Injury Prevention and First Nations A Strategic Approach to Prevention
Prepared for the Assembly of First Nations
Health Secretariat

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Overview

Canada is suffering an injury epidemic and in Aboriginal communities the epidemic is even more staggering. In First Nation communities injury is the leading cause of death for people under the age of 45 (Health Canada 2001). As well as being a major cause of death, injuries tend to kill at comparatively young ages in First Nation communities. The biggest cause of injury death are motor vehicle accidents, suicide and accidental drug poisoning (2001). Injury death rates in First Nations communities are *far higher for men than for women*. First Nations people die from the *same types of injuries* as other Canadians *but the rates are much higher*. The age pattern is also similar in that in both cases, *people age 15-24 are at highest risk* (2001).

According to the 1991 Aboriginal People's Survey 39% of the respondents reported that family violence was a concern in their community. In both First Nations and general Canadian populations, about two thirds of homicide victims were males (2001). Suicide rates in First Nation communities tend to be highest among youth aged 15-24 and to diminish gradually at older ages. Rates of *completed* suicide are typically *3 times higher* in First Nation males than females. However, *it is generally the case that far more women than men attempt suicide*.

One major fallout of injuries are the resulting disabilities. Aboriginal persons with disabilities in Canada live in third world conditions subject to poverty and isolation. According to the 1991 *Aboriginal People's Survey* 31 per cent of Aboriginal adults have some form of disability - this is twice the average of the general Canadian population. According to the United Nations there are over 500 million persons with disabilities world wide – or 10 per cent of the global population. In some countries nearly 20 percent of the general population is in some way disabled; *if the impact on their families is taken into account, 50 per cent of the population is affected.* If we make that analogy to the Aboriginal population of Canada *over 71 percent of the Aboriginal population is affected in some way by a disability if the impact on the family is taken into account.*

According to the United Nations, the number of persons with disabilities continues to increase in tandem with the growth of the world population. Not surprisingly, many of the disabled *are poor*. The overwhelming majority – nearly 80 percent – *live in isolated rural areas*. Almost that many live in areas where *the services needed to help them are unavailable*. Too often their lives are handicapped *by physical and social barriers in society which hamper their full participation* (UN 2001). In addition to poverty, injury is the cause of much of this suffering.

Injury – A Definition

"Injury is physical damage to the body. Amongst other causes, injuries result from road traffic collisions, burns, falls, poisonings and deliberate acts of violence against oneself or others. More technically speaking, injuries result from acute exposure to various kinds of energy – mechanical, thermal, electrical, chemical or radiant – in amounts that exceed the threshold of physiological tolerance. Public health professionals divide injuries into two categories: *unintentional injuries* that include most injuries resulting from traffic collisions, burns, falls, and poisonings; and *intentional injuries* that are injuries resulting from deliberate acts of violence against oneself or others. " (WHO 2002).

Research indicates that in addition to death and disability, injuries contribute to a variety of other health consequences depending upon the type of injury incurred. These consequences include depression, alcohol and substance abuse, smoking, eating and sleeping disorders and HIV and other sexually transmitted diseases. The consequences of these deaths and disabilities affect not only the victim, but also their families, communities and societies at large (2002).

Injuries are caused by a complex interaction of a variety of factors. From a societal perspective they include low socio-economic status, cultural norms that support violence to resolve conflict and rigid gender norms. From a community perspective, some factors could include poor safety standards in the workplace, unsafe roads, and easy access to firearms. At the family level, family relationships such as lack of care and supervision, physical abuse, and family dysfunction are factors that cause injuries. Finally, factors such as aggression, and alcohol and substance abuse by individuals contributes to injuries to oneself and others (2002).

According to WHO *injuries are not random events.* <u>They are preventable</u>. The use of seat belts, child car seats, helmets, flame resistant clothing, smoke detectors, locked storage of firearms and ammunition are a just few measures that can contribute to a decrease in injuries globally.

Injuries are costly. Emergency room, hospitalization and long term care often mean that scarce resources are diverted from other development priorities to treat injuries (2002). Injuries are a public health concern because of the cost but also because of the human price of death and disability. Prevention strategies are required and in some cases need not be expensive. To date most prevention efforts have concentrated in developed countries. As a result deaths and disabilities have declined markedly in countries where such prevention efforts were established (e.g. seat belts, designated drivers programs, child car seats, etc.). A host of strategies at the individual, family and community level have also shown

promise in reducing violence related injuries. These include substance abuse programs, family counseling and school-based violence prevention initiatives.

To address the impact of injury WHO tells us that experts from the fields of medicine, education, transportation, sociology, criminology, justice, urban planning and communications can play crucial roles in creating safe and healthy communities. This will require commitment at the national, international and local levels to document the injury problem, craft, test and evaluate comprehensive solutions and disseminate lessons learned (2002).

The Statistics

The leading causes of death by age group for the First Nations population is illustrated in the following table. Of the five age groups illustrated, children (age 1-9), youth (age 10-19), early adults (age 20-44), middle adults (age 45-64) and senior (age 65+), there are very evident patterns related to injury. For children and through to age 44 the most common causes of death were injury. These were primarily non-intentional. In contrast, for youth and early adults the most common causes of death were intentional – suicide and self injury – at a rate of 38%. Additionally, 7% of deaths for early adults were homicides.

