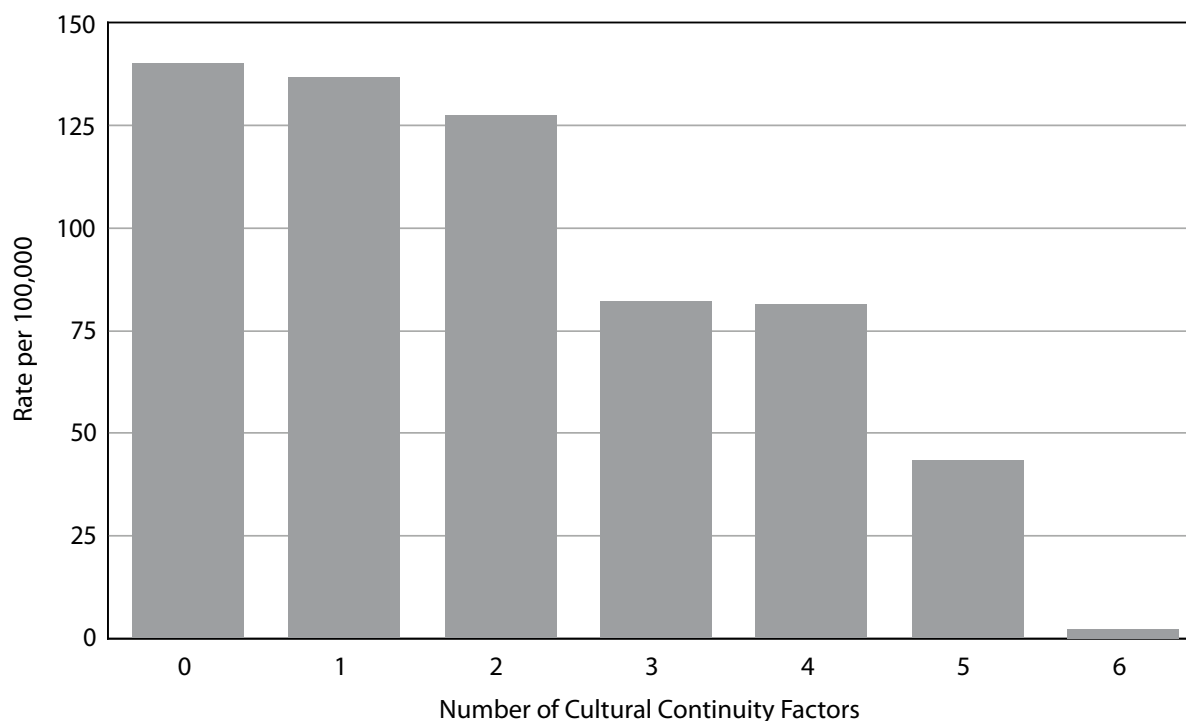
Cultural Continuity, Community Wellness, and Collective Identity

Another thing is that about ten years ago, we were put down in high school and stuff. Like I was, for the longest time, I wasn't even proud to be Native. I just wanted to be someone like everybody else ... but now that the youths ... are in the drum groups, they are asked to go everywhere and they're proud and it's nice to see a gleam in their eyes. And that they are proud of doing something that's got nothing to do with drugs or alcohol (First Nation adult).

The possibility that community wellness and collective identity may be protective factors for youth suicide has been the basis of some intriguing research by developmental psychologists Michael Chandler and Christopher Lalonde in British Columbia. They extended Chandler's earlier notions about the development of continuity of self in adolescent development to consider the role of "cultural continuity" in the health of communities (Chandler and Lalonde, 1995). They theorized that when communities have a strong sense of their own historical continuity and identity, resources are available to provide vulnerable youth with a bridge or buffer to help them get through periods of struggling with feelings of identity confusion and discontinuity. Where cultural transmission has been disrupted, vulnerable youth will have no such buffer and their risk of suicide may increase.

To indirectly test this hypothesis, Chandler and Lalonde (1998) examined data from the coroner's records to compare the rates of completed suicide in eighty First Nation communities in British Columbia. As noted in Chapter 2 (see Figure 2-6), there was wide variation in rates with some communities exhibiting no suicides while others suffered very high rates. Using available data on community characteristics, Chandler and Lalonde scored each community on six measures of what they termed "cultural continuity" factors: the majority of students attend a band-run school; presence of band-controlled police and fire services; cultural facilities; band-controlled health services; history of land claims; and some measure of self-government. The rate of suicide was strongly correlated with the level of these factors (see Figure 4-1). Communities with all of the cultural continuity factors had no suicides while those with none had extremely high rates. In a subsequent replication using data from 1993 to 2000, these factors were confirmed, and three additional community level factors associated with decreased rates of suicide were also identified: the community was at an advanced stage of land claims negotiations; women were the majority of elected officials; and the community had local child protective services (Chandler and Lalonde, in press).

Figure 4-1) Youth Suicide Rates by Number of Cultural Continuity Factors in British Columbia First Nations, 1987–1992



Source: Chandler and Lalonde, 1998; reproduced with permission.

Of course, a cross-sectional study cannot demonstrate causality. It is possible that some of these factors are markers for healthy communities, and that the link to suicide is through other co-varying but unmeasured factors including: sense of empowerment, collective self-efficacy, and self-esteem; better infrastructure or community organization; and more job opportunities or roles for youth. As well, labelling these factors as indicators of “cultural continuity” is questionable; the involvement of Aboriginal people in contemporary institutions like municipal government or formal school systems can hardly be viewed as cultural traditionalism. “Local control” might be a more accurate term to describe most of the protective factors identified by Chandler and Lalonde, and this probably reflects cultural flexibility and adaptability rather than the maintenance of tradition *per se*. Nevertheless, this study provides compelling evidence for the impact of community level factors, and should encourage other studies of determinants of mental health using careful analysis of the history, structure, and dynamics of communities (Mignone, 2005). A further crucial step will be the identification and measurement of mediating factors so that the links between community-level processes and individual behaviour and experience can be traced.

Cultural continuity remains an interesting concept and one that is important to explore in the light of ongoing efforts of Aboriginal people to recuperate and reclaim traditional knowledge and values as an explicit basis for collective identity and community cohesion. Cultural continuity can be expressed in many ways, but all depend on a notion of culture as something that is potentially enduring or continuously linked through processes of historical transformation with an identifiable past of tradition. However, contemporary anthropological understandings of culture emphasize the fluidity and negotiated nature of cultural realities.

Cultural traditions provide individuals with resources from which to construct socially and psychologically viable selves in local worlds. At the same time, both individuals and communities transact with a larger world system, which gives them new possibilities for identity and mobility. Contemporary pan-Indian spirituality and other forms of collective identity are important responses to this new social and political landscape (Trimble and Medicine, 1993).

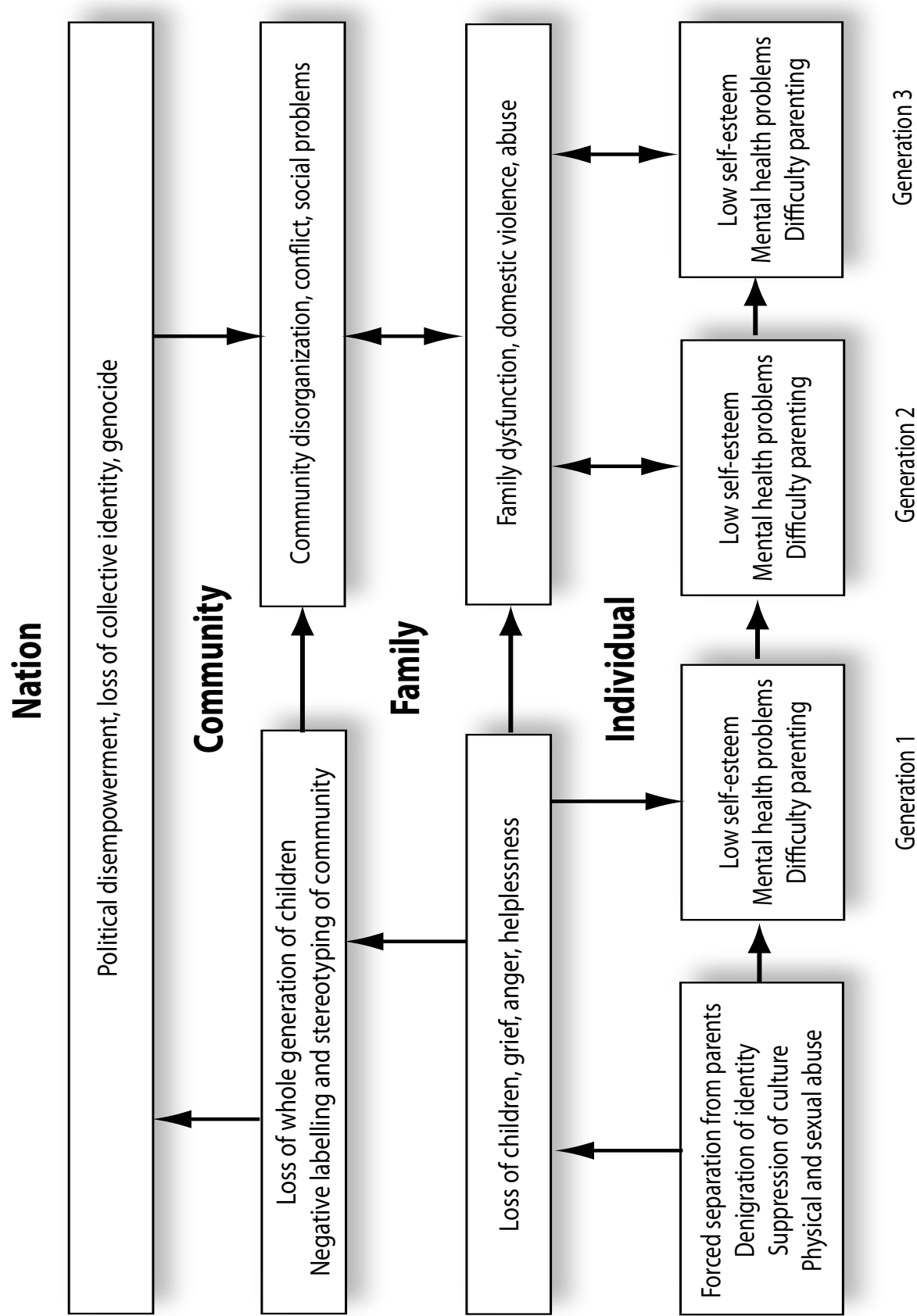
Traditions are transmitted by family and elders within Aboriginal communities, but they also must be rediscovered and adapted to the social realities of each generation. The creation of Aboriginal organizations and institutions, as well as “pan-Indian” movements that emphasize the common history, values, and aspirations of geographically dispersed and divergent cultural groups are powerful means of revitalizing tradition, strengthening identity, and gaining political leverage for groups that, by themselves, would continue to be marginalized. Aboriginal culture tends to be represented in the dominant society through distorted images that are either denigrated or idealized (Berkhofer, 1978; Jaimes, 1992). Cultural continuity and positive transformations of Aboriginal identity must come from within Aboriginal communities, but they also require increasing awareness, recognition, and respect from Canadian society as a whole.

Summary

Acculturation stress and marginalization (failing to acquire and value Aboriginal values and identity, while also failing to identify with the cultural values of the larger society) have been repeatedly described as risk factors for Aboriginal adolescent suicide (Bechtold, 1994; Johnson and Tomren, 1999). Cultural marginalization and concomitant problems in identity formation may render Aboriginal youth vulnerable to suicide, even in the absence of clinical depression. These processes of marginalization and acculturation stress do not simply reflect individual differences in adaptation, but are largely determined by social and political forces beyond the individual.

Governmental policies of forced assimilation enacted through the residential school system and the child welfare system resulted in profound disruption in the transmission of culture and the maintenance of healthy communities. Figure 4-2 summarizes some of the ways in which the transgenerational effects of the residential school system and other social processes may contribute to mental health problems in general, as well as suicide in Aboriginal communities. The impact of the residential school system and other systematic practices of cultural suppression and forced assimilation can be seen at the levels of individual experience, family systems, communities, and whole nations or peoples. Each of these levels has its own pathways that can transmit negative effects across the generations. Each level also has its own ways of contributing to resilience, revitalization, and renewal. The individual, family, community, and nation levels interact to shape each successive generation so that, while their experiences are unique in many respects, there is a historical continuity. The historical roots of current problems must be recognized and addressed to develop effective interventions that can transform intrafamilial and intergenerational cycles of suffering.

Figure 4-2) Transgenerational Effects of Residential School Experience



The reports of the Royal Commission on Aboriginal Peoples (1995) and the Advisory Group on Suicide Prevention (2003) emphasize the importance of historical, political, and community levels in the origins and prevention of youth suicide. Chandler and Lalonde (1998; Chandler et al., 2003) have provided intriguing evidence that local community control is associated with lower levels of suicide. They go beyond this to theorize a fundamental role for cultural continuity in protecting vulnerable adolescents from suicide. This type of research holds the promise of identifying clear causal pathways from larger social and community processes down to individual experiences. Advancing this research depends on a better understanding of the relationships among cultural continuity, transformation and change, community dynamics, and individual well-being.

What Works in Suicide Prevention?

Each reserve is different and I find each reserve lacks ... One reserve may get all the resources ... well, they can access the funds or programming, but another reserve doesn't have that opportunity or don't have the people or committed individuals within their reserve that could set up programs for them or find the money where they could help out their community members or the youth (First Nation youth).

Conventional mental health approaches to suicide emphasize the identification and treatment of individuals at risk. This is one essential component of any effective intervention. Most Aboriginal communities are underserved, and it is not always possible for individuals with depression, substance abuse problems, and family crises to obtain appropriate help. Basic services must be made accessible to Aboriginal people living in remote communities and in urban centres. At the same time, the very high rates of suicide, attempted suicide, and suicidal ideation among youth in many Aboriginal communities indicate that the problem is not just individual but involves community-wide issues. As such, a community-based approach to prevention is essential.

Recent reports from government and professional advisory groups agree that there is an urgent need for more research to identify effective ways of preventing suicide (Silverman, 2001; Goldsmith et al., 2002; American Academy of Child and Adolescent Psychiatry, 2001b). Reviews of prevention programs specifically designed to reduce suicide among Aboriginal people have found that there are very few well-evaluated studies to date (Middlebrook et al., 2001; Advisory Group on Suicide Prevention, 2003). Nevertheless, there is some consensus on current best practices at the levels of individual and community healing, clinical intervention, and prevention. Similar strategies have been outlined in documents prepared by various groups in Canada, Australia, and the United States (American Academy of Child and Adolescent Psychiatry, 2001a; 2001b). Several useful reviews of strategies and programs appropriate for Aboriginal communities in Canada are also available (e.g. Devlin, 2001a; 2001b; Gardiner and Gaida, 2002; White and Jodoin, 2003).

This chapter reviews available information on what types of programs and interventions may be effective for suicide prevention, the treatment of suicidal individuals, and support for those affected by the suicide of a friend or family. The first section briefly outlines the levels and types of prevention. The next section reviews the elements of successful suicide prevention programs and discusses the few programs that have been shown to be effective in systematic evaluation or outcome studies. Chapter 6 discusses issues in adapting prevention programs to Aboriginal communities and summarizes guidelines for best practices. Appendix A describes some recommended programs in more detail.

Levels of Prevention

Primary prevention (acting “before the fact”) aims to reduce suicide risk by improving the mental health of a population. This kind of prevention strategy can address a wide range of social or mental health problems, and its positive impact goes well beyond the problem of suicide (Mrazek and Haggerty, 1994). Examples include life skills education in schools, parenting programs, and provision of accessible and effective mental health services for a population.

Secondary prevention (early intervention or treatment) aims to help potentially suicidal individuals either before they injure themselves or during a suicidal crisis. Examples include telephone crisis lines as well as counselling, support, and supervision for persons who have expressed thoughts of suicide or have given other indications of being at risk.

Tertiary prevention (or *postvention*) focuses on persons who have been affected by suicidal behaviour: suicide attempters who are at high risk for a recurrence, bereaved friends or family members who are also at risk for increased distress, psychiatric morbidity, and the development of suicidal behaviour. Postvention is often accomplished through counselling and other forms of support (Kirmayer et al., 1994b).

Suicide prevention methods can be targeted at different levels: the community, the family, or the vulnerable individual. It can also address different time frames: the sources of vulnerability and resilience in infancy and childhood, the period of increasing vulnerability in adolescence, the immediate precursors to suicidal behaviour, or the crisis situation itself. These levels, in turn, are reflected in the most appropriate location of interventions: community centres or other places where youth and their parents can be reached; the school or other settings where youth congregate; and primary health care or social services, mental health services in community clinics, or mobile crisis teams. Through specific policies, organized outreach, or mass media, interventions may be directed to whole communities or populations. There is general agreement that programs directed to several of these levels at the same time will achieve the best outcomes. However, some types of service may be more feasible in a given community.

In principle, anything that reduces a risk factor or increases a protective factor will help prevent a suicide. Although most research and practice focuses on individual-level factors, it is likely that there are community-level and population-level factors that have powerful effects. However, there is controversy in the area of prevention as to whether to attempt to influence a whole population or to screen for and target high-risk groups (Rose, 1993). Large-scale programs are costly, may not reach the most vulnerable individuals, and may have only small effects on any given person. Some prevention programs may also have potential negative effects, particularly with people for whom they were not specifically designed.

Table 5-1 summarizes some of the advantages and disadvantages to individual- and population-level approaches. The high-risk individual approach can tailor interventions to the needs of a particular group of individuals, and deliver it in a way that is most appealing to them. This will likely increase the motivation of participants. Direct contact with individuals is also more interesting for clinicians and other helpers who may experience rewarding interactions. The focus on vulnerable individuals is usually a cost-effective use of resources. This focus also allows the helper to consider the drawbacks of any intervention in an individual case, and so minimize the risk of harm.

Table 5-1) Strategies of Illness Prevention and Health Promotion

	High-Risk Individual Approach	Whole Population Approach
<i>Advantages</i>	1. intervention can be tailor-made to be appropriate to individual 2. individual is likely to be more motivated 3. clinician is likely to be more motivated 4. cost-effective use of resources 5. favourable benefit/risk ratio	1. may get at social roots of problem 2. can have large potential benefit for whole population 3. can be integrated into everyday behaviours and contexts of community
<i>Disadvantages</i>	1. difficulties and costs of screening large numbers 2. intervention may only treat symptoms and not most basic causes in social conditions 3. may not reach all vulnerable individuals in a large population 4. may not be integrated into everyday behaviours of individuals	1. many have small benefit to most vulnerable individuals 2. may have poor motivation of individual 3. may be less motivating for clinician who prefers working with individuals 4. benefit/risk ratio may be poor

Source: Adapted from Rose, 1993.

However, identifying high-risk individuals may involve screening large numbers of people, which introduces its own costs and potential negative effects. Focusing on the individual may ignore the deeper roots of problems that are located in social conditions or in earlier developmental events, like family violence that involves the behaviour of other people not addressed by the intervention. As a result, there may be little impact on the larger population or subsequent risk for others. Singling out a specific vulnerable group may be stigmatizing for them, and will also not promote a supportive social environment that can help them maintain the gains achieved through intervention.

In contrast, the population approach to prevention can address the roots of a health problem in social conditions, including widespread attitudes, lifestyle, child-rearing practices, or the integration of whole communities. This has the potential to benefit a large population and may improve many conditions. Broadly directed approaches may be more acceptable because they do not single out a specific group, and this may lead to changes in many people who reinforce each other's healthy behaviour. The main drawbacks to the population strategy in addressing a broad group are that resources may be spread thinly and do not really appear to reach any one group effectively. There may be only a small benefit to any one individual. The less personal nature of the intervention may also make it less interesting to individuals and professionals. The potential risk to some individuals may be difficult to recognize and address. This raises a dilemma in terms

of the balance of risk and benefit. "In mass prevention each individual has usually only a small expectation of benefit, and this small benefit can easily be outweighed by a small risk (Rose, 2001:432).

Population level approaches vary in their definitions of the population they address. For Aboriginal people, the relevant population can range from a global or North American population of Indigenous people, a specific Aboriginal group or First Nation, the general Canadian or provincial or territorial population, or else a regional or single community population. Organizing prevention strategies at each level has different implications, not only in terms of the type and scale of resources required for the target population, but most importantly in terms of the degree of political involvement and control of the intervention by Aboriginal people. The degree of community involvement in the development and carrying out of prevention programs may be a crucial factor in their positive impact.

As discussed in Chapter 3, many Aboriginal communities have specific demographic groups at greater risk for suicide. Young men in particular constitute an identifiable group at risk. Substance abuse, particularly heavy alcohol use and any history of solvent use, is a strong indicator of increased risk. Solvent abuse often occurs among preadolescents and points toward significant individual and family problems. Other risk factors that can guide screening and intervention programs are listed in Table 5-2. However, epidemiological studies show that the suicidal ideation and attempts are so widespread among young people in some communities that the concept of an "at-risk group" may be misleading and a broader community-based approach is needed. A community-wide approach has two added advantages: it avoids stigmatizing a specific group of individuals and it fits with broader goals of community development that will have a positive effect on the mental health of the whole population as well as vulnerable individuals.

Table 5-2) Risk and Protective Factors Relevant to Suicide Prevention

Risk Factors	Protective Factors
✦ Male gender ✦ Previous suicide attempt ✦ Violence victimization ✦ Violence perpetration ✦ Alcohol use ✦ Drug use ✦ Inhalant or solvent use ✦ School problems ✦ Mood disorder (i.e. major depression) ✦ Social isolation ✦ Poverty	✦ Perceived parent and family connectedness ✦ Emotional well-being (esp. for females) ✦ Success at school ✦ Community involvement and connectedness

Sources: American Academy of Child and Adolescent Psychiatry, 2001a; Barney, 2001; Borowsky et al., 2001; Gould et al., 1996; Evans, Hawton, and Rodham, 2004; Malone et al., 2000.

Effective Suicide Prevention Programs

An ideal suicide prevention program for Aboriginal communities would have proven effectiveness, reach high-risk groups, be feasible given local resources, and address both the immediate and more basic long-term causes of suicide.

Unfortunately, few studies have rigorously evaluated the effectiveness of suicide prevention programs in any population (Goldsmith et al., 2002; Middlebrook et al., 2001). The low base rate of suicide in many populations makes it difficult to assess the impact of interventions. In a review of evaluative research on suicide prevention across Canada, Breton and colleagues (1998) found only 15 studies, most of which assessed the impact of school-based programs on knowledge and attitudes. Most evaluations found benefits from the programs, but few studies had been published in the scientific literature. The report concluded that there is much need for further evaluative research, and that this should focus not only on effectiveness, but also examine the appropriateness of interventions and their impact both on the specific factors that have been targeted and on the wider health care and social systems. The report also noted that the tendency to focus on one sector (e.g. school) did not reflect the reality of the experience of youth, which demands a more integrated and ecological approach.

Perhaps the clearest demonstration of a successful population-based intervention comes from a comprehensive suicide prevention program for over 5 million U.S. Air Force personnel that achieved a 33 per cent reduction in deaths by suicide over a 6-year period (1997–2002 compared to 1990–1996) (Knox et al., 2003). The program aimed to reduce the stigma of seeking help for mental health or psychosocial problems, improve public knowledge about mental health, and change policies and practices to facilitate the use of services. The program included 11 major components:

- 1) training leaders on suicide and violence awareness;
- 2) providing suicide awareness training in general military education;
- 3) providing leaders with guidelines and resources for referring individuals at risk for treatment;
- 4) providing one person at each mental health centre who can devote their time to prevention work;
- 5) providing “buddy” or peer training for all personnel and specific training for gatekeepers;
- 6) changing policies to ensure that individuals under legal investigation are assessed for suicide risk;
- 7) establishing critical incident stress management teams to respond to traumatic events, including suicides;
- 8) integrating services to improve flow of information and referral, including family advocacy program, family support, health promotion and wellness centres, mental health clinics, child and youth programs, and chaplains;
- 9) ensuring confidentiality in counselling and psychotherapy so that individuals are more willing to come for help and confide their problems;
- 10) providing survey assessment tools and information to leaders; and
- 11) tracking social, behavioural, and psychological risk factors in the population.

The prevention program also had a positive impact on levels of domestic violence, and a family advocacy program was a key component. Although some of the details are specific to the military context, much of this comprehensive program could be translated into community, regional, and national interventions for Aboriginal people.

Recent reviews suggest that the most effective means of suicide prevention among youth in the general population are likely to include school-based coping skills training for students, screening and referral of at-risk youth, education of primary care physicians and other gatekeepers, media education, lethal-means restriction, psychotherapy (particularly, dialectical behaviour therapy and cognitive-behavioural therapy), and treatment with antidepressants (Gould et al., 2003; Goldsmith et al., 2002; Middlebrook et al., 2001). However, all of these potentially helpful interventions need further evaluation and most have not been examined at all in Aboriginal populations.

Primary Prevention Strategies

This section reviews the following most common primary prevention strategies:

- 1) restriction of the available means of suicide;
- 2) school-based programs, including suicide awareness curricula, social problem-solving skills, and skills programs targeted at high-risk youth;
- 3) screening and referral of high-risk youth;
- 4) peer helpers and peer support programs;
- 5) gatekeeper training;
- 6) community-based approaches; and
- 7) the use of mass media.

Means Restriction

The availability of lethal methods influences the number of deaths by suicide (Brent et al., 1991; Garrison, 1992). Historically, the elimination of specific lethal means of suicide such as firearms and lethal gas has had a measurable effect on the suicide rate (Garrison, 1992). Organizations including the International Association for Suicide Prevention, the Canadian Association for Suicide Prevention, the American Association of Suicidology, the Canadian Paediatric Society, and the World Health Organization all recommend means restriction as an important aspect of suicide prevention. However, due to traditional connections to hunting, trapping, and fishing as a way of life among many Aboriginal people, firearms are readily available in communities and are not always amenable to tight control. Furthermore, an increasing number of deaths by suicide among Aboriginal youth in Canada are by hanging, and it may be impossible to eliminate all options for such acts. *Aboriginal Youth: A Manual of Promising Suicide Prevention Strategies* (White and Jodoin, 2003), a manual of best practices for Aboriginal youth suicide prevention, provides an example of a community that chose to implement a central firearms storage program. The chief and council passed a band council resolution determining that all firearms had to be placed in the storage facility when not in use for hunting. The 1998 evaluation of the program found that participants of the program felt it benefited the community in terms of safety, reduced break-ins, reduced accidents, fewer shootings, and protection of children (White and Jodoin, 2003).

Restricting access to lethal means of self-injury can make the difference between a death and an opportunity to help a distressed individual. Relatively easy access to firearms in many Aboriginal communities is likely unavoidable, although gun safety and proper storage can be promoted through educational programs. Methods other than firearms are important in many communities. For example, a review of 68 suicide and possible suicide deaths in Nunavik during the time period 1982–1996 showed that the majority of deaths resulted from hanging, most often in the victim's bedroom using the closet rod. The installation of

closet rods that give way under the weight of a person may interfere with this method (Masecar, 1998). A Northwest Territories community with very high suicide rates removed closet rods and bedroom door locks in the early 1990s. Although other prevention activities occurred around the same time, such as multiple community meetings, the suicide rate dramatically decreased over the next several years (Kral, 1999).

There is a high rate of accidental death in many Aboriginal communities, some of which may be related to risk-taking and self-destructive behaviour (e.g. skidoo or ATV accidents due to recklessness and drug or alcohol use). Some authors have suggested that many such accidents can be considered to be a form of suicidal behaviour (Young, 1994). Education and safety programs may reduce these accidents; conversely, effective suicide prevention should also reduce the frequency of accidental death.

Prohibition of alcohol has been associated with reduced rates of suicide in some communities (Landen et al., 1997), but has sometimes apparently increased rates (May, 1992). The impact of prohibiting alcohol in a whole community likely depends on geographic, cultural, and political factors, which affects what it means to the community, whether it can be enforced and whether it is associated with other forms of community solidarity and social integration.

School-Based Suicide Prevention Programs

According to the World Health Organization, “school health programmes can simultaneously reduce common health problems, increase the efficiency of the education system, and further public health, education, and social and economic development in all nations” (Vince-Whitman et al., 2001:18). School-based health promotion methods have been the most widely used intervention for youth suicide prevention, in part, because they are relatively inexpensive and easy to deliver.

Early studies of school-based educational suicide prevention programs were disappointing, showing no benefit or even suggesting that some programs may have harmful effects by increasing distress among vulnerable youth (Phillips, Lesyna, and Paight, 1992; Shaffer et al., 1990; Vieland et al., 1991). More recent studies have found no evidence of harmful effects and that intensive broad-based programs demonstrate some effectiveness (Bennett, Coggan, and Brewin, 2003; Felner, Adan, and Silverman, 1992; Gould et al., 2005; Ploeg, Ciliska, and Dobbins, 1996). In a comprehensive review, Guo and Harstall (2002) identified 10 studies of school-based programs that met basic criteria for the quality of the evaluation. Programs varied widely in structure, content, and duration. Two well-designed studies found significant changes in depression, hopelessness, stress, anxiety, and anger in the adolescents exposed to the prevention program (Guo and Harstall, 2002). However, the report raised questions about the applicability of the findings to Canadian school contexts.

The literature on youth suicide prevention emphasizes that schools should provide a health education curriculum for all students that builds basic skills useful for managing a variety of health and social issues rather than focusing exclusively on the topic of suicide (Shaffer and Gould, 2000). Such a curriculum would enhance the ability to cope with stress or distressing emotions (especially anger and depression), problem-solving, interpersonal communication, and conflict resolution—all measures that help build self-esteem and deal with emotional conflict and crisis (Cimboic and Jobes, 1990).

Discussion of suicide in the context of developing life skills and self-esteem, problem-solving, and communication skills is likely to be more effective than programs directed primarily at suicide *per se* (Royal

Commission on Aboriginal Peoples, 1995; Tierney, 1998). Educational materials aimed at facilitating appropriate help-seeking for major depression, alcohol or substance abuse, and family problems may help reduce the risk of suicide.

Direct case-finding by screening and intervention for high-risk youth may be the most effective school-based strategy (Shaffer and Gould, 2000). However, screening for suicide risk, depression, or other mental health problems is only useful if it identifies individuals at real risk, and that there are appropriate interventions available. In a study of high school students in the United States, initial screening identified 29 per cent of students as “at risk” for suicide (Hallfors et al., 2006). It was impossible to respond to this level of perceived need, and school staff actually decided to stop screening. More accurate screening and adequate resources in order to respond are essential to make screening useful.