Motor vehicle accidents were among the leading causes of death in all age groups except for seniors. According to Health Canada (2003) potential years of life lost (PYLL) statistics are often used to illustrate the causes of premature mortality. For First Nations communities even a partial reduction in the injury death rates would have a profound effect on premature death rates and the health of the population in general.

In 1999 suicide accounted for approximately 1,315.5 potential years of life lost (PYLL) per 100,000 First Nations people. That is greater premature morbidity than for all other causes of death including cancers, and it is almost 50% more potential years of life lost as for all circulatory diseases (900 PYLL per 100,000 population). Suicide rates vary greatly based on numerous markers of cultural continuity (Chandler et. al 1998). Community rates are significantly reduced in First Nations environments that have control over their traditional land base, presence of *band controlled* schools, community control over health, presence of cultural facilities, control over police and fire services and community self – government (the greatest protective factor).

Table 1.0
Leading Causes of Death in First Nations by Age Group 1999

Age Group	Leading Cause of Death	Percentage
Age 1 to 9	Fire and Flames	26%
	Motor Vehicle Accidents	24%
	Other Injuries	24%
	Other	26%
Age 10-19	Suicide and Self Inflicted Injury	38%
	Motor Vehicle Accidents	30%
	Drowning and Submersion	10%
	Other	23%
Age 20-44	Suicide and Self Inflicted Injury	29%
	Motor Vehicle Traffic Accidents	15%
	Homicide	7%
	Accidental Poisoning by Drugs	6%
	Drowning and Submersion	5%
	Other	43%
Age 45-64	Ischemic Heart Disease	17%
	Lung Cancer	6%
	Motor Vehicle Traffic Accidents	5%
	Diabetes	4%
	Live Disease and Cirrhosis	4%
	Other	64%
Age 65+	Ischemic Heart Disease	20%
	Other Forms Heart Disease	9%
	Cerebrovascular Disease	7%
	Lung Cancer	7%
	Pneumonia and Influenza	6%
	Other	50%

Source: Health Canada, First Nations and Inuit health Branch in-house statistics. 2001

In the First Nations population mortality due to injury is the result of various factors that are unique to First Nation community living. The following are some of the most prevalent injury and living factors and how they correlate with one another:

Motor Vehicle Accidents:

- First Nations communities are greater distances from places where regular activities, commodities or services can be undertaken
- Riskier types of vehicles like snowmobiles and all-terrain vehicles are utilized in unsafe conditions such as on ice, public or poor roads, etc. – they are hard to see and roll over easily causing injury
- There are significant influences of alcohol and substance abuse in First Nation communities
- Emergency facilities are greater distances from First Nation communities increasing risk of death

Drowning

- Many First Nation communities are in close proximity to rivers and lakes, often with important services such as stores, heath centres, air strips located across a body of water
- In northern areas cold water temperatures increase likelihood of hypothermia and consequent death. In northern areas there is also less access to swimming lessons and lifesaving training
- Safety and lifestyle habits do not emphasize safety practices such as use of flotation devices or limiting alcohol consumption when in or on the water.

Fire and Burns

- Many homes in First Nation communities are wood frame construction
- There is limited presence of smoke detectors in many First Nation communities
- Smoking habits contribute to fires and injury

Violence and Suicide

- Poor social conditions and community dysfunction result in greater risks of violence and suicide. High suicide rates correlate with community characteristics such as a higher number of occupants per household, more single parent families, fewer Elders, low average income and lower average education.
- Overcrowded and poor housing increases the risk of injuries and can aggravate stress levels and contribute to family violence
- Hunting and subsistence lifestyles contribute to the risk of injuries due to firearms as well as the risk of suicide by these weapons.
- According to a recent British Columbia study, the main characteristics distinguishing Aboriginal from non-Aboriginal suicides were:
  - more powerful effects of adverse community conditions
  - youth – the typical Aboriginal victim - is an unmarried male in his late teens or twenties – he is likely to have been separated from family members in childhood, often in foster care, or come from a family that is unstable.
  - more family alcohol abuse, with accompanying violence
  - more personal alcohol abuse, with accompanying violence
  - lower levels of diagnosed mental illness
  - more impulsive decisions to commit suicide
  - were unemployed or victims of physical or sexual abuse

Source: FN and Inuit Injury Prevention Working Group 2001 health Canada

Risk and Protective Factors in First Nation Communities

People everywhere are exposed all their lives to a limitless array of risk to their health and to injury. No risk occurs in isolation. It is a complex chain of events spanning periods of time. Each has its cause and some has many causes. According to WHO (2003) risk can mean different things to different people. WHO also recognizes that injuries cannot be effectively addressed by one sector alone. With public health experts acting as a convenors, for example, experts from other fields such as medicine, education, transportation, sociology, criminology, justice, urban planning and

communications can play a crucial role in creating safe and healthy communities (2002). In order to protect people, and to help them protect themselves, governments need to be able to assess accurately how great the risks are. Without some qualitative approach to gauging the importance of specific risks, government policies might be driven by factors such as lobby groups or the weight of individual cases. Our goal is to define risk for First Nation communities by estimating the burden of disease and injury to different risks. This will involve the identification, and characterization of threats to human life and health. Risk assessment, therefore, will provide First Nations with an overall picture of the relative roles of different risks to human health and illuminate the potential health benefits by focusing on those risks that require research, attention and political action.