There is evidence that school-based programs targeted at high-risk youth may be effective in reducing suicidal behaviours and enhancing coping skills for dealing with conflict and anger. A study with high school students in the Pacific Northwest of the United States compared two interventions: i) a brief one-on-one assessment and crisis intervention by a counsellor, and ii) in addition to the individual counselling, a 12-session weekly small-group intervention based on skills-building and social support (Randell et al., 2001; Thompson et al., 2001). Both interventions were effective in reducing suicidal ideation, but the program that included the peer group had broader positive effects, particularly for females.

Clear evidence for the effectiveness of a school-based prevention program comes from a recent randomized study of 2,100 students in the United States. The Signs of Suicide (SOS) prevention program aims to raise awareness about suicide and screen for depression and other risk factors. It consists of a video and accompanying discussion guide that present dramatizations of the signs of suicide and depression along with interviews of people whose lives have been affected by suicide. Students also complete a screening instrument for depression, which they score themselves. The questionnaire encourages those with elevated scores to seek help. The school provides students with information on the resources available. Students are directed especially to teachers, guidance counsellors, and their families for help. The program was associated with a 40 per cent reduction in reports of suicide attempts in the three months following participation. This reduction appeared to be partially due to the better understanding of and attitudes toward depression and suicide (Aseltine and DeMartino, 2004).

Younger children (under the age of 12) are also an important target group for primary prevention, since many contributors to youth despair begin to have an effect during childhood. This implies attention to and support for the family. Family life education, family therapy, or social network interventions aimed to uncover abuse, resolve conflicts, and ensure the emotional support of youth and children may be more useful than an individual approach centred exclusively on the young person (Mrazek and Haggerty, 1994).

Awareness programs may be less useful in many Aboriginal communities where the population is all too aware of suicide, although there remains a need to correct misconceptions. For some youth, suicide may be viewed positively as an effective means of protest or a heroic gesture pointing to social wrongs and injustices. Suicide education can challenge this romanticized view of suicide and point to alternative responses to interpersonal crises and despair. In communities that have experienced repeated suicides, there may be a process of normalization in which suicide becomes more thinkable, taken-for-granted, or even part of an identity that confers a sense of belonging (Niezen, *in press*).

The American Indian Life Skills Development Curriculum is the most widely used program for enhancing a range of skills appropriate for youth suicide prevention (LaFromboise, 1996). Developed originally for the Zuni Pueblo in New Mexico, the curriculum includes 7 major areas:

- 1) increasing self-esteem;
- 2) learning to identify emotions and stress;
- 3) improving communication and everyday problem-solving;
- 4) identifying and reducing negative thoughts and anger reactivity;
- 5) information about suicide risk;
- 6) suicide intervention training; and
- 7) personal and community goal-setting (LaFromboise and Howard-Pitney, 1994).

These topics were covered in classroom sessions 3 times per week over 30 weeks. Each session involved standard skills training methods of providing information about problematic and desirable behaviours, modelling the skills, experiential exercises, behavioural rehearsal of new skills, and feedback to refine performance. The material was tailored to the specifics of Zuni culture including values, sense of self, space and time, and styles of communication and social interaction. The program evaluation compared a group of students who received the curriculum with those who did not. The outcome was assessed through self-report measures of suicide risk factors, hopelessness, depression, and self-efficacy, as well as observations of problem-solving skills and peer ratings. The program reduced hopelessness and negative thoughts and improved observed problem-solving skills (LaFromboise and Howard-Pitney, 1994).

Since the breakdown in transmission of cultural traditions appears to contribute substantially to the widespread demoralization and hopelessness of Aboriginal youth, the development of programs to transmit cultural knowledge, values, and traditions usually by respected Elders is also a crucial component of any suicide prevention program addressed to Aboriginal people (Kirmayer et al., 1993b). As pointed out in Chapter 4, knowledge of Aboriginal culture and pride in one's roots and heritage are especially important for young people. This knowledge can be promoted, for example, through cultural education, school-sponsored family and community events, and youth-elder camps. Getting youth actively involved in interacting with and helping others and in community organizations is likely to be more effective than simply offering them information or educational programs. When despair affects a whole generation of young people, it may be necessary to involve a large number of youth directly in teaching, helping, and offering community activities to have significant impact.

Peer Support Programs

Training people in the community to handle crisis ... I think it should be youth that are trained for those positions. I myself have always had kind of a problem relating personal issues and you know, things that are close and dear to me with adults because throughout my life ... It's adults who have basically been screwing me over most of my life, so that I've always had that kind of negative attitude when it comes to being able to communicate and open channels with them. Whereas if I was put with people my own age, it's a lot easier for me to communicate (First Nation youth).

Programs for youth can foster self-esteem and social skills, develop specific suicide prevention expertise, and provide postvention for young people who have lost a friend or family member through suicide. These

programs can be school-based, but must be adapted to reach out to the most vulnerable youth who may not attend school.

Peer support programs—in which trained student volunteers lead and run the program—offer an appealing alternative to conventional suicide awareness programs because they may make resources more readily available to other students and engage youth in constructive community roles. Suicidal youth are much more likely to speak of their concerns to youth than to adults or professionals (Kalafat and Elias, 1994). Since many suicidal youth do not contact any professionals or adults when they are in crisis, training of peers to respond to problems and provide a bridge to professional help may be helpful, but evidence for the effectiveness of this approach is limited (Lewis and Lewis, 1996). Peer helpers have been a crucial component in the successful interventions in an Athabaskan community in the United States (Centers for Disease Control and Prevention, 1998; May et al., 2005).

Community-Based Approaches

Although school is a natural focus for programs working with the age groups most directly affected by suicide in Aboriginal communities, there are youth who have dropped out, families who are socially isolated, and older age groups who may not be reached in this way. Community-based approaches address the need to reach the widest range of individuals and to have impact on the community as a whole with respect to social structures, collective self-esteem, and shared vision.

Rodgers (1991) discusses an approach to suicide clusters based on experiences in three communities, two in the Northwest Territories and one in Saskatchewan, each with a population of about 1,200. The suicide clusters involved mostly young males living in communities that lack resources and have problems with alcoholism, family violence, general hopelessness, and pervasive feelings of low self-esteem. Rodgers advocates a community-based intervention conducted with outside consultation based on the hypothesis that the suicides are an indicator of more widespread community disorganization. Rodgers reports an almost complete halt to suicides in the three communities that received this intervention. Unfortunately, his report lacks systematic description of the intervention and structured evaluation of its effectiveness. However, it remains a promising direction for integrating professional expertise with community resources.

There have been very few systematic evaluations of suicide prevention efforts in Aboriginal communities. The most relevant example for Aboriginal people in Canada is a program implemented in 1990 among an Athabaskan tribe in rural New Mexico that was suffering from a high rate of suicide among youth aged 15–19 years (Centers for Disease Control and Prevention, 1998; May et al., 2005). The population addressed by the program included about 800 young people (10 to 24 years of age). The objectives of the program were to:

- 1) identify suicide risk factors specific to the community;
- 2) use this information to identify individuals and families at high risk for suicide, violence, or other mental health problems;
- 3) design and implement prevention activities to help these vulnerable individuals and families;
- 4) provide direct mental health services for high-risk individuals and families; and
- 5) enhance community knowledge and awareness of suicide and mental health issues.

Tribal leaders, health care providers, parents, elders, and youth were actively involved in developing and implementing the program. The program consisted of the following major components:

- 1) school-based and community education programs for youth and adults on topics including suicide, but also parenting and life skills;
- 2) about 10 to 25 youth volunteers were trained each year as “natural helpers” and peer counsellors to respond to young people in crisis and to notify mental health professionals of any need for assistance. These natural helpers also provided school and community education on alcohol and drug prevention, self-esteem and team building, and suicide prevention;
- 3) systematic outreach to families after a suicide or traumatic death or injury;
- 4) immediate response and follow-up for youth reported to be at risk; and
- 5) suicide risk screening in mental health and social service programs.

The program provided basic mental health and social services that were previously unavailable in the community and received sustained funding to develop a well-resourced service that ultimately included 21 clinical staff as well as support staff.

The program had three formal evaluations over its span, which have been important for its development and continued funding (May et al., 2005). The level of suicidal acts among youth aged 15–19 years was reduced almost immediately after the implementation of the program, and this improvement continued over the following 12 years with a net reduction of about 73 per cent in suicide attempts and less life-threatening suicide “gestures.” This reduction was seen in youth cohorts that were the focus of the intervention and not in those over 25 years of age. However, there was no comparison community, and it is possible that the observed improvement reflected cyclical trends in suicide over time. As well, the numbers of completed suicide were too small to demonstrate a clear effect of the program, although there was some suggestion of a beneficial effect. Nevertheless, at present, this is the best-tested program and illustrates the principles and components that should be included in an effective community-based approach. A cost-benefit analysis using an estimate of quality-adjusted life years (QALY) indicated the program was highly cost effective (Zaloshnja et al., 2003).

Another program emphasizing community-developed projects was implemented in Alaska in 1988. The Community-Based Suicide Prevention Program (CBSPP) provided grants to communities state-wide to support community-based activities such as cultural heritage instruction, support groups, recreational activities, volunteer helping systems, counselling, and crisis response. Forty-eight communities received grants in the first year, and this number grew to 66 in 1995 (20 maintained their projects continuously over this period). Each community has implemented one or more projects from a wide range of potential approaches. An evaluation for the period from 1989 to 1993 found that while project communities began with higher suicide rates than the overall Alaska Native rate, their rates declined faster than the state-wide rate at the end of three years. The Alaskan experience suggests that it is not so much the specific type of program as the degree of community initiative, organization, and involvement that results in the mental health benefits. It appears that communities able to sustain their programs over several years had the best outcomes (Soule, 2005; Henderson, 2003).

The report of the Royal Commission on Aboriginal Peoples (1995) provides case studies of five programs:

- 1) the Ngwaagan Gamig Recovery Centre for alcohol/drug addiction and Nadmadwin Mental Health Clinic, Wikwemikong, Ontario;
- 2) the 1993 Big Cove gathering and community sharing circle, New Brunswick;
- 3) a suicide prevention training program for community caregivers, Northwest Territories;

- 4) the Canim Lake Family Violence Program, British Columbia; and
- 5) the Wakayos Child Care Education Centre, Meadow Lake, Saskatchewan.

These case studies serve to highlight factors that contribute to successful mental health promotion strategies among Aboriginal people. The activities were community-initiated (some in conjunction with band councils or regional Aboriginal organizations), drew from traditional knowledge and wisdom of Elders, were dependent on consultation with the community, and were broad in focus. Most involved locally controlled partnerships with external groups.

Strategies aimed at community and social development should promote community cohesion and local control, collective esteem and identity, transmission of Aboriginal knowledge, language, and traditions, and methods of addressing social problems that are culturally appropriate (Royal Commission on Aboriginal Peoples, 1995; White and Jodoin, 2003). For the community at large, information about suicide should be transmitted along with broader information about mental health, help-seeking resources, and ways of dealing with substance abuse, domestic violence, relationship conflict, loss, and emotional distress. The report of the Advisory Group on Suicide Prevention (2003) includes an appendix with a framework for community assessment that could be further developed and evaluated both as a means to identify communities at risk and to promote community development.

Gatekeeper Training

Various helpers and people in the community who have contact with many youth can act as gatekeepers to identify individuals at risk and refer them to appropriate resources. Training materials exist for such gatekeepers. Community caregivers should receive mental health training and develop skills in individual and family counselling, social network intervention, and community development. Primary care providers (doctors and nurses) need to be trained to better recognize and treat major depression and other psychiatric disorders (Kirmayer et al., 1993b). Other community gatekeepers who can facilitate help-seeking need to be identified and trained (Capp, Deane, and Lambert, 2001).

Mass Media

Mass media—in the form of television, Internet, magazines, and music—play an important role in the lives of most contemporary young people. Mass media may influence the rate and pattern of suicide in the general population (Pirkis and Blood, 2001; Stack, 2003; 2005). The media representation of suicides may contribute to suicide clusters. Suicide commands public and government attention and is often perceived as a powerful issue to use in political debates. This focus, however, can inadvertently legitimize suicide as a form of political protest and thus increase its prevalence. Research has shown that reports on youth suicide in newspapers or entertainment media have been associated with increased levels of suicidal behaviour among exposed persons (Phillips and Cartensen, 1986; Phillips, Lesyna, and Paight, 1992; Pirkis and Blood, 2001). The intensity of this effect may depend on how strongly vulnerable individuals identify with the suicides portrayed.

Phillips and colleagues (1992) offer explicit recommendations on the media handling of suicides to reduce this contagion effect. The emphasis is on limiting the degree of coverage of suicides, avoiding romanticizing the action, and presenting alternatives. There is some evidence that this may actually reduce suicides that follow in the wake of media reporting (Stack, 2003). Many Canadian newspaper editors have adopted

policies to minimize the reporting of suicide to reduce their negative impact (Pell and Watters, 1982). Suicide prevention materials can also be disseminated through the media. The media can also contribute to mental health promotion more broadly by presenting positive images of Aboriginal cultures and examples of successful coping and community development.

There are prevailing attitudes in some segments of society that romanticize suicide as an expression of alienation, social protest, or heartbreak. Mass media sometimes make suicide the topic of sensationalized accounts. For some, Aboriginal suicide has come to represent resistance to the effects of cultural suppression and marginalization, which may inadvertently give it heroic meaning for some youth. Suicide prevention requires strengthening individual and community attitudes that reject suicide as a viable option. Effective problem-solving, community involvement, political activism, and other forms of active engagement in protest and change, all present alternatives to self-destructive despair and powerlessness. In the hands of Aboriginal youth themselves, the media can become tools of empowerment and social change.

Secondary Prevention: Early Intervention and Treatment

My friend had just taken a whole bunch of pills. So I went over there and the ambulance arrived—we have an ambulance there—and they got her on a stretcher and they went to the hospital. And once we got to the hospital they were ... well they were looking after her ... In the end she was ok, but ... I was upset because they didn't have anything in place, like a protocol in place or what happens after ... And I was really disappointed because I thought they had. Well, when I first arrived there was a mental health worker there and he had his own little program ... but he had to leave the reserve ... and nothing was followed through after ... So I was trying to find someone else in the community who she would feel comfortable to talk to, and there was no one. And as for aftercare, she wasn't even, she was not even referred to an agency anywhere, and this is like her third attempt (First Nation youth).

Crisis teams or services allow a rapid response to persons at immediate risk that can prevent their self-injury or death (Royal Commission on Aboriginal Peoples, 1995). This implies having the human resources to manage a crisis situation as well as long-term support involving mental health practitioners and/or lay caregivers, developed and set up before a crisis is under way. There must be ready access to culturally appropriate mental health care that respects and is consonant with local cultural values (Kirmayer et al., 1993b). The response to a crisis situation in remote, isolated communities requires effective links to regional hospitals and training of potential support persons in each community. A “crisis centre” able to accommodate short-term stays for crisis treatment may have some effectiveness, particularly if the centre is run by Aboriginal persons (Lester, 1997). Several Canadian suicide prevention centres have been set up to provide direct counselling as well as health promotion information.

Specific suicide education related to detection should be provided to teachers, social workers, health care professionals, clergy, police, and other community members who are likely to come in contact with high-risk individuals (Royal Commission on Aboriginal Peoples, 1995). Those closest to a person with suicidal intentions have the best chance of recognizing the “warning signs” and taking action (which will usually mean referral to a trained professional). Thus, parents as well as other community members such as young people can benefit from basic training in recognizing the clues and knowing when (and how) to get help for

someone in danger of self-injury (Royal Commission on Aboriginal Peoples, 1995). Distressed youth turn more often to their friends for help instead of family members or professionals in the community (Malus, Kirmayer, and Boothroyd, 1994; Tierney, 1998). Health care providers must also be trained to recognize the signs of a suicidal individual in order to offer timely treatment.

Crisis telephone lines have had limited impact in the general population, but may have more value in small, remote communities because other sources of help are scarce and they allow a measure of privacy to talk about painful situations. The Baffin crisis telephone line, Kamatsiaktut, was developed in the early 1990s by community members, and provides counselling and contact services for anyone in need (Tan et al., 2004). Community ownership has been essential to the success of the program: the service is delivered entirely by volunteer northerners and has as many Inuktitut speakers as possible on the lines (about 85% of the population being served is Inuit). The program was developed using Southern crisis line models, adapted to the local setting and culture, and strict rules are used to maintain anonymity and confidentiality. An average of three calls are received per night (the lines are open from 9 P.M. to midnight). The program has been expanded to service half of the Northwest Territories and a large portion of Quebec (in area code 819) toll-free; two other lines in the Northwest Territories have been developed based on this model. Such services can offer help with a level of confidentiality that may be impossible in many small communities.

The Role of Professionals and Mental Health Services

As discussed in Chapter 3, most people who commit suicide have a psychiatric disorder and addiction (depression, personality disorder, substance abuse). As well, 50 to 60 per cent of people who make a suicide attempt see a physician or other health care provider in the weeks before the event (Appleby et al., 1996; Lewis, Hawton, and Jones, 1997). Because these disorders are both common and strongly associated with suicide, effective treatment of these conditions should significantly reduce suicide rates. Very rough estimates based on studies among youth suggest that successfully treating all cases of major depression and other mood disorders could reduce the rate of suicide by an average of about 40 per cent, elimination of substance abuse would reduce suicide rates by an average of 20 per cent, and elimination of all conduct and anti-social disorders would reduce suicide by an average of 20 per cent (Fleischmann et al., 2005).

In studies of the general population in Britain, Finland, Sweden, and the United States about 75 per cent of the people who die by suicide were in contact with a primary care provider in the previous year, while only one in three people were in contact with mental health services before their death (Luoma, Martin, and Pearson, 2002). About one-third of youth with suicidal ideation or attempts receive some form of mental health care, usually from a private doctor or school counsellor (Pirkis et al., 2003). A study of deaths by suicide in Nunavik found that one in three had been in contact with primary care services during the month before their death (Boothroyd et al., 2001). These and other studies suggest the importance of primary care as a site for the identification and treatment of individuals at risk for suicide.

There is both direct and indirect evidence that delivery of mental health services can reduce suicide (Rutz, 2001). Some of the observed decrease in suicide rates in the United States population in recent years has been attributed to better treatment of depression with newer antidepressant medications (Gould et al., 2003; Olfson et al., 2003).

Although they may visit a physician in the weeks or months prior to the event, most people who die by suicide do not openly discuss their intention during medical visits (Isometsa et al., 1995). Thus, it requires

skill and expertise to establish rapport and detect the signs of depression and despair (American Psychiatric Association, 2003). However, many primary care clinicians are not adequately trained and do not feel competent to diagnose and treat suicidal behaviour.

A number of studies have found that where clinicians have received education in suicide recognition, intervention, and prevention the rates of suicide and attempted suicide had been reduced (Gould, 2003). There is evidence that a one-day training program can significantly improve the ability of general practitioners to recognize psychological distress and suicidal ideation among youth, but is not sufficient to modify their management (Pfaff, Acres, and McKelvey, 2001). Practice audits that review physician performance according to established guidelines may prolong the effect, and having appropriate training in interventions and support staff would promote effective treatment. In some studies, most people who died by suicide were not taking antidepressants, suggesting they had not been adequately treated (Henriksson, Boethius, and Isacson, 2001).

It is sometimes suggested that people who have suffered through similar predicaments and survived have the knowledge they need to help others. While such experiences may bring wisdom, compassion, and understanding they do not necessarily make someone competent to help suicidal individuals. Indeed, there is some evidence that their own past suicide attempt can impair even trained counsellors' ability to respond effectively to their clients (Neimeyer, Fortner, and Melby, 2001). Clearly, there is a need for effective training, supervision, and support of helpers in clinical settings as well as in crisis hotlines or other sources of help.

In remote communities, arranging contact with mental health professionals may be difficult. Maintaining long-term contact with previously hospitalized patients may be extremely helpful (Motto and Bostrom, 2001). The simple effort to contact someone after the acute crisis or hospitalization is over may send a powerful message of caring and concern. The typical pattern of sending people out of remote communities for time-limited treatment may lead to discontinuities in care that put people with chronic problems at greater risk. Strategies for maintaining long-term (even if infrequent) contact must be developed.

Tertiary Prevention or Postvention

Aftercare services provide help for those who have made a suicide attempt or have shown other tendencies for self-injury as such individuals are at high risk for completing suicide at a later time. The forms of support should include both appropriate clinical services to treat psychiatric illness and non-medical approaches to mental health and healing (examples include peer counselling, close supervision, family and social network intervention, and counselling by Elders). Services need to be accessible and meaningful to persons who "may be in conflict with the criminal justice system, have issues with substance use or sexuality, or be otherwise alienated from helping services" (Commonwealth Department of Health and Family Services, 1997:34th pg., 8th para.). Support also needs to be in place for family and community members affected by a suicide attempt or death.

Suicide has significant impact on family and friends of the victim—increasing depression for at least six months after the event. Many authorities advocate the provision of counselling aimed at promoting normal mourning and avoiding pathological grief responses (Kirmayer et al., 1993b). In order to respond in a timely fashion to a suicide, it is important to have essential services and a coordinating team in place. The Centers for Disease Control and Prevention has provided guidelines for postvention services, with particular attention to responding to suicide clusters (O'Carroll et al., 1988).

Summary

Although there is still a lack of good evaluation studies and demonstrations that suicide prevention programs actually work, even in the general population, recent evidence does suggest that certain specific types of interventions are likely to be effective. There is evidence of benefits from programs or interventions that:

- 1) restrict access to the means of suicide;
- 2) provide school-based education to teach coping skills, how to recognize and identify individuals at risk, and how to refer them to counselling or mental health services;
- 3) train youth as peer counsellors or “natural helpers;”
- 4) train other individuals with whom youth come into regular contact (teachers, nurses, primary care providers, clergy, parents) to recognize and refer youth at risk;
- 5) mobilize the community to develop suicide prevention programs, a crisis intervention team, family support, and activities that bring together youth and Elders to transmit cultural knowledge and values; and
- 6) ensure that mass media portray suicide and other community problems in appropriate ways.

For individuals already identified as at risk for suicide or suffering from other mental health problems, it is crucial to ensure they have access to adequate mental health services. Depending on the severity of the problem, this includes psychiatry, psychology, counselling, peer support, and indigenous forms of help and healing. Families and friends bereaved by a suicide should also have counselling and other forms of support available. The fact that it is the youth in Aboriginal communities who are most obviously affected by suicide tends to keep the focus primarily on youth. Any intervention that reduces the suffering and improves the well-being of the parents and families of youth will benefit youth as well as contribute to suicide prevention.

Conclusion: Understanding and Preventing Suicide

For myself with suicide, I guess ... like everybody else was just saying, it doesn't matter where you are from or where you're at, in small communities, it always hurts. It's always regretful that somebody had to commit suicide. For myself, there's a lot of things we can do. When somebody commits suicide, it's for me, I think it's darn, we could have done something about it but that's just saying, for the youth or for somebody that somebody has to start doing something about it instead of just talking about it all the time. Maybe, maybe somebody has to stand up and say, hey, we must do something (First Nation youth).

This concluding chapter begins by presenting a model that integrates biological, psychological, developmental, and socio-historical factors that contribute to suicide and corresponding strategies for prevention. This model is based on existing research and provides a framework for thinking about transgenerational origins and consequences of suicide. A discussion follows on the notion of "best practices" in Aboriginal mental health and the ways in which conventional practices may need to be modified to address the realities of Aboriginal communities and populations. Guidelines for best practices in suicide prevention are then summarized. Finally, areas where further research is needed in order to provide a firm footing for suicide prevention and mental health promotion in Aboriginal populations are discussed.

An Integrative Perspective on Suicide

Mental health professionals tend to view suicide as an individual problem related to personal or family psychopathology. Most studies find that the majority of people who die by suicide had a psychiatric disorder (this includes substance abuse and personality disorders) (Lesage et al., 1994). However, suicide may also occur among people who face desperate circumstances or act impulsively, but who do not have a distinct psychiatric disorder (Goldsmith et al., 2002).

The sociological perspective sees suicide as a consequence of large-scale social processes including economic disadvantage and marginalization, the stress of overly rapid and coercive cultural change and discontinuity, the disruption of community structures of solidarity and support, and political disempowerment. Suicide may also be understood as a spiritual problem, having to do with the person's sense that life lacks meaning or with the lack of a connection with larger values that give life purpose and direction.

No single cause or factor can account for any individual act of self-harm, let alone for the great range of people affected by suicidal ideation and behaviour. It follows that there is no single item of information or simple combination of items that allows accurate identification of individuals who will commit suicide over the long-term (Enns et al., 1997; Pokorny, 1992). Accordingly, the clinical psychiatric perspective focuses on identifying and treating individuals who are currently distressed and at immediate risk. Up to the present, Aboriginal people in many parts of the country have not received adequate access to the range of mental health services (Advisory Group on Suicide Prevention, 2003). The provision of adequate clinical and social services will certainly help to reduce the suicide rate. Linking suicide to psychiatric disorders has also been recommended as a prevention strategy, not only because it may encourage help-seeking, but also because it stigmatizes suicide, making it less acceptable as a behaviour (American Academy of Child and Adolescent Psychiatry, 2001b).

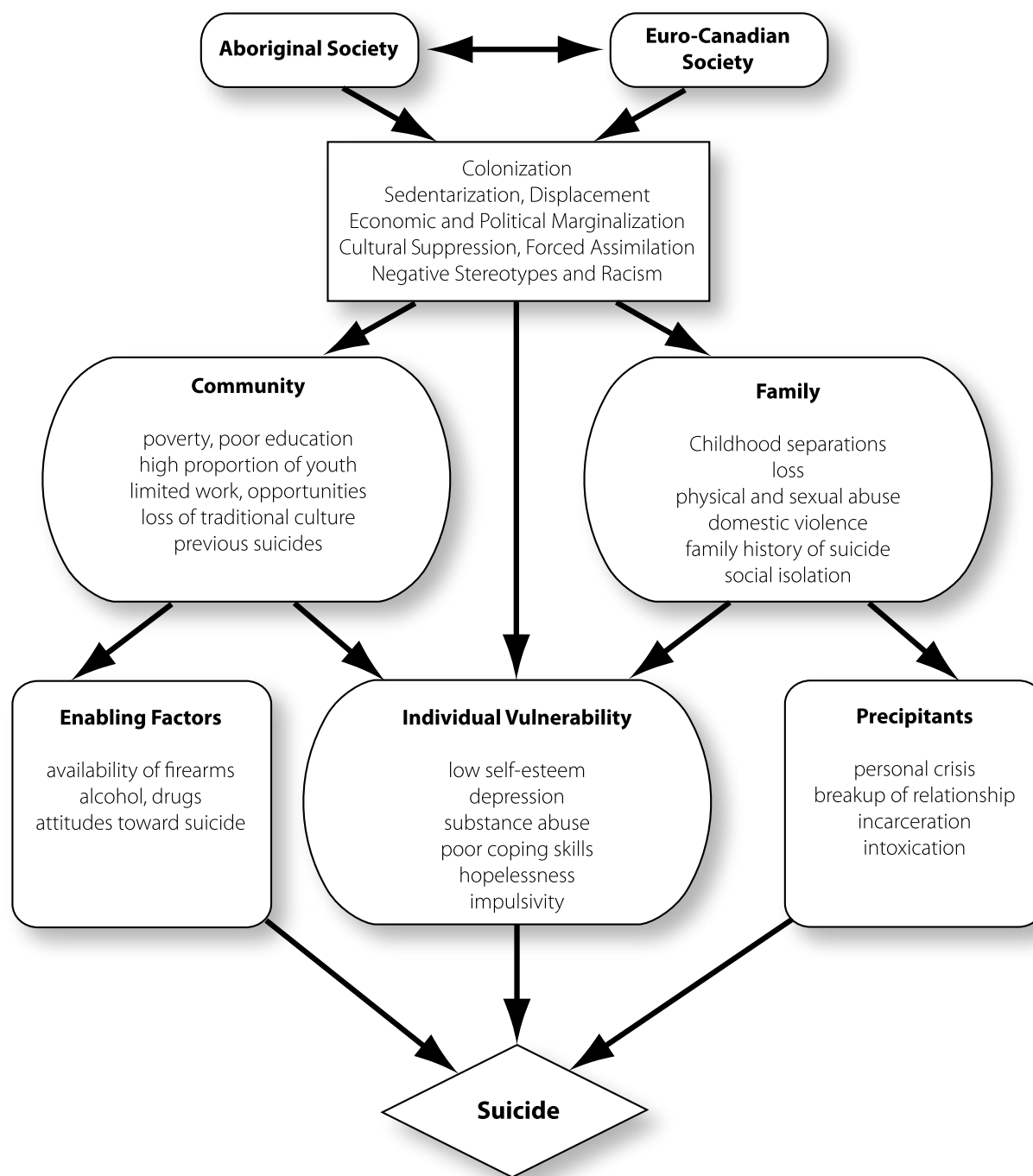
An argument can be made, however, that given the widespread social problems faced by Aboriginal people in Canada, viewing suicide strictly as the outcome of a psychiatric disorder is not only incomplete but actually may aggravate the situation (Kirmayer, 1994; Tester and McNicoll, 2004). Psychiatric explanations are stigmatizing, and so add to the feelings of estrangement, devaluation, and powerlessness that contribute to suicidality. A psychiatric approach directs attention to the pathological individual rather than to basic social problems that demand remediation. Nor can psychiatric labelling be displaced from the individual to the community. Labelling whole communities as “sick” is a metaphor that may contribute to pervasive demoralization and that evades the social and political issues. Compounding this problem is the fact that suicide commands public and government attention and, therefore, is perceived as a powerful issue to raise in political debates. This focus, however, may just serve to legitimate suicide as a form of political protest and so, inadvertently, increase its prevalence. A way is needed to approach suicide as an outcome of social conditions without justifying it as an “appropriate” response or even as an effective form of political protest. The report of the Advisory Group on Suicide Prevention (2003) acknowledged this dilemma when it called for depoliticizing suicide but politicizing youth; that is, the report suggests avoiding using the issue of suicide as a tool to achieve political ends, while encouraging youth to take an active role in shaping their own future.

Of course, the social explanations cannot fully account for the actions and experience of individuals. Even under the worst social conditions and most desperate situations only some people attempt suicide. Therefore, there is a need to understand the specific characteristics that increase individual vulnerability or, looked at the other way, the qualities that confer resilience on those who do not make suicide attempts. Even when beset by severe depression, most people do not attempt suicide. This resistance to despair in the face of personal and collective adversity is worthy of attention in its own right.