For example, in an injury event spectrum, interventions may be applied at different levels of the model. The spectrum below illustrates the moment of exposure to an event or agent through to the occurrence of the injury and possible resulting disability and/or death.

Event ---------- Exposure------------Injury----------Disability -------->Death

Prevention strategies may take different forms. Three examples are as follows:

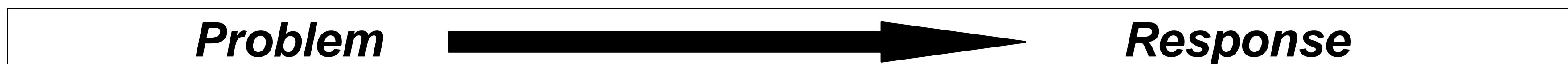
- **Primary prevention**: eg. preventing the injury, achieved by either preventing the event from occurring or averting an injurious outcome
- **Secondary intervention**: eg. early diagnosis and management
- **Tertiary intervention**: eg. mitigating sequlae such as more severe injury, disability or death, through early diagnosis and management.

Source: Injury Surveillance Guidelines for Less-Resourced Environments – National Center for Injury Prevention and Control Centers for Disease Control, Atlanta, Georgia WHO 2001
The public health approach is yet another injury prevention model that could be utilized in a First Nations context. The public health approach starts with defining the problem and progresses to identifying associated risk and protective factors, developing and evaluating interventions and implementing interventions into programs.

- **Defining the problem** includes delineating mortality, morbidity and risk taking behaviors. This includes obtaining information on the demographic characteristics of the person involved, temporal and geographic features of the incident, circumstances under which it occurred and the severity and cost of the injuries.
- **Identifying risk and protective factors** looks at who, when, where, what and how.
- **Developing interventions** is based on the information collected in the previous steps and doing controlled comparisons of populations, time series analysis of trends and observational studies.
- **Evaluation** documents the process that contribute to the success or failure of an intervention in addition to examining the impact of the interventions on outcomes
- **Implementation** of interventions that have been proven or are highly likely to be effective.

The Public Health Approach

Surveillance	Risk Factor Identification	Intervention Evaluation	Implementation
What's the Problem?	*What's the Cause?*	*What Works?*	*How do you do it?*



Poverty is an underlying determinant of many risks to health and injury. Alcohol is another commonly cited and increasing risk to health in many communities. The chain of causes – from socioeconomic factors through environmental and community conditions to individual behavior – offers many different entry points for prevention.

Risk assessment can be defined as a systematic approach to estimating and comparing the burden of disease and injury resulting from different risks. Risk means a factor that raises the probability of an adverse outcome. For example, if someone drinks and drives the risk can mean a potential adversity or threat .

Kinds of Risks

Risk	Definition
Prevalence of risk	The proportion of the population who are exposed to a particular risk eg. alcohol abuse as a percent of the population
Relative Risk	The likelihood of an adverse outcome in people exposed to a particular risk compared with people who are not exposed eg. smoking and lung cancer
Hazard	An inherent property that provides potential for harm eg. a chemical
Population attributable risk	The proportion of disease in a population that results from a particular risk to health
Attributable burden	The proportion of current disease or injury burden that results from past exposure
Avoidable burden	The proportion of future disease or injury burden that is avoidable if current and future exposure levels are reduced to those specified by some alternative or counterfactual distribution

Source: Who 2003

An effective risk assessment must have a well defined scope, which in turn depends on the purpose of the analysis. It is essential to have a quantitative approach to gauging the importance of the range of risks for injury so that the information from risk assessments are reliable, relevant and timely. Protective factors promote positive behavior and inhibit risk behaviors hence mitigating the impacts of exposure to risk. By reducing risks in the lives of First Nation community members the strengthening of protective factors is required.

Risks across the life course suggest the exposure to disadvantageous experiences and environments accumulates throughout life and increases the risk of illness, injury and premature death as time moves on. This best explains the

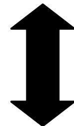
existence of wide socioeconomic differentials in morbidity and mortality rates as we have described earlier between First Nation children, youth and older adults.

Chronic illness in childhood can have long term consequences both for health and socioeconomic circumstances later in life. Slow growth in childhood is an indicator of early disadvantage. Early material and psycho-social disadvantage may also have an adverse impact on psychological and cognitive development which in turn may affect the health and labour market success later in life. The impact of living and working environments – and lifestyle factors such as smoking and drinking – on health inequalities have long been recognized. Cumulative differential lifetime exposure to health damaging environments appears to be the main explanation for observed variations in health and life expectancy to socioeconomic status.

Managing the Risk Prevention Process

Risk Surveillance
* monitoring interventions
* surveillance of risks and outcomes
* feedback to risk management

Risk Assessment
* identifying risk factors
* distribution and exposure levels
* probability of adverse events



Risk Communication
* communicating prevention strategy
* consultations with stakeholders
* promoting trust and debate

Risk Management
* understanding risk perceptions
* cost-effectiveness of interventions
* political decision-making

In the past prevention programs have been inhibited by the perception that injuries are *unavoidable* and that as a result behaviors are *difficult to change*. In First Nation communities this has been complicated by the "ethic of non-interference." In the field of injury prevention the new approach of focusing on not only *the injury event* but on the *risk factors* surrounding it has changed this ethic to one of pro-activity. Dr. William Haddon, an engineer and physician, identified what

he called the injury triangle which includes the host (person injured), the agent (thing or person injuring) and the environment (the overall setting where the injury takes place). To each of these corners of the injury triangle, he looked for risk factors in the “pre-event,” “event,” and “post-event” phases of injury events. When a pattern of risk factors emerged, Dr. Haddon outlined ten practical measures injury prevention workers could use for reducing, or eliminating, them.