In many respects, psychiatric and sociological views are complementary rather than contradictory. The collision of two cultures, followed by the engulfment and suppression of one by the other, results in marginalization including social stress on at least three distinct but interrelated levels: the community, the family, and the person. The community suffers economic disadvantage, social disorganization, and political disempowerment. Unemployment, poverty, and community disorganization create conditions of alienation and anomie (normlessness). The family and social support system suffer disorganization as well from the forced changes brought on by the rapid modernization and loss of traditional patterns of child rearing. Individuals suffer self-estrangement and loss of self-esteem due to the denigration or marginalization of the cultural heritage from which they draw their language, self-definition, and personal history. Given the complex situation faced by many Aboriginal communities, there must be understanding of the origins of suicide and its prevention in ways that bring together both psychological and social explanations.

Thus, the model presented in Figure 6-1 integrates some of the biological, psychological, developmental, and socio-historical dimensions of suicide by placing equal emphasis on the individual, family, and community as precursors to the crisis situation itself. This model also makes it clear that there are both distal (long-term) and proximal (immediate) factors that influence suicide. Distal factors include the profound socio-historical changes of colonization and its aftermath that have exerted their effects over many generations. Proximal factors include the immediate precipitants of suicide, like the breakup of a relationship or other personal crisis and enabling factors (e.g. readily availability of alcohol, drugs, and firearms) that increase the likelihood of impulsive action and the lethality of suicide attempts.

Figure 6-1) An Integrative Model of the Origins of Suicide*



*Based in part on Shaffer et al., 1988.

This model of suicide highlights the central role of larger social historical factors in the predicament faced by contemporary Aboriginal people. Although many authors have pointed to rapid cultural change as a cause of demoralization and distress, cultural change is not inherently harmful nor does it always result in a loss of traditional culture.

However, for much of their history since contact with European colonizers, Aboriginal communities have been actively suppressed, undermined, and destroyed. These acts of violence have marked many Aboriginal groups and severely constrained their options for adaptation to cultural change. The oppressive effects of colonization, marginalization, forced assimilation, and the active suppression and denigration of Aboriginal cultures and identities through state-sponsored programs like the residential school system and systematic out-adoption have wounded and disrupted families and had a devastating effect on contemporary Aboriginal youth in many communities.

Of course, the model is only a sketch of the complex historical, social, and psychological pathways and inevitably simplifies the dense web of relationships. In mapping one set of pathways, the model ignores the great diversity of Aboriginal communities both in social and cultural history and in current circumstances. There are wide variations in the rate of suicide and other indicators of mental health among Aboriginal communities reflecting their different histories and the ways in which they have responded to ongoing challenges.

As well, despite the history of violent suppression, cultural contact has involved ongoing exchange and dialogue in which Aboriginal cultures and values have exerted a significant effect on Euro-Canadian society. In fact, the impact of Aboriginal values may be increasing in recent years through political efforts and media exposure, both locally and internationally, as others come to recognize the limitations and negative consequences of Euro-American values of individualism and materialism. At the same time, Aboriginal people are actively engaged in creating ways of life and identity that blend features of traditional culture with elements drawn from the wider society and global cultures.

The final common pathway of suicide involves profound hopelessness and a desire to escape unending psychic pain (Schneidman, 1993). For Aboriginal youth, this hopelessness, pain, and despair result from the confluence of psychological or psychiatric disorders and existential problems that follow directly from the rapidity of social change, the suppression of traditional knowledge, history, and identity as well as from persistent racism, discrimination, and economic disadvantage in the larger society. These problems demand social and political analyses and interventions. The fact that the mental health literature tends to focus on individual problems and solutions, this should not obscure the need for a broader perspective on suicide among Aboriginal people.

Adapting Prevention Practices for Aboriginal Populations

The notion of “best practices” is increasingly discussed in relation to suicide prevention. The concept of best practices implies there is a sound basis for choosing among available options to identify those approaches that achieve the best possible outcome. Although sometimes framed as general standards, best practices may vary across different settings. Ideally, best practices in suicide prevention and health promotion should have proven effectiveness in settings that are similar to those needing to be addressed, be feasible given available resources, and fit well with social, cultural, and political concerns. In fact, the actual efficacy and effectiveness of most suicide interventions remain uncertain. Existing studies are often in large urban

settings that are quite different in the context of most Aboriginal communities. Little work has been done to adapt interventions to the social and cultural particulars of Aboriginal communities. In the face of these limitations of available information, the decision of what constitutes “best practice” becomes a pragmatic choice among available options based on expert consensus and careful consideration of the specific context of Aboriginal communities.

While many of the goals and objectives of standard suicide prevention practices are pertinent to Aboriginal communities, most require some modification or reconsideration to fit the social and cultural realities faced by the communities. The programs discussed in Chapter 5 and listed in Appendix A as being relevant to the situation of Aboriginal people in Canada were either developed by and for Aboriginal communities or have been adapted for Aboriginal communities with the help of the community itself. Despite this fact, there are many features of Aboriginal communities that may make the adaptation or creation of suicide prevention programs a challenging undertaking. Models of mental health services and professional training developed in large-scale urban environments for a Euro-Canadian population require systematic rethinking to be adapted and applied to the wide range of Aboriginal contexts. Distinctive features of Aboriginal communities and populations that may affect the effectiveness of any specific prevention program include the scale and location of communities, the lack of mental health services, the lack of Aboriginal professionals, the difficulty of maintaining professional anonymity and confidentiality, and cultural and linguistic diversity.

Scale and Location of Communities

Many Aboriginal people live in small communities that are geographically distant from major urban centres. This distance results in problems of resource availability and transportation, with communities having fewer human and material resources for medicine and social services, and multiple roles being played by a few individuals. The remoteness of some communities may contribute to feelings of isolation and uncertain identity among youth. On a practical level, it makes hospitalization and involvement in aftercare difficult. The geographic location of many Aboriginal communities also goes along with cultural values that emphasize a close relationship to the land and the seasons that shape ideas about self and community.

Up to half of the Aboriginal population live in urban settings (Statistics Canada, 2003) where they may be widely dispersed within the general population as well as forming ethnic enclaves. There is considerable heterogeneity in the urban Aboriginal population in terms of cultural background, socio-economic status, educational attainment, employment status, and the number of years spent in urban settings. However, inner-city poverty, high unemployment, racism, and associated social problems are very real concerns in most major Canadian cities, particularly in the western provinces. In some cities, a high proportion of the homeless are Aboriginal, and high-risk Aboriginal youth far too often become street-involved at a young age and are overrepresented in the drug/sex trade. While most major Canadian cities have friendship centres, Aboriginal housing, and other resources for Aboriginal people, these services are neither adequately funded nor well integrated with other mental health and social services. The urban Aboriginal population may have distinct needs in terms of their social support and health care problems. Recent federal, provincial, and regional initiatives, such as the National Homelessness Initiative and the Urban Aboriginal Strategy, to improve housing and services for Aboriginal people have begun to respond to this complexity, but no one solution will fit the diverse needs of urban Aboriginal populations.

Access to Services

Even with the counselling services through the hospital, you have to have a recommendation from a doctor and there's a long waiting period before there's a free space so that you can see the counsellor. And if you've got a problem that's happening right now, waiting three weeks to see a counsellor isn't the best solution (First Nation youth).

For geographical, historical, and economic reasons there is a lack of resources available in many communities for mental health programs. Indeed, most communities have limited availability of mental health services, which largely fall under “non-insured health benefits” administered by the First Nations and Inuit Health Branch of Health Canada (Advisory Group on Suicide Prevention, 2003). Most mental health care is provided by primary care clinicians (nurses and family physicians) or community workers.

Primary care clinicians and helpers must be trained to be able to detect and respond to potentially suicidal individuals. The willingness to recognize problems depends, in part, on the clinician's confidence in treatment. Treatment skills are particularly important for nurse practitioners and family physicians who work in remote communities where there is little specialized mental health expertise available. Specific areas relevant to suicide where additional training in treatment approaches may be needed include major depression, anxiety disorders, substance abuse, family violence, and sexual abuse.

Mental health workers in remote settlements may experience more isolation than their counterparts who work in cities. Workers in remote communities must operate without the backup of other professionals and resources needed to deal with crises (e.g. supervised settings, psychiatric consultation, day-hospital programs, family intervention). Unfortunately, there often are arbitrary divisions and a lack of communication among school, social services, and health personnel even in small communities. This isolation and fragmentation of services must be counteracted to provide support for workers and continuity of care.

Availability of Aboriginal Mental Health Workers

Few Aboriginal people have had the opportunity to pursue professional training in mental health. This is changing and a new generation of helpers is emerging who are able to put together Aboriginal knowledge of health and healing with the most useful and relevant aspects of psychiatry and psychology. However, conflicts and contradictions between biomedicine and local ways of understanding affliction and healing can occur; therefore, models of integration or conflict resolution must be developed.

Given the lack of trained mental health workers in many Aboriginal communities and the crucial importance of cultural and linguistic knowledge in treatment, it is essential to extend training programs to local community workers, healers, church leaders, and other “natural” helpers. Professional training can be adapted to the needs and perspectives of these groups so that they can both provide various types of supportive intervention and work with professionals when necessary.

Privacy and Confidentiality

I'm not sure exactly how this would work but the idea that was touched on before that it's easier to talk to a stranger than someone that, well, not a stranger, but someone that you know, don't know necessarily personally, I suppose, is easier to talk to. So if somehow there's

like a program set up where you like, go in and meet with someone and talk to someone that's there for you, that you don't necessarily know on a one-on-one time, like that would be really helpful (First Nation youth).

As a result of community size, family ties, and shared history there is little opportunity for the sort of privacy and confidentiality that is part of the professional mental health or social service practitioners' role in big cities. This confidentiality has both ethical and practical uses: it provides privacy and safety for clients who wish to talk about potentially embarrassing or stigmatizing issues and it allows the helper to have some respite from being constantly "on the job." In small communities, helpers are often related to the people they are helping and have no way to step back for a while from their role. This can lead to conflicts of interest and untenable situations and contributes to emotional "burnout."

Cultural and Linguistic Diversity

Language is a basic conveyor of culture, and most people are connected to their emotions and intimate thoughts most readily in their first language or language of everyday life. To be most useful, help should be available in a language the person is comfortable with and take into account aspects of cultural background and social milieu. Few health professionals have made the effort to learn Aboriginal languages and little information has been translated. Interpreters rarely receive systematic training in interpreting mental health, nor are professionals trained in how to work with interpreters. Translation is not just a matter of finding roughly equivalent words, but of exploring and understanding the different connotations of words and specific cultural meanings.

Culture is a broader issue than language and includes popular conceptual models of how people function, patterns of social interaction, and basic values that are central to any mental health program. Culture is not simply tradition since all communities evolve and change to meet new circumstances. For example, Aboriginal spirituality and new expressions of Christianity or other religions are all important in the complex cultural mix of contemporary communities. These ways of life influence both the way in which suffering is expressed and the process of healing (Adelson, 2000; O'Neill, 1996). Ongoing dialogue among health providers and access to a variety of forms of help are needed to address the growing diversity within communities.

Some forms of psychotherapy or other mental health interventions for high-risk individuals may not fit well either with traditional Aboriginal values or contemporary realities of settlement or reserve life. Family and social network approaches may be more consonant with Aboriginal culture, particularly if they are extended to incorporate some notion of the interconnectedness of person and environment (LaFromboise, 1988; Fleming, 1994). Direct involvement of respected Elders as advisors and caregivers in the development of counselling methods and associated psychotherapeutic techniques is essential for the development of culturally appropriate care that will also contribute to a valued sense of collective identity (Duran and Duran, 1995).

Aboriginal notions of spirituality are at the centre of the renaissance of traditional healing practices (Absolon, 1994; Mawhiney, 1993; Dion Stout, 1994; Young, Ingram, and Swartz, 1989). These values are being reclaimed after centuries of active suppression by religious, educational, and governmental institutions. Traditional healing practices invoke spirituality as a link between individual suffering and the health of the community as a whole. Suicide is then seen as closely related to other forms of sickness of the spirit, and the

aim of healing is to restore the balance of physical, mental, emotional, and spiritual dimensions of self and community (Dion Stout, 1994). While the term “spiritual” is intuitively and experientially understood by many people, it has specific interpretations under different social contexts (Waldram, 1993). The value of promoting spiritual values and healing cannot be understood simply in terms of symptoms, behaviours, or outcomes as it is an essential element in the current reconstruction and revitalization of Aboriginal identity both at individual and community levels.

Rapidity of Social and Cultural Change

As discussed at length in Chapter 4, the most striking fact about the recent history of most Aboriginal communities is the rapidity with which social and cultural change has occurred. This change has been largely forced on people by governments and other forces beyond their control. In recent years, new technologies of communication and transportation have introduced the realities of globalization even to remote communities. Rapid change has challenged Aboriginal identity and resulted in profound generation gaps among youth, adults, and elders. Many youth may feel more strongly identified with a global youth culture purveyed through television and the Internet than they do to their families and communities.

Best Practice Guidelines for Suicide Prevention

This section summarizes guidelines for developing best practices for suicide prevention programs that are adapted to the characteristics of specific Aboriginal communities or populations. Figure 6-2 outlines the major sites or levels of intervention to be included in a comprehensive suicide prevention program.

Figure 6-2) Levels of Intervention in Suicide Prevention

Community Development

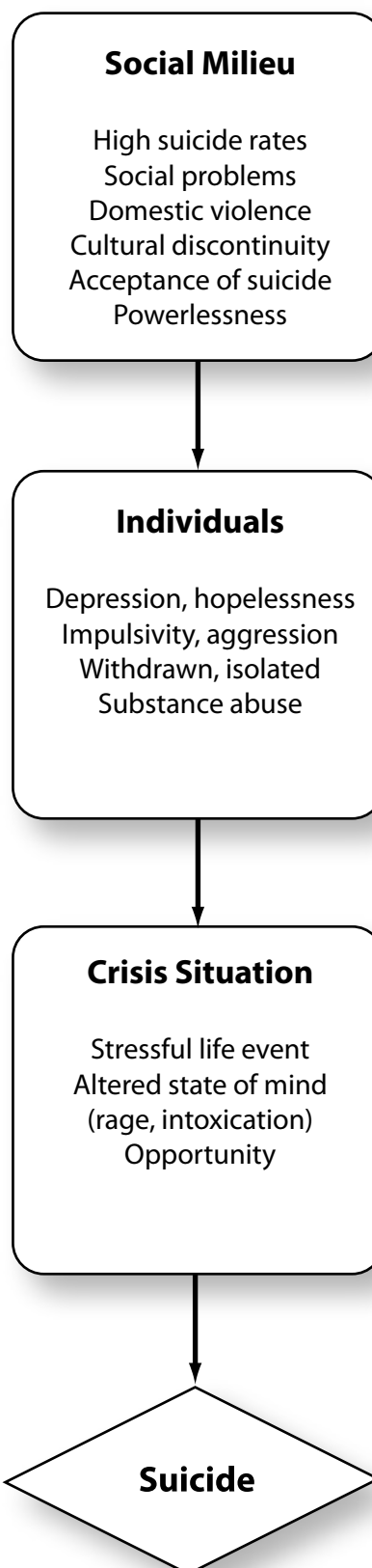
- * Education about mental health and suicide
- * Organization of suicide prevention committee
- * Community development
- * Cultural renewal, continuity
- * Youth-elder-family programs
- * Local control of institutions
- * Political empowerment
- * Employment and recreational activities for youth

Identifying and Helping Vulnerable Individuals

- * School-based education in life skills
- * Screening for youth at risk
- * Gate-keeper training, referral networks
- * Peer counselling
- * Traditional healing
- * Mental health services
- * Drug rehabilitation programs
- * Hospitalization

Crisis Intervention

- * Crisis hotline
- * Crisis service or crisis team
- * Safe place for refuge
- * Training of police and first responders
- * Monitoring and support for individuals in custody
- * Firearm education and control
- * Alcohol and substance controls
- * Suicide postvention team



Overall Orientation

Suicide prevention should be understood as part of a larger, multi-faceted mental health promotion strategy that is the responsibility of the whole community, First Nation, or region. In its *Choosing Life: Special Report on Suicide Among Aboriginal People*, the Royal Commission on Aboriginal Peoples (1995) insisted that only a comprehensive approach to suicide prevention will improve the situation in Aboriginal communities. Such an approach includes plans and programs that:

- provide suicide crisis services;
- promote broad preventive action and community development; and
- address long-term needs for self-determination, self-sufficiency, and healing (Royal Commission on Aboriginal Peoples, 1995).

A suicide prevention strategy with the best chance of making a difference is better conceptualized as a “mental health” or “community wellness” promotion strategy. This suggests the following general guidelines for a suicide prevention strategy:

- 1) Programs should be locally initiated, owned and accountable, and embodying the norms and values of Aboriginal culture. Although it is crucial to develop local solutions rather than those imposed by external agencies, useful help from the latter should not be rejected when a meaningful partnership can be negotiated.
- 2) Suicide prevention should be the responsibility of the entire community, requiring community support and solidarity among family, religious, political, or other groups. Given the importance of community, there is a need for close collaboration among health, education, other community services, and local government. The bureaucratic structures that have evolved in government and urban services are fragmented and sometimes competitive. This can have disastrous effects in Aboriginal communities, not only through lack of continuity of care for vulnerable individuals, but because of the demoralizing effect on the lack of integration on the whole community.
- 3) A focus on children and young people (up to their late 20s) is crucial, and this implies involvement of the family and the community.
- 4) The problem of suicide must be addressed from many perspectives, encompassing biological, psychological, socio-cultural, and spiritual dimensions of health and well-being.
- 5) Programs that are long-term in focus should be developed along with “crisis” responses. A comprehensive approach to the problem of suicide should be integrated within larger programs of health promotion, family life education, community and cultural development, and political empowerment.
- 6) Evaluation of the impact of prevention strategies is essential. While a program’s continued existence is often taken as an indicator of its success, it is always important to examine the workings of a program and its wider impact to detect any unforeseen or harmful effects.
- 7) Training of community mental health workers in individual and family counselling (particularly for grief), appropriate social intervention, and community development methods is essential.

Planning and Coordination

A comprehensive suicide prevention program requires a central coordinating group to ensure that there are no gaps in the system and there is no duplication. This group should involve representatives from major sectors of the community: youth, respected Elders, caregivers, professionals (from health, social services, and education), local government, and others. Inter-agency collaboration should be encouraged in order to fully utilize the strengths of all concerned, resulting in a comprehensive strategy responsive to the changing needs of individuals and the community. Together they may create or adapt programs that reflect the true nature of the community. The immediate effect of such collaboration will be a coordinated response to suicide prevention. The long-term effects will be the strengthening of the community and cultural identity, as well as the emergence of local control that will improve the health of both individuals and communities.

This coordinating group should also link with and supervise a research team who can help design and carry out evaluations on the prevention activities and programs.

Prevention

Primary suicide prevention strategies for Aboriginal communities should include the activities listed below:

- 1) Peer counselling in which a group of youth are trained in basic listening skills and are identified as resource people for other youth in crisis.
- 2) A school curriculum that incorporates learning about positive mental health, the recognition of suicide, substance use, and other problems as serious mental health issues, as well as cultural heritage as a source of ways of healthy coping.
- 3) Recreational and sports programs for children and young people to combat boredom and alienation, and to foster peer support and a sense of belonging.
- 4) Workshops on life skills, problem solving, and communication for children and young people; much of this can be given by youth counsellors who could provide positive role models.
- 5) Family life education and parenting skills workshops for new parents and adults.
- 6) Support groups for individuals and families at risk (e.g. young mothers, recovering substance abusers, ex-offenders who have returned to the community after serving time).
- 7) Cultural programs and activities for the community at large (e.g. recording and transmitting the traditions of elders, camping on the land, ceremonial feasts, Aboriginal language courses).
- 8) Collaboration between community workers in health, social services, and education to promote integration of services.
- 9) Training in mental health promotion and suicide risk factor awareness for lay and professional helpers.
- 10) Opening lines of communication by creating opportunities for community members to express their concerns and interests (e.g. town council or community meetings and gatherings).

While many of these activities and programs can be implemented through the school or clinic, this would be greatly facilitated by the development of a community drop-in centre where these activities could take place.

Intervention

The following types of programs and services address the needs for intervention with individuals at high risk for suicide and should form part of a comprehensive prevention strategy:

- 1) Training of primary care providers (e.g. nurses, physicians, social workers, etc.) in suicide detection and crisis intervention, as well as in treatment of depression, anxiety disorders, substance use, and other psychiatric disorders.
- 2) Development of a regional crisis hotline based outside the community to provide some confidentiality; but workers should have knowledge of the community in order to respond appropriately and have community contacts who are available to intervene quickly when necessary.
- 3) Development of a crisis centre based in the community or in an adjoining community to provide a safe place, “time out,” and an opportunity for intensive intervention. It can be staffed by lay helpers and “big brothers” or “big sisters,” along with available professional assistance.
- 4) Immediate availability of crisis intervention for those at acute risk. This must address not just the affected youth themselves but their family and social networks as well (Stewart, Manion, and Davidson, 2002). Family therapy and social network interventions fit the family- and community-centred values of many Aboriginal people (Thompson, Walker, and Silk-Walker, 1993).
- 5) Development of assessment and intervention services for parents of youth at risk (e.g. individual, couple, or family interventions for substance use, family violence, effects of residential school experiences, relocations, etc.).

Some of these services may be difficult to provide in an ongoing way in remote communities. Limitations of local resources may be offset by the use of telehealth (Jong, 2004; Muttit, Vigneault, and Loewen, 2004) and the development of regional crisis intervention teams able to support and work collaboratively with people within the community (Debruyn et al., 1988).

Postvention

There is a need for routine follow-up of family and friends who have experienced a loss through suicide to identify and help those at risk for suicide themselves. Since Aboriginal communities are closely-knit and many youth find themselves in similar predicaments, suicides often occur in clusters. Therefore, there is a need to develop a crisis team to respond to suicide clusters. This can be done locally and complemented by a regional team with additional resources (Debruyn, Hymbaugh, and Valdez, 1988). The U.S. Centers for Disease Control and Prevention has developed guidelines for the community response to suicide clusters (O’Carroll et al., 1988). In brief, these guidelines suggest:

- 1) A community should review these recommendations and develop their own plan before the onset of a suicide cluster.

- 2) The response to the crisis should involve all concerned sectors of the community: i) a coordinating committee of concerned individuals from school, church, health care, government, law enforcement, helpers, etc.; and ii) a host agency that should coordinate meetings, planning, and actual response in time of crisis.
- 3) Relevant community resources should be identified including hospital, emergency medical services, school, clergy, parents' groups, suicide hotline, students, police, media, and representatives from agencies not on the coordinating committee.
- 4) The response should be implemented when a suicide cluster occurs or when one or more deaths from trauma are identified that may impact on the adolescents.
- 5) The first step in crisis response is to contact and prepare all groups involved.
- 6) Avoid glorifying suicide victims and minimize sensationalism.
- 7) High-risk persons should be identified and have at least one screening interview with a trained counsellor, and then be referred for further counselling as needed.
- 8) Timely flow of accurate, appropriate information should be provided to the media.
- 9) Elements of the environment that might increase the likelihood of further suicide attempts should be identified and changed.
- 10) Long-term issues suggested by the nature of the suicide cluster should be addressed.

Both national and local media have a responsibility to take great care with their coverage of suicide issues by adhering to codes of conduct (Royal Commission on Aboriginal Peoples, 1995). Guidelines for media reporting of suicide are readily available (e.g. American Foundation for Suicide Prevention, 2001; Youth Suicide Prevention Program, n.d.). Suicidal behaviour must not be dramatized or romanticized, and details on methods should not be provided. A news report should always be accompanied by information about available suicide prevention resources and other means of coping with distress (Royal Commission on Aboriginal Peoples, 1995). This can be presented in the form of comments by persons who were previously suicidal but sought help or by caregivers who can offer assistance (Commonwealth Department of Health and Family Services, 1997). The media can contribute to suicide prevention by presenting positive images of Aboriginal culture and examples of successful coping and community development.

Evaluation

An evaluation strategy should be developed from the start in parallel with program development. If necessary, this can be done in partnership with academic researchers who have the requisite expertise. Two handbooks on evaluation for First Nations and Inuit communities are recommended for detailed information (see Health and Welfare Canada, 1991; Holt, 1993).

The overall prevention strategy and its major elements should be systematically evaluated in terms of four broad issues:

- 1) effectiveness in reducing suicide and improving mental health;
- 2) pragmatic feasibility and cost-effectiveness;
- 3) process of implementation and evolution; and
- 4) wider social and cultural impact.

The results of ongoing evaluation can be used to identify useful or detrimental aspects of the strategy, uncover gaps or new possibilities for prevention, and refine the programs.

Effectiveness can be assessed in terms of several different measures, including rate of attempted suicide and suicidal ideation through community surveys, service utilization through clinical records, and other epidemiological measures of mental health and well-being. Basic outcome statistics include: mortality rates by suicide, sex, and age; information on methods used; attempted suicide rate as estimated by a survey; and hospitalization rate following attempted suicide by sex and age.

Evaluation of the feasibility and cost-effectiveness of programs is important to identify what elements are most readily transferable to other communities, as well as to seek support for long-term funding to maintain prevention efforts. Process evaluation that examines how a program was implemented, obstacles faced, and solutions found will provide essential information for further program development as well as potential assistance to other communities seeking to develop similar programs.

Finally, any prevention program with the wide scope described in these guidelines will have far-reaching effects on community life, individual and collective identity, and other social and cultural outcomes (e.g. economy). Qualitative and, where possible, quantitative analysis of this wider social impact will add a critical dimension to prevention efforts.

Conclusion

Clearly, action to prevent suicide cannot wait on definitive research. At the same time, there is an urgent need for evaluation research of intervention programs in Aboriginal communities, since there is a real possibility that some well-intentioned interventions may do more harm than good. To address this need, a brief list of some recommended programs that provide a starting point for community-based development of local initiatives has been compiled. These programs all have an Aboriginal community focus where the program is either: 1) community created and driven; 2) adapted in part, or in whole, by the community; or 3) intended to help the community mobilize toward a community created and implemented prevention initiative. Each program has an evaluation component. Finally, the programs are wide-reaching, ongoing, and accessible to anyone who wishes to find out more about them.

Given the limited state of knowledge about what works in suicide prevention, research must continue to play an important role. In fact, participatory action research may contribute directly to suicide prevention by strengthening communities. To achieve these beneficial effects, research must be conducted collaboratively with communities to ensure relevance and responsiveness to local needs and perceptions. Ethical guidelines for the conduct of research with Aboriginal communities and people have been published by the Royal Commission on Aboriginal Peoples (1996b) and the National Aboriginal Health Organization (2003).¹³

¹³ For these and other sources, see: www.mcgill.ca/namhr/resources/ethics/

Often, suicide is a response to feeling trapped in a dead-end with no exit. It is almost always an effort to escape unending frustration, grief, and psychic pain (Schneidman, 1993). The prevention of suicide must therefore counteract frustration, hopelessness, and unbearable pain in all of their toxic forms, and provide other means of changing or escaping intolerable circumstances. In many cases, this may involve psychotherapy, medication, or other forms of healing that renew the individual's sense of power, self-efficacy, and self-worth. Where the loss of hope affects whole communities, however, this individualized approach may be woefully inadequate. However, rather than turning Aboriginal communities into "therapeutic milieus" where everyone is preoccupied with mental health issues, it may be more effective to directly address the social problems that affect whole generations of young people by supporting community development and political empowerment. In this way, young people will move with their parents, elders, and communities from a position of marginalization, powerlessness, and pessimism to one of agency, creativity, self-confidence, and hope.

Recommended Suicide Prevention and Mental Health Promotion Training Programs

This appendix summarizes selected programs in suicide prevention and mental health promotion for Aboriginal people. These programs were chosen for the following reasons:

- 1) The program has an Aboriginal community focus in that it is either community created and driven, adapted in part or in whole by the community, or is intended to help the community mobilize toward a community created and implemented prevention initiative.
- 2) An evaluation component is included, whether the evaluation has been completed, is ongoing, or is included in the design.
- 3) The programs are wide-ranging, ongoing, and currently accessible to anyone who wishes to find out more about them.

Although only a few of these programs have had rigorous evaluations, they are all reasonable places to start in developing a comprehensive prevention program.

Applied Suicide Intervention Skills Training (ASIST)

ASIST is a two-day, interactive workshop designed by Livingworks Education, a public service corporation, to prepare all caregivers including professionals, paraprofessionals, and lay people to intervene in a suicide crisis. ASIST is currently the most widely used suicide intervention workshop in the world. It has been in place for nearly 25 years, is multilingual and employs over 3,000 trainers worldwide. This workshop talks about attitudes and how they affect one's work as a caregiver (a caregiver in this case is anyone whose work—professional or volunteer—involves suicide prevention). It also gives the caregiver an understanding of who commits suicide and how to do a risk assessment. Participants have the chance to practice talking to a person at risk, using role play in which they follow the intervention model taught through ASIST. Participants learn to recognize individuals at risk and how to intervene to reduce the immediate risk of suicide. ASIST is designed to help all caregivers become more ready, willing, and able to help persons at risk. Fundamental to the program is the belief that prepared caregivers can help prevent suicide. The program has five learning sections:

- 1) *Preparing* – sets the tone, norms, and expectations of the learning experience.
- 2) *Connecting* – sensitizes participants to their own attitudes toward suicide. Creates an understanding of the impact that attitudes have on the intervention process.
- 3) *Understanding* – overviews the intervention needs of a person at risk. It focuses on providing participants with the knowledge and skills to recognize risk and develop safe plans to reduce the risk of suicide.
- 4) *Assisting* – presents a model for effective suicide intervention. Participants develop their skills through observation and supervised simulation experiences in large and small groups.
- 5) *Networking* – generates information about resources in the local community; promotes a commitment by participants to transform local resources into helping networks.

ASIST participants receive the *ASIST Handbook*, a Help Card and a workbook. Although the program was originally designed for caregivers in the general population, ASIST is widely used in Aboriginal communities. While the information presented is basically the same as workshops presented in other communities, the trainers working with Aboriginal groups are experienced in adapting the material so that it is relevant to the community. Aboriginal and non-Aboriginal trainers are often brought together to present this 2-day ASIST workshop for Aboriginal communities. The ASIST workshop has been evaluated many times. Evaluations are available from Livingworks Education (the authors of the program). Results indicate an increase in caregiver competence and confidence following the workshop.

An example of the program in use is the Calgary Urban Aboriginal Suicide Prevention Committee II-PAA-TAA-PII (IPTP), a coalition of social service agencies and Aboriginal community members. The committee provides education and awareness of suicide prevention issues to urban Aboriginal community members. Since its inception in 2003, IPTP has trained five Aboriginal trainers to present the ASIST workshop. IPTP provides highly subsidized ASIST workshops to the local Aboriginal community. IPTP has also developed a local suicide help card, provided 2-hour awareness presentations to a variety of local groups and communities, and is currently developing a one-half day workshop on suicide and Aboriginal people.