Haddon’s Ten Prevention Strategies or Countermeasures

The following are the strategies for injury prevention.

Strategies for Injury Prevention	Examples
Prevent the creation of the hazard in the first place	Eg. don’t build all terrain vehicles or at least consider the hazards that are created when you design or start something new
Reduce the amount of the hazard created	Package medications in smaller amounts
Prevent the release of a hazard that already exists	Improve the braking capability of a car
Modify the rate or spatial distribution of the hazard from its source	Build cars with air bags
Separate in time or space the hazard from that which is to be protected	Build pedestrian walkways
Separate the hazard and what is to be protected by a material barrier	Separate drivers from a drop-off in the road by building guard rails
Modify relevant basic quality of the hazard	Build cribs with slats too narrow to strangle a child
Make what is to be protected more resistant to damage from the hazard	Physical conditioning
Move rapidly to detect and evaluate damage that has occurred and counter its continuation and extension	Train people in First Aid
Stabilize repair, and rehabilitate the damaged object	Develop a regional trauma system

Source: Injury Prevention a Guide for Aboriginal Communities

These strategies identify what is required to prevent injury and examples of each. For example, prevention of hazards in the first place are required. This could mean building vehicles such as all terrain vehicles which are used in many northern First Nation communities with a design in mind that makes them safe and less injurious.

Potential sources of data that could be used to proactively plan for injury prevention in First Nation communities is essential. Potential sources include:

- Agency or institutional records
- Individual data
- Local program data
- Community and government records
- Population based and other related surveys, and
- Special studies

Such information can be used to better understand the circumstances surrounding the various injuries and incidents that occur in First Nation communities and their impact on the communities as a whole. Various types of data include:

- Health data on diseases, injuries and other health conditions;
- Self-reported data on attitudes, beliefs, behaviors, cultural practices, victimization and exposure to violence or risk factors for injury;
- Community data on population characteristics and levels of income, education and unemployment;
- Crime data on the characteristics and circumstances of violent events and offenders;
- Economic data related to the costs of treatment and social services;
- Data describing the economic burden on health care systems and possible savings realized from injury prevention programs;
- Data on policy and legislation.

The following table illustrates almost all sources of where injury related data can be collected to quantify the rates of injury from a First Nations perspective.

Types of Data and Potential Sources for Collecting Injury Information in First Nation Communities

Type of Data	Data Sources	Examples of Information Collected
Mortality	Death certificates, vital statistics registries, medical examiners', coroner' or mortuary reports	Characteristics of the decedent, cause of death, location, time, manner of death
Morbidity and other health data	Hospital, clinic or other medical records	Diseases, injuries, information on physical, mental or reproductive health
Self-reported	Surveys, special studies, focus groups, media	Attitudes, beliefs, behaviors, cultural practices, victimization and perpetration, exposure to violence in the home or community
Community	Population records, local government records, other institutional records	Population counts and density, levels of income and education, unemployment rates, divorce rates
Crime	Police records, judiciary records, crime laboratories	Type of offense, characteristics of offender, relationship between victim and offender, circumstances of event
Economic	Programme, institutional or agency records, special studies	Expenditures on health, housing or social services, costs of treating violence related injuries, use of services
Policy or legislative	Government or legislative records	Laws, institutional policies and practices

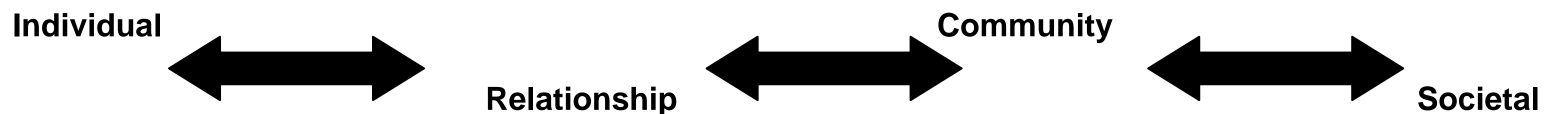
Adapted from the WHO World Report on Violence and Health, 2002

Accurate data on First Nations conditions is difficult to collect and as a result should be used with caution. The availability, quality and usefulness of the various data sources available on First Nations communities varies considerably. However, where data is available these should be used as sources to identify strategies for prevention. There are currently

undertakings to establish a First Nations Statistical Institute in Canada that will address this problem through legislation and First Nations methodologies of data collection.

Injuries are preventable and First Nations do not have to accept injury as an inevitable part of life. Injuries and their impacts can be prevented in much the same way as other public health efforts have prevented, and reduced, workplace injuries, violence and infectious diseases. This has been proven in mainstream cases and through large and small scale efforts at the individual, community and societal level (WHO 2002).

There are several factors that pre-dispose individuals, families, communities and whole societies to injury.



At the **individual level** factors such as poverty, low educational attainment, substance abuse, history of aggression and abuse are considered risk factors.

At **the relationship leve**l social relationships such as relations with peers, intimate partners and family members increase the risk of victimization and perpetration of, for example, violence. Partner violence, child maltreatment or peer pressure all have the potential to shape an individual's behavior and range of experience. Research indicates this range of experience pre-disposes individuals to engage in negative activities that eventually lead to outcomes such as injury.

At the **community level** social relationships are embedded in the community context though social behaviors that play out in schools, workplaces and neighborhoods. High levels of residential mobility (where residents move frequently from one dwelling to another), heterogeneity (the *social glue* that binds communities together), and high population density or crowding are examples of characteristics associated with violence and injury. Similarly in First Nation communities where crowding due to poor housing, high levels of unemployment and poverty, and lack of institutional supports pre-dispose First Nations citizens to injury and violence.

Finally, at the **society level** larger societal factors influence rates of injury and violence in communities. Included in these factors are climates that are conducive to, or reduce, inhibitions to violence and injury. These larger societal factors include:

- Cultural norms that support violence an as acceptable way to resolve conflicts;
- Attitudes that regard suicide as a matter of *individual choice* instead of a *preventable act* of violence;
- Norms that give priority to parental rights over child welfare;
- Norms that entrench male dominance over women and children;
- Norms that support the use of excessive force by police against citizens;
- Norms that support political conflict.

Larger societal factors also include the health, educational, economic and social policies that maintain high levels of economic and social *inequality* between groups in society (WHO 2002). In this case, First Nation communities are extremely disadvantaged as compared to their mainstream neighbors in terms of economics and poverty. This again pre-disposes First Nation communities to dysfunction, violence and injury. The outcome is when communities are not healthy, families and individuals are not healthy. See Appendix 1 for a chart of statistics on First Nation community conditions.

Multi-Faceted responses are required

At each level of risk there is a corresponding level or *key point for intervention*. They are as follows:

- Addressing individual risk factors and taking steps to modify individual risk behaviors;
- Influencing close personal relationships and working to create healthy family environments, as well as, providing professional help and support for dysfunctional families;
- Addressing gender inequality and adverse cultural attitudes and practices;
- Addressing the larger cultural, social and economic factors that contribute to injury and taking steps to change them, including measures to close the gap between the “rich” and the poor and to ensure equitable access to goods, services and opportunities.

Risk Factor and Protective Factor Framework for First Nation Communities

Domains of risk can be applied to First Nation communities as a result of the history and events that have predisposed First Nations to risk and poverty. Canadian – First Nation history illustrates how current risk factors have evolved in First Nation communities as a result of government policy.

After some 500 years of a relationship that has swung from *partnership* to domination, from *mutual respect and cooperation* to paternalism and attempted assimilation, Canada must now work out fair and lasting terms of coexistence with First Nations and Aboriginal People (RCAP, 1996).

Canada was founded on a series of *bargains* with First Nations people….*bargains* this country never fully honored. Treaties between First Nation and non-First Nation governments were agreements to share the land. They were replaced instead by policies intended to:

- remove First Nation people from their homelands
- suppress First Nations and their governments
- undermine First Nation cultures
- stifle First Nation identity

The approach to Treaties was *schizophrenic*. By signing treaties British authorities appeared to recognize the nationhood of First Nation peoples and their equality as nations; but they also expected First Nations to acknowledge the authority of the monarch, and increasingly, to cede tracts of land to British control - for settlement and to protect it from seizure by other European powers or by the United States (RCAP 1996).

A Chronology of Canadian Policies of Domination and Assimilation

- Governments established "reserves" of land for First Nation and Aboriginal people. The system began in 1637.

- In 1857 the Province of Canada passed an act to "Encourage the Gradual Civilization of *Indian Tribes*" providing the means for *Indians* "of good character," declared by a board of non-Aboriginal examiners, to be *non-Indian.*

- Confederation, declared in 1867, announced the government's goal to "do away with the *tribal system* and assimilate the *Indian* people in all respects with the inhabitants of the Dominion."

- The British North America Act made "*Indians and lands reserved for Indians*" a subject for government regulation. Parliament passed laws to replace traditional Aboriginal governments with *Band Councils* with insignificant powers, taking control of valuable resources located on-reserve, finances, and imposing unfamiliar systems of land tenure and applying non-First Nation concepts to marriage and parenting through the *Indian Act* 1876, 1880, 1884 and later.

- 1849 the first of what would become a network of 130 residential schools for First Nation children was opened in Alderville, Ontario. First Nation children were taken from their families at an early age and instilled the ways of dominant society during 8-9 years of residential school training or more. Thousands of First Nation children died in residential schools. There are 93,000 residential school survivors alive today. The last residential school closed in the 1990's in Yellowknife, NT . The residential school system was a conscious and brutal attempt to force First Nation people to assimilate.

- 1885 DIAND instituted a *pass system*. No outsider could come onto a reserve to do business with an First Nation resident without permission from an *Indian agent*. In many places no First Nation person could leave the reserve without a pass from the *Indian Agent*.

- "During the world wars 3,000 registered *Indians* and unrecorded numbers of Iniut, Metis and non-status *Indian* people volunteered for the Canadian Armed forces. When they returned from service land was taken from their reserves and used for " military purposes." Many were denied benefits awarded to other veterans.

- The 1969 White Paper proposed to abolish the *Indian Act* and all that remained of the special relationship between First Nation people and Canada . First Nations were unanimous in their rejection of the White Paper.

The Present:

- *Existing Aboriginal and Treaty rights* were recognized in the Constitution Act of 1982 - acknowledging that Aboriginal rights are older than Canada itself and that their continuity are part of the "*bargain*" between Aboriginal and non-Aboriginal people that made Canada possible (RCAP)

- 1991 - 1996 Royal Commission on Aboriginal Peoples in response to Oka

- 1997 *Reconciliation Statement* and launch of *Gathering Strength* DIAND's response to RCAP

- 2002 Bill C7 First Nations Governance Act (provincial like governance imposed on First Nations) and C19 First Nations Fiscal and Statistical Management Act

Social Conditions in First Nation Communities Equals Failed Federal Programs/Policy:

- First Nation Diabetes rates are double and triple the total rates in most provinces

- Morbidity rates for intentional injuries are almost 5 times higher in First Nation on-reserve populations than the total population in most provinces

- Fewer First Nation children graduate from school - 34% versus 70% for Canada
- Suicide rates for First Nation youth age 15-24 is 8 times higher than the national rate for females and 5 times higher for males

- First Nation houses are 10 times more likely to be crowded. Only 54% have adequate water and 47% sewage disposal.
- Four times as many Aboriginal people are below the poverty line than other citizens
- Incarceration rates are 5-6 times higher for Aboriginal people than the national average.

Why Government Programs Don't Work

- The values and culture are western/Euro-Canadian rather than First Nation
- Policy makers assume First Nation people live in communities connected to healthy labor markets with ample access to employment and training.
- Services are not holistic. They are fragmented with limited integration of resources or standards.
- The approach looks at the disadvantaged individual within society and not the society being disadvantaged.

Failed Program/Outcomes Lead to Bitterness

- Frequent failure to come to a meeting of the minds has led to bitterness and mistrust among First Nation people, resentment and apathy among non-First Nation people.
- First Nation people have made it clear, in words and deed, that they will no longer sit by, waiting for their grievances to be heard and their rights restored eg. Burnt Church, Davis Inlet, Ipperwash, Stonechild.

First Nations have unequal access to resources and economic opportunity The historical self-sufficiency of First Nations people and their communities was destroyed in several ways:

- Diminished control over lands and resources;
- Agriculture and manufacturing were monopolized by non-First Nation people and businesses;
- Governments failed to live up to the spirit and intent of Treaty promises to preserve traditional means of self-sufficiency - hunting, fishing, trapping, trading;
- Legislation, especially the *Indian Act* interfered with economic activity on reserves by restricting flow of capital and limiting decision making capacity of First Nation governments and entrepreneurs
- Education, training, business and industry did not welcome, support or accommodate Aboriginal people

There are Several challenges to the Revitalization of Aboriginal economies :

- Dependence - on government funds because of limited job opportunities;
- Inequality - 54% of annual incomes are less than $10,000.00 - unemployment is high and is rising;
- Rapid labour force growth - higher birth rates and life expectancy has implications on future job needs;
- Variability - First Nations are isolated with limited natural resources at their command because of the *Indian Act.*

The following tables illustrate the risk and protective factors model for injury prevention in First Nation communities:

RISK FACTORS FOR FIRST NATION COMMUNITIES IN CANADA

Individual	Family/Relationship	Community	Societal
♦ Substance abuse ♦ Poverty ♦ Low academic achievement ♦ Identity conflict ♦ Acculturation ♦ Low self-esteem ♦ Anger ♦ FAS/FAE ♦ Grief ♦ Limited employment skills ♦ Lack of positive involvement(s) ♦ Limited cultural involvement ♦ Alienation ♦ Witnessing or experiencing violence or abuse as a child ♦ Peer pressure ♦ Gang influence ♦ Impulsive and antisocial tendencies ♦ Childhood separation and loss ♦ History of personal or family health problems ♦ Favorable attitudes toward problem behaviors	♦ Substance abuse ♦ Poverty ♦ Neglect ♦ Emotional abuse ♦ Sexual abuse ♦ Physical abuse ♦ Economic instability ♦ Domestic violence ♦ Criminal behavior ♦ Few male role models ♦ No sense of belonging ♦ Unsafe home ♦ Dysfunctional attachment ♦ Stress ♦ Poor nutrition ♦ Availability of guns ♦ Poor family management ♦ Emotionally unsupportive family environment ♦ High rates of infant mortality ♦ Residential school experience and impacts on parenting skills or lack of thereof ♦ Lack of commitment to school ♦ Favorable parental attitudes and involvement in problem behavior	♦ Substance abuse ♦ Poor academic achievement ♦ Schools and curriculum not culturally relevant and teachers not culturally competent ♦ Apathy ♦ Level of tolerance towards, drugs, alcohol and violence ♦ Denial ♦ Lack of recreation and other leisure activities ♦ Crime ♦ Employment ♦ Social degradation ♦ Limited cultural activities ♦ Isolation ♦ Urbanization ♦ Availability of guns ♦ Norms ♦ First nation/community policing ♦ Limited funding support ♦ Lack of institutional support from police/justice system ♦ Media portrayals of violence	♦ Weak laws and policies ♦ Society norms supportive of superiority and ethnocentrism ♦ High levels of crime and other forms of violence and abuse ♦ Colonization ♦ Assimilationist policies ♦ Social and economic inequalities ♦ Violations of human rights ♦ Political and economic power exercised – and differently applied- according to ethnic identity (non-first nation versus first nation) ♦ Improper scope and effectiveness of social safety nets designed to ensure minimum universal standards of service eg. Social assistance, education, housing, ♦ Uneven economic development ♦ Laws and norms favorable toward drug use, firearms and crime

PROTECTIVE FACTORS FOR FIRST NATION COMMUNITES IN CANADA

Individual	Family/Relationship	Community	Societal
♦ Substance abuse awareness ♦ Economic opportunity and ability to rise out of poverty ♦ Education and academic achievement ♦ Anger management/healing ♦ Prevention and treatment of FAS/FAE ♦ Employment and capacity building skills ♦ Positive activities ♦ Cultural enrichment ♦ Positive mentoring ♦ Prevention of violence and abuse ♦ Adequate social support services ♦ Language and culture ♦ Religious activities ♦ Academic support ♦ Health promotion ♦ Recreation and leisure activities ♦ Sweat lodges and drum groups ♦ Increased self esteem ♦ Positive involvement(s)	♦ Substance abuse awareness ♦ Economic opportunity and ability to rise out of poverty ♦ Prevention of domestic violence ♦ Physical, sexual and emotional abuse awareness and prevention ♦ Positive activities ♦ Cultural enrichment ♦ Gang prevention ♦ Language and culture ♦ Family counseling ♦ Adequate social and support services ♦ Religious activities ♦ Safe homes ♦ Health promotion ♦ Recreation and leisure opportunities ♦ Gun regulation and control ♦ Family management skills ♦ Lower infant mortality rates ♦ Improved schools and commitment to school ♦ Healing from residential school experience ♦ Sweat lodge and drum groups ♦ Elders	♦ Substance abuse awareness ♦ Improved schools, relevant curriculum and teachers who are culturally competent ♦ Zero tolerance for drugs, alcohol and violence ♦ Recreation and leisure activities for families and communities ♦ Employment and economic development ♦ Crime prevention ♦ Cultural activities ♦ Gun control and regulation ♦ Health promotion ♦ Disease prevention ♦ Transportation and housing ♦ Funding support ♦ First nation/community policing that is adequate to meet the needs of the community ♦ Institutional support from police and the justice system ♦ Less music and media portrayals of violence ♦ Aboriginal language & culture ♦ Recreation and leisure activities ♦ Community mobilization	♦ Native representation in policy making ♦ Positive relations between government and first nations ♦ Stronger laws and policies that support first nations self-sufficiency/self-government ♦ Crime and abuse prevention legislation ♦ De-colonization ♦ Eliminate assimilation policies ♦ Reduce violations of human rights ♦ Equality between first nations and non-first nations ♦ Proper social safety needs designed from a first nation world view (eg. Aboriginal strategic initiative 1997) ♦ Economic development ♦ Laws and norms that do not favor drug use, crime or firearms ♦ Advocacy ♦ Peacemaking ♦ Proactive legislation ♦ Cultural enrichment and awareness ♦ Adequate funding and resources

Health Consequences of Inaction and Lack of Prevention

Ill health is caused by injury, abuse and violence and as a result forms a significant portion of global, society and community burden of disease. For example, research indicates that suicidal behavior and major adult forms of illness including cancer, chronic lung disease, irritable bowel syndrome and Fibromyalgia are related to experiences of abuse during childhood. The apparent mechanism to explain these results is the adoption of *behavioral risk factors* such as smoking, alcohol abuse, poor diet and lack of exercise (WHO 2002). Research has also highlighted important direct acute and long term consequences to health by abuse. Studies further substantiate short and long term psychological damage for children who have endured abuse. Survivors of abuse, according to world clinical research, have serious psychiatric symptoms such as depression, anxiety, substance abuse, aggression, shame or cognitive impairments. We know that over 93,000 First Nation citizens are survivors of the Residential School Era and many of them have endured documented cases of physical, sexual and mental abuse. The following is a list of the health consequences of abuse and injury from a physical, sexual/reproductive, psychological/behavioral and other long term health ailments perspective.

Physical

- Injuries to the body and brain
- Bruises and welts
- Burns and scalds
- Nervous system injuries
- Disability
- Fractures
- Lacerations and abrasions
- Fibromyalgia
- Gastrointestinal disorders
- Ocular damage
- Reduced physical functioning

Sexual and Reproductive

- Reproductive health problems
- Sexual dysfunction

Sexually transmitted diseases, including HIV/AIDS
Unwanted pregnancy
Pelvic inflammatory disease
Unsafe abortion
Pregnancy complications/miscarriage
Infertility
Gynecological disorders

Psychological and Behavioral

Alcohol and drug abuse
Cognitive impairment
Depression and anxiety
Poor self esteem
Unsafe sex
Developmental delays
Eating and sleep disorders
Feelings of guilt and shame
Hyperactivity
Poor relationships
Poor school performance
Poor self-esteem
Post-traumatic stress disorder
Psychosomatic disorders
Suicidal behavior and self-harm
Smoking

Other long-term health consequences

Cancer
Chronic lung disease
Irritable bowel syndrome

Ischaemic heart disease
Liver disease
Reproductive health problems such as infertility
AIDS related mortality
Homicide
Suicide

The financial burden associated with both the short and long term care of victims must be kept in mind when analyzing the impacts of the health consequences listed above. The calculation of this financial burden includes direct costs associated with treatment, visits to the hospital and doctor, and other health services. An additional range of indirect costs are related to lost productivity, disability, decreased quality of life and premature death. These costs are borne by the justice system and other institutions and include:

- Expenditures related to apprehending and prosecuting offenders;
- The costs to social welfare organizations of investigating reports of crime, violence and abuse
- Costs associated with care
- Costs to education systems
- Costs to the employment sector arising from absenteeism and low productivity.

The cost of this burden is billions of dollars as cited, for example, by the United States and United Kingdom for immediate welfare and legal services, educational costs, adult mental health services and loss of earnings.

A Strategic Approach to Injury Prevention in First Nation Communities
Implications for Social Policy

A strategy for injury prevention is *essential* to reducing death and disability in First Nation communities. In the case of First Nations an effective injury control strategy must be *First Nation driven, demographically sensitive and culturally appropriate.*

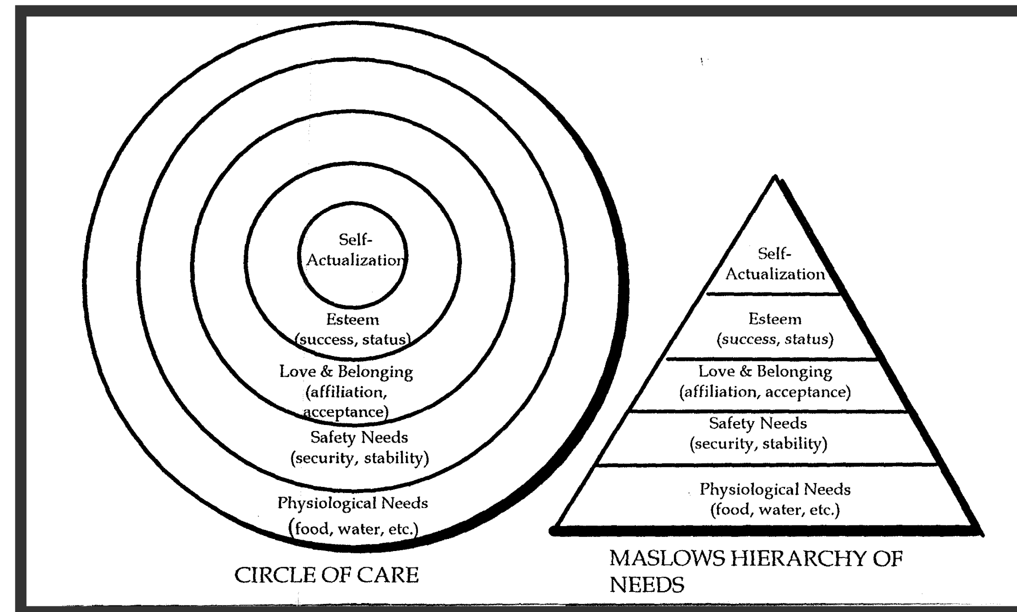
According to WHO the most important measures for prevention of death, disability and impairment are:

- improvement of the educational, economic and social status of the least privileged groups,
- identification of types of injury and impairment and their causes within defined geographical areas
- introduction of intervention measures through better health and prevention practices
- legislation and regulations that are geared towards prevention
- modification of unsafe lifestyles
- education regarding environmental hazards and potential for injuries
- fostering better informed and strengthened families and communities
- training and regulations to reduce accidents in industry, agriculture, on the roads and in the home
- control of the use and abuse of drugs and alcohol

From a First Nation perspective it is essential that not only the goal of injury prevention be achieved by any process or strategy that is developed but that the endemic problems of government subjugation of Aboriginal people historically be acknowledged and addressed as part of the underlying conditions in First Nation communities that predisposes First Nation citizens to injury, and consequently, death and disability.

Maslow's hierarchy of needs clearly illustrates the basic physiological and safety needs that must be met to address the social and environmental risk factors that are so desperately and devastatingly apparent in First Nation communities.

Maslow's Hierarchy of Needs in a First Nations Context:



Source: Sharing Solutions First Nations Social Security Reform AFN 1999

This diagram is based on a stratified illustration of the basic needs of an individual, family, community and society in terms of survival. Although the federal government has made efforts to address injury prevention the basic human elements effected by poverty are not being addressed. Instead government is desirous of concentrating its efforts on a small targeted cadre of issues and responses to injury prevention, without addressing the *underlying causes* of injury, disability and ultimately death in First Nation communities. Until poverty in First Nation communities is addressed no social policy endeavor will be totally successful. This diagram illustrates the interdependency of supports required to meet the basic human requirements of people in society and particularly those of First Nations.

Stakeholders in Prevention:

Government and Community Agencies and Organizations	Professional Groups and Service Organizations
♦ Health Canada and Health Agencies ♦ Indian and Northern Affairs Canada