5-Day Suicide Prevention Training for Aboriginal Communities

The 5-Day Suicide Prevention Training for Aboriginal Communities was commissioned by the Royal Canadian Mounted Police (RCMP) National Aboriginal Policing Services and was created by Suicide Prevention Training Programs (SPTP), a branch of the Centre for Suicide Prevention. The Centre for Suicide Prevention is a non-profit organization dedicated to providing information, research, and training regarding suicide prevention.

Suicide Prevention Training Programs (SPTP) developed a flexible, five-day workshop to address the issue of suicide in Aboriginal communities. The five-day workshop has been presented throughout Canada, in every province and territory. Many of the workshops have been conducted as part of a suicide prevention strategy of the RCMP National Aboriginal Policing Services Branch. SPTP was selected to develop the program for the RCMP, making it the first national initiative to address suicide prevention in Aboriginal communities. While there is a generic workshop format, each program is tailor-made to fit the needs of the particular community. The workshop is interactive and engaging, involving small and large group discussions, videos, practice role-plays, talking circles, and group strategy sessions. When appropriate, local Elders are invited to speak about local traditions and to conduct ceremonies. Workshop organizers, participants, and community members are encouraged to incorporate their community traditions and ceremonies into the five days of the workshop. Elders provide opening and closing ceremonies for the workshops when applicable. In some communities, there are requests for a local Elder to come and talk about local traditions, culture, and the Aboriginal view of life, death, suicide, and grieving. The full-day talking circle is generally co-facilitated by an SPTP trainer and a local Elder. This workshop is designed to provide suicide and crisis intervention training for community members, have members learn about bereavement, as well as give members an opportunity to share their own feelings of loss and thoughts about suicide and other issues in their community. While the program is flexible and is retooled before each workshop, the following core components are most often used:

Day 1 and 2: ASIST-Applied Suicide Intervention Skills Training. The first two days are spent in the LivingWorks/SPTP ASIST training. Participants learn to recognize and assess suicidal behaviour as well as how to undertake the short-term management of a crisis situation.

Day 3: Critical Incident Stress Debriefing (CISD). This component of the workshop is grounded in the belief that caregivers working on the front line need to have a system that allows them to deal successfully with the stress of their job. Burnout, identifying stressors, and strategies for dealing with stress are discussed.

Cultural Awareness and Traditions. In some communities, there are requests for a local Elder to come and talk about local traditions, culture, and the Aboriginal view of life, death, suicide, and grieving.

Day 4: Talking Circle. It is important to understand how life experiences impact the ability to be an effective caregiver. The full-day talking circle gives participants the opportunity to explore their own feelings and fears about suicide in a very safe and supportive environment.

Day 5: Development of a Suicide Prevention Strategy. It is essential that communities develop practical strategies to address their high rate of suicide behaviour. This segment introduces the concept of community development, and encourages groups to examine gaps in services and to develop a realistic plan for suicide intervention/prevention.

The workshop was evaluated by an outside source in 2000. The evaluation was designed to meet the diverse needs of Aboriginal communities. It took place in three communities that had previously hosted the workshop. The evaluation involved a sharing circle in which community members were asked to discuss specific questions regarding suicide and suicide prevention and how these related to the workshop and their communities. The discourse of the participants was tape recorded, transcribed, and analyzed through content analysis, thus allowing the voices of the community to speak to the effectiveness of the workshop. Summative results indicated that the workshop goals were well met. Formative results indicated that there was a need for more content involving youth and suggested an additional prevention program for youth. The evaluation is available on request from the Centre for Suicide Prevention.

White Stone: Aboriginal Youth Suicide Prevention Training for Youth Educators

White Stone was developed in partnership between the RCMP National Aboriginal Policing Services and Suicide Prevention Training Programs (SPTP) in response to Aboriginal community requests for a prevention program involving youth. Suicide Prevention Training Programs is a branch of the Centre for Suicide Prevention, a non-profit organization dedicated to providing information, research, and training regarding suicide prevention.

The purpose of White Stone is to train participants to deliver education sessions to youth in their community. Participants are Aboriginal and Inuit youth 18–25 years of age who have been identified as leaders by their community and community-based service providers (youth worker, teacher, nurse, police, etc.). When they return to their community they work in partnership to offer Youth Education Sessions. The Youth Education Sessions are intended to be presented to youth over the age of 16 who are not actively at risk of suicide. The curriculum includes suicide prevention and may incorporate self-esteem, problem-solving, goal-setting, communication, and coping skills.

The Training for Youth Educators was field tested in 2000 to 2001 in four locations in Canada to a total of 85 participants from 24 communities. An informal evaluation based upon participant feedback, training team experience, debriefing, and reflection is ongoing. A rigorous evaluation process was completed in 2004 by an external evaluator using surveys, telephone and in-person interviews, and document review. The evaluation (available on request from the Centre for Suicide Prevention) indicates that White Stone has a positive impact on its participants and communities. Recommendations are made for continued funding, follow-up, and increased front-end support for communities who bring in White Stone.

White Stone participants have access to a members-only website to provide them with ongoing support, resources, and online community. Participants are able to email questions to White Stone trainers, share information, and access additional resources provided by Suicide Prevention Training Programs. The purpose of the Training for Youth Educators component is to train participants to be a resource to their community. The primary way for participants to be a resource is to present education sessions to youth in their community. The Youth Education Sessions are intended to be presented to youth over the age of 16 who are not known to be actively at risk of suicide. The sessions are designed to be flexible and responsive to local needs. The sessions have a life skills development focus and it is expected they will be offered as part of a larger community suicide prevention strategy. The curriculum includes suicide prevention and may incorporate self-esteem, problem-solving, goal-setting, communication, and coping skills. Elders provide opening and closing ceremonies for the workshops when applicable. In some communities there is a request for a local Elder to come and talk about local traditions, culture, and the Aboriginal view of life, death, suicide, and grieving.

An example of the White Stone program in use is the New Brunswick First Nation Suicide Prevention Task Force Work Plan. The Aboriginal New Brunswick task force is comprised of approximately 12 people from 10 different First Nation communities in New Brunswick. Their objective is to:

- 1) provide training activities and establish a support network for front line workers and caregivers;
- 2) sensitize the outside world to the unique issues of First Nation people of New Brunswick;
- 3) act as a public relations board; and
- 4) distribute information about suicide prevention and First Nation people of New Brunswick.

The task force works with provincial organizations such as the New Brunswick Division of the Canadian Mental Health Association and the RCMP. Training programs are offered to the youth of all First Nation communities in New Brunswick. Recently, the task force organized a White Stone 5-day training program.

Community-Based Suicide Prevention Program (CBSPP)

The CBSPP is a state-funded program administered in participating communities across Alaska by the Division of Alcoholism and Drug Abuse (ADA) of the Department of Health and Social Services that has been running since 1988. The purpose of the program is to reduce suicide and self-destructive behaviour while encouraging productive and healthy alternatives. Currently, funds are administered by the Division of Alcoholism and Drug Abuse (ADA) in the form of grants averaging approximately US\$11,000. Grants are awarded to organizations within Alaskan villages, which design projects to meet the needs of their own community. While projects must fit within specific constraints determined by the state, the function of the state remains administrative, and it is the members of the villages themselves who design and run the projects. Although changes have been made recently to the grant-writing and implementation process, in

the past, project coordinators received assistance in the form of training as well as an information network that included state and regional conferences and a bimonthly newsletter. The program used to fund approximately 50 villages per year, with the number of villages funded varying slightly from year to year. More recently, with the combination of several grants intended for prevention, only 23 grants specifically for suicide prevention were awarded. Activities implemented by the villages involve, among others, crafts, fundraising, cultural and outdoor activities, prevention, crisis, and organizational activities, many of which are specific to the Native culture of the village.

The CBSPP has undergone three evaluations in its 18-year history. The first, conducted in 1990, examined the implementation of the program. Among other findings, this evaluation reported a high degree of community planning involved in the projects and community integration of the project activities with existing community activities. The project staff was pleased with the grant application process and work was being done to make the process even more accessible in order to assist villages in the competition for funds. The second evaluation, completed in 1993 was designed to assess whether or not the program was meeting the original goals, and to examine what sort of impact the program was having thus far. This evaluation revealed that program intentions were met in both the design and implementation of the program. Programs were meeting community needs and were integrated with existing activities, thus solidifying program support. In terms of impact, this evaluation found that emphasis was placed on skill development regarding suicide prevention, and that communities with the highest suicide rates were indeed the ones applying for grants. However, project coordinators reported having difficulty in getting certain at-risk groups involved, particularly, young men.

The third and most extensive evaluation commenced in 1998 and was completed in 2003. This evaluation involved several aspects, the first being an examination of community participation and the coordinator's perception of project success. Findings revealed that 41 per cent of the planned activities were implemented, and that these percentages were consistent after the initial year. This evaluation also involved the creation of a database intended to track the performance of the village projects through nine indicators. These data were collected by the village coordinators. Some of the more pertinent findings revealed that during the last year these indicators were evaluated, the project resulted in an average of one cultural event per month per village; and over the lifetime of the evaluation, crisis services were provided to 1,033 individuals.

The database was also used to analyze external data sets of completed suicides from the Alaska Bureau of Vital Statistics from 1990 to 2001, as well as attempted suicides and alcohol-related injuries from the Alaska Trauma Registry from 1991 to 1999. In general, it was revealed that for completed suicides, there were downward trends for both villages with and without projects, although villages with projects tended to have higher rates. The rates for both attempted suicides and alcohol-related injuries increased over the lifetime of the evaluation. Comparing villages with and without projects, those with projects had higher rates of attempted suicides, while those without projects tended to have the higher rates for alcohol-related injuries. These findings may have been influenced by an increased effort at data collection and reporting at trauma centres during the study period.

All three of these evaluations indicated positive outcomes as a result of the CBSPP program and recommended continuation of the program and level of funding. The third evaluation suggested that in contrast to villages with problems, villages that do not have problems appear less willing to commit to the grant conditions for such a small amount of money. This suggests that the current program as it existed had a high likelihood of providing funding where it was needed.

The program has continued in a different form, as indicated above, where several prevention programs that previously were administered separately and had separate request for proposals (RFPs) were combined into one RFP for all. This has involved a lengthier application process as well as a reduction in the grants provided specifically for suicide prevention.

An example of the program in use is a small Aleut village (name withheld for confidentiality) where a project coordinator/member of the crisis response team for suicide prevention, along with school district staff, worked together to coordinate a spirit/culture week. This included camping, subsistence preparation and use, food gathering, traditional stories, usage and learning the Alutiiq language, and traditional arts and crafts. The combination of crisis response, supportive counselling, and culturally based activities as demonstrated in this community is typical of many of the funded projects.

Zuni Life Skills Development Curriculum (ZLSD)

The Zuni Life Skills Development Curriculum (ZLSD) is a culturally based suicide prevention program aimed at high school students. The ZLSD led to the creation of the American Indian Life Skills Development Curriculum. Both were developed by Teresa LaFromboise, a professor in the Faculty of Education at Stanford University and a descendant of the Miami tribe of Indiana.

The original program was designed to be consistent with “Zuni norms, values, beliefs, and attitudes; sense of self, space, and time; communication styles; and rewards and forms of recognition” (LaFromboise and Howard-Pitney, 1995:481). The creators of the curriculum worked in conjunction with the Zuni community in the development of the curriculum and community support. The ZLSD focuses on providing participants with life skills in an attempt to reduce behavioural and cognitive factors associated with suicidal behaviour. The program is based upon social cognitive theory, which suggests that suicidal behaviour is influenced by: 1) individual characteristics; 2) environmental factors; and 3) peer and community modelling. The premise of the program is that in providing youth with life skills, these youth will have decreased risk factors and increased protective factors. The curriculum itself contains seven units (LaFromboise and Howard-Pitney, 1995):

- 1) Building Self-Esteem
- 2) Identifying Emotions and Stress
- 3) Increasing Communication and Problem-Solving Skills
- 4) Recognizing and Eliminating Self-Destructive Behaviour
- 5) Receiving Suicide Information
- 6) Receiving Suicide Intervention Training
- 7) Setting Personal and Community Goals

These units include skills and knowledge that may provide protective factors against a variety of risk-taking behaviours common among youth. Skills training provided information about helpful and harmful effects of certain behaviours, modelling of skills, rehearsal of skills, and feedback to improve skills (LaFromboise and Howard-Pitney, 1995). Those implementing the curriculum were taught to use it through training sessions that were similar to the skills-building approach of the ZLSD curriculum. Teachers were also provided with a manual for teaching the curriculum.

This program was evaluated using a quasi-experimental design, though matching participant characteristics in intervention and non-intervention conditions (LaFromboise and Howard-Pitney, 1995). Students

completed self-report data, which measured psychological risk factors, self-efficacy, and protective skills. Students also conducted role-play activities and were observed, through blind review, by reviewers who had been trained as a team for 18 hours in assessing the role-play activities. The evaluation found that employing the curriculum resulted in the reduction of certain risk factors and protective factors associated with suicide including decreased hopelessness and suicide probability for those who had taken the curriculum. Behavioural observation also revealed that employing the ZLSD had provided students with better suicide intervention skills and problem-solving skills than those who had not received the curriculum.

The ZLSD program can be adapted easily to other cultures as long as it is employed by individuals well trained in the curriculum, and there is extensive community involvement that allows those implementing the program to adapt it to community norms.

Jicarilla Suicide Prevention Program

The Jicarilla suicide prevention program in New Mexico was established in 1990 through collaboration among the Jicarilla Tribal Council, the community, and mental health professionals of the U.S. Indian Health Services (IHS). The program is aimed at youth aged 10–19 years old—a group which was identified as being most at risk for suicide within the community. The goals of the program are twofold:

- 1) to increase community awareness and education regarding suicide and suicide prevention as well as other related concerns such as child abuse, family violence, and substance abuse; and
- 2) to reduce the incidence of suicide and suicide attempts among the targeted age group.

The program involves five objectives:

- 1) to identify risk factors of suicide that are unique to the Jicarilla people and that may be similar to other Athabaskan tribes from the southwestern United States;
- 2) to identify specific individuals or groups among the Jicarilla people who are susceptible to risk, be it suicide, other mental health concerns, or violence;
- 3) to identify and create prevention activities that are intended for high-risk groups;
- 4) to provide mental health services to Jicarilla people in need; and
- 5) to increase community awareness and knowledge about suicide and suicide prevention.

Groups from all parts of the tribe were consulted in the creation of the program, from tribal leaders to youth, and over 50 workshops took place in order to determine what problems in the community needed to be addressed, what barriers existed in overcoming these problems, and what can be done to address both the problems and barriers. Information obtained from these workshops indicated that community members felt that suicide could not be dealt with in isolation, and suicide could only be addressed in conjunction with the underlying issues of domestic violence, child abuse, alcoholism, and unemployment. The resulting program thus includes components that address these concerns. The program takes on a public health approach, including mental health services that are integrated into a larger program of services that deal with social, psychological, and developmental health at all levels of prevention. Continued development and funding have contributed to the enhancement of the program throughout the 15 years of its existence.

This program has been evaluated four times, and the most recent evaluation indicated a 60 per cent drop in self-destructive acts between 1988 (before the program began) and 2002 (May et al., 2005). This correlates

with the creation and implementation of the prevention program in the Jicarilla community, suggesting that the program influenced a reduction of suicidal gestures and attempts. While deaths by suicide remained the same for all ages combined in the community, most suicides happened outside the targeted groups. According to the authors of the evaluation, this finding suggests that the program is successful in reducing chronic repetitive suicidal behaviour, but not more acute impulsive suicides. The authors of this evaluation further suggest that program success is a result of the combination of a public health approach, combined with community involvement from creation to implementation, and the continued evaluation that influences the ongoing program.

Northwest Territories Suicide Prevention Training (NTSPT)

The Northwest Territories Suicide Prevention Training Program was developed in response to an increase of suicides in the Northwest Territories (NWT) that occurred during the 1980s. The developers include the Department of Health and Social Services, the Canadian Mental Health Association, the Department of Education, Culture and Employment, the Dene Cultural Institute, and the Nunavut Social Development Council. The program is administered by the NWT Department of Health and Social Services with a territorial steering committee.

The goal of NTSPT is to make suicide prevention training something that communities in the Northwest Territories are able to access. The program is intended to create expertise among the community members so that they may be able to recognize and help individuals who are at risk of suicide. This is accomplished by helping communities develop their own community-appropriate strategies for suicide prevention. The program provides handbooks to communities that wish to host training.

The program involves two phases. The first phase is divided into three components, each of which takes one week. These include: 1) "Grieving and Healing," where participants discuss their own grief and loss and build support networks among themselves; 2) "Prevention, Intervention, and Postvention Skills," where participants work on developing the knowledge and skills necessary to deal with suicide in their communities; and 3) "Leadership Skills and Community-Based Strategies," which teaches participants on how to become community leaders in suicide prevention.

The second phase of the program is a four-week course designed to train trainers so that a group of local trainers could be established and, hence, train as many NWT residents as possible. A four-week course was designed by the Dene Cultural Institute in consultation with the Tatigiit Development Inc. Individuals who attend this phase of the program must have previously attended the first phase as described above. These individuals learn to become NTSPT trainers, and also receive instruction on the development of effective communication, self-care, suicide assessment, and intervention skills. This phase of the program has only been offered once to date (in 1998) and produced 19 graduates.

The cost for local training is approximately \$30,000, and regional training is usually higher due to travel costs. The program is subsidized by the NWT Department of Health and Social Services, and communities are encouraged to provide aid in any way they can in order to show community awareness and support of the training.

The NTSPT program has been evaluated twice, first during the testing period of the program, which simply indicated that the program was well-received and the trainees felt they had gained useful knowledge.

The second evaluation was done three years into the program and indicated that: 1) trainees provided positive feedback about the curriculum components; 2) the program was seen as different from other suicide prevention programs in that it provided experiential learning and addressed the personal reactions of caregivers; and 3) caregivers were using support from the Department of Health and Social Services, and they requested ongoing support from the department. Caregivers also indicated that they were connecting with other suicide prevention caregivers and that they wanted to be integrated into community groups. The NTSPT program has also been evaluated and listed as a “best practice” in several reviews of prevention programs.

Contact Information for Recommended Suicide Prevention Programs

ASIST / White Stone / 5-Day Suicide Prevention Training for Aboriginal Communities

Centre for Suicide Prevention
Suite 320, 1202 Centre Street SE
Calgary, AB T2G 5A5
Phone: 403-245-3900
Fax: 403-245-0299

Email: csp@suicideinfo.ca

Website: www.suicideinfo.ca

Website page specific to programs for Aboriginal communities: <http://www.suicideinfo.ca/csp/go.aspx?tabid=54>

This website also contains information on other prevention programs that were either created for or may be adapted to Aboriginal communities, such as: 1) *Weaving the Web: Suicide Prevention and Community Development for Aboriginal People*, which uses a 4-phase community development model to teach participants how to initiate and implement suicide prevention initiatives that will make a difference in their community; 2) *Talking Circle: Surviving Loss*, which is a 1-day workshop designed especially for communities where suicide deaths or multiple losses have occurred; and 3) *Counselling the Bereaved: A workshop for caregivers*, which can be either a 1- or 2-day workshop for caregivers who may be helping someone who is bereaved, particularly because of a suicide death.

The Community-Based Suicide Prevention Program

Department of Health and Social Services
Division of Behavioral Health
3601 'C' Street, Suite 878
Anchorage, AK 99503
USA

Phone: 907-465-3033

Fax: 907-269-3786

Website page: <http://www.hss.state.ak.us/dbh/prevention/programs/suicideprevention/default.htm>

The Zuni Life Skills Development Curriculum

To order the *American Indian Life Skills Development Curriculum* contact:

Customer Service Department
The University of Wisconsin Press
c/o Chicago Distribution Center
11030 S. Langley Avenue
Chicago, IL 60628
USA

Phone: 773-702-7000

Monday-Friday 9 A.M. – 5 P.M. Central Time

Fax: 1-800-621-8476 or 773-702-7212
Program Developer
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Stanford, California 94305-3096
Phone: 650-723-1202
Fax: 650-725-7412
Email: lafrom@stanford.edu
Website: <http://www.stanford.edu/~lafrom>

Jicarilla Program

The National Suicide Center located on the Jicarilla Apache Indian reservation in New Mexico provides training upon request for American Indian/Alaska Native communities. The Center also has staff to provide treatment on an outpatient basis.

Jicarilla PHS Indian Health Center
P.O. Box 187
Dulce, NM 87528
Phone: 505-759-3291
Fax: 505-759-3532
Website: <http://www.ihs.gov/>

Northwest Territories Suicide Prevention Training Program

Mental Health Consultant
Department of Health and Social Services
Government of the Northwest Territories
P.O. Box 1320
Yellowknife, NT X1A 2L9
Phone: 867-920-8758
Fax: 867-873-7706

Additional Resources: Manuals and Tool Kits

Aboriginal Youth: A Manual of Promising Suicide Prevention Strategies

This manual is a practical guide designed for those interested in developing a local suicide prevention strategy for Aboriginal youth. Grounded in the best evidence available and written in a user-friendly manner, the manual recommends 17 promising youth suicide prevention strategies that have real potential to reduce suicide and suicidal behaviours among Aboriginal youth. With over 250 pages of information including an introductory chapter on suicide among Aboriginal people and a model for understanding suicide prevention, this manual is an important resource to those living and working in Aboriginal communities. It is available at: www.suicideinfo.ca

National Inuit Youth Suicide Prevention Framework

This document describes the work and research undertaken by the Qikiqtani Inuit Association, on behalf of the Inuit Tapiriit Kanatami and the National Inuit Youth Council, on the National Inuit Youth Suicide Prevention Project. It presents background information on how the project came about, discusses key documents reviewed to learn from research already conducted, identifies common themes relating to suicide prevention, and presents recommendations for future action on suicide prevention for Inuit youth. Available at: www.itk.ca/publications/niyspf-en.pdf

National Aboriginal Youth Suicide Prevention Strategy Program Framework

The *National Aboriginal Youth Suicide Prevention Strategy Program Framework* is based on a framework created by the Assembly of First Nations, Inuit Tapiriit Kanatami, and the First Nations and Inuit Health Branch of Health Canada. The purpose of the strategy is to fund activities that promote suicide prevention among Aboriginal youth. All activities will: 1) be evidence-based and recognize traditional and cultural knowledge; 2) build on existing structures and processes; and 3) respect federal, provincial, and territorial mandates. There will be separate guides for: 1) First Nation people living on-reserve; 2) Inuit in Inuit communities; and 3) all off-reserve Aboriginal people. The main elements of the strategy include: 1) primary prevention activities intended to increase resiliency and reduce risk; 2) secondary prevention activities intended to support communities at risk of suicide; 3) tertiary prevention that will involve responding to crisis; and 4) evaluation and research intended to develop a foundation of available knowledge to prevent suicide among Aboriginal youth. The strategy is intended to develop and strengthen collaborative approaches with government, agencies, and organizations while maintaining the community-driven focus of preventing suicide among Aboriginal youth. This document also outlines funding that the strategy will receive, as well as the development of work plans for communities, timelines, and the sharing of knowledge. The appendix contains information on suicide among Aboriginal youth. Available at: <http://www.niyc.ca/news.php>

Acting on What We Know: Preventing Youth Suicide in First Nations

This report was created by the Advisory Group on Suicide Prevention appointed by National Chief Matthew Coon Come of the Assembly of First Nations and then Minister of Health Allan Rock. The purpose of this advisory group was to review the existing research and formulate a series of practical, doable recommendations to help stem the tide of youth suicides occurring in First Nation communities across Canada. Through discussion, literature review, and preparation of background papers key issues

were identified and recommendations generated. This report provides an examination of these issues from basic suicide data to specific factors affecting First Nation and, based on this, presents recommendations for action. The recommendations fall into four main themes: 1) increasing knowledge about what works in suicide prevention; 2) developing more effective and integrated health care services at national, regional, and local levels; 3) supporting community-driven approaches; and 4) creating strategies for building youth identity, resilience, and culture. Available at: http://www.hc-sc.gc.ca/fnih-spni/pubs/suicide/prev_youth-jeunes/index_e.html

Assessment and Planning Tool Kit for Suicide Prevention in First Nations Communities

The Assessment and Planning Tool Kit for Suicide Prevention in First Nations Communities was prepared in 2005 for the First Nations Centre, National Aboriginal Health Organization. The tool kit was created as a framework for communities to use in determining and creating a suicide prevention plan. The kit, which includes research and information on suicide and suicide prevention recommendations, is a guide intended for adaptation to the needs of each community. The tool kit is comprised of three phases:

- *Phase I: Pre-Assessment: Research and Information on Suicide and Suicide Prevention:* includes information on understanding suicidal behaviour among youth, including what might lead someone to consider suicide and what the protective factors might be. This section of the tool kit also outlines different approaches to suicide prevention (prevention, intervention, and postvention) and discusses the importance of involving all three in a prevention initiative. A variety of prevention, intervention, and postvention strategies are suggested. Phase I concludes by recommending how to develop and incorporate assessment, planning, and consultation into a suicide prevention strategy.
- *Phase II: Community Assessment:* explains how to gather information regarding the community population and access to general programs and services. This section suggests compiling information on community demographics, infrastructure, community health and social programs and services, community views and attitudes about suicide, community suicide itself, community responses to suicide, community risk factors, other community factors, cultural continuity factors, and community strengths.
- *Phase III: Developing a Community Healing Plan:* describes the process of planning community healing and suicide prevention through the use of local initiatives, community members, and community-appropriate strategies. Recommended steps include: analyzing the community assessment done in Phase II; identifying existing community programs that may act in the capacity of primary prevention resources; identifying existing programs that may act in the capacity of intervention programs or secondary prevention; identifying existing programs that may act in the capacity of postvention programs; and identifying specific community strengths. The tool kit then provides numerous questions to help create a framework that may be used to help the community with its suicide prevention planning process. The tool kit concludes by emphasizing the importance of evaluation and by providing information that will guide the community in developing an appropriate evaluation for their suicide prevention program. The appendices include common warning signs of suicide and key resources for the community to draw upon.

Available at: http://www.naho.ca/firstnations/english/documents/NAHO_Suicide_Eng.pdf

Aboriginal Healing and Wellness Strategy Suicide Prevention and Intervention Resource Kit

The *Suicide Prevention and Intervention Resource Kit* was prepared by the Nishnawbe Aski Nation as the result of a grant from the Aboriginal Healing and Wellness Strategy in Ontario. The program was developed by the Suicide Prevention Working Group, a task group established by the Aboriginal Healing and Wellness Strategy Joint Management Committee. The objective of this tool kit is to provide service workers with a range of tools to help address suicide among Aboriginal youth. The kit provides background information on strategies to prevent and intervene in suicide attempts. The main component of the tool kit is the *Wabanabe Puksayimoowin (Spirit of Hope) Aboriginal Youth's Suicide Prevention and Intervention Resource Manual – 2004*. This manual contains several resources, including: 1) information on injury profiles for Aboriginal people in Canada; 2) a paper on cultural continuity as a hedge against suicide; 3) information on traditional (Aboriginal) approaches to understanding suicide; 4) an example of a background document supporting a suicide prevention strategy; 5) an evaluation report; 6) a document on suicide prevention and mental health promotion in First Nations and Inuit communities; and 7) information on community factors and youth suicide. This manual within the tool kit also contains practical examples of prevention strategies including: 1) the *New Zealand Youth Suicide Prevention Strategy – In Our Hands / Kia Pika Te Ora O Te Taitamariki*; 2) *Wabanabe Puksayimoowin (Spirit of Hope) Example Suicide Prevention Strategy*; and 3) *Kashechewan First Nation Suicide Prevention Strategy*.

Other resources included in the tool kit are: 1) *Dilico Ojibway Child and Family Services Resource Manual* as an example of an agency or treatment program suicide protocol; 2) *The Resource Team Manual: A Guide for Community Based Resource Workers* from the Shibogama Health Authority's Payahtakenemowin Program as an example of a front-line suicide prevention/intervention protocol; 3) Cards and posters for helplines in Northern Ontario; 4) *The Nishnawbe Aski Nation Suicide Prevention Training Manual*, and accompanying video as an example of a community-based training manual; 5) discussion notes from a suicide prevention workshop; the report *Acting on What We Know: Preventing Youth Suicide in First Nations* from the Advisory Group on Suicide Prevention (2003) mandated by the Assembly of First Nations and Health Canada; and 6) a *Suicide Resource Listing Booklet*.

Crisis intervention workers in all 50 communities within Nishnawbe Aski Nation (NAN) region have received training in suicide prevention and intervention and the training is ongoing. NAN Suicide Prevention Programs focus on the strength of family values and spirituality to help combat the high rate of youth suicide in the NAN territory.

No longer available.

Additional Resources: Organizations

Aboriginal Healing and Wellness Strategy: www.ahwsontario.ca

Aboriginal Healing Foundation (AHF): www.ahf.ca

ACADRE Programs (Aboriginal Research Centres)

Alberta: Alberta ACADRE Network: www.acadre.ualberta.ca

Anisnawbe Kekendazone Centre – the Ottawa ACADRE: www.ciet.org/en/documents/projects_library_docs/2006222111642.pdf

Atlantic Aboriginal Health Research Program: aahrp.socialwork.dal.ca

BC ACADRE: www.health-disciplines.ubc.ca/iah/acadre

Centre for Aboriginal Health Research: www.umanitoba.ca/centres/cahr

Indigenous Health Research Development Program: www.ihrdp.ca

Indigenous Peoples' Health Research Centre: www.iphrc.ca

Nasivvik ACADRE Inuit Centre: www.nasivvik.ulaval.ca

American Association of Suicidology: www.suicidology.org

Assembly of First Nations: www.afn.ca

Australian National Youth Suicide Prevention Strategy Communications Project: www.aifs.gov.au/ysp/strategymenu

Canadian Association for Suicide Prevention (CASP): www.casp-acps.ca/index.html

Centre for Suicide Prevention: www.suicideinfo.ca

First Nations and Inuit Health Branch of Health Canada (FNIHB): www.hc-sc.gc.ca/fnih-spni/index_e.html

Health Canada: www.hc-sc.gc.ca

Indian and Northern Affairs Canada (INAC): www.ainc-inac.gc.ca

Inuit Tapiriit Kanatami: www.itk.ca

National Aboriginal Health Organization (NAHO): www.naho.ca

National Inuit Youth Council: www.niyc.ca

National Strategy for Suicide Prevention (for the United States of America): www.mentalhealth.samhsa.gov/suicideprevention

One Sky Center: www.oneskycenter.org

Ontario Suicide Prevention Network: zope.vex.net/~wbell/OSPN

Suicide Prevention Resource Centre: www.sprc.org

World Health Organization: www.who.int

Yellow Ribbon Suicide Prevention Program: www.yellowribbon.org

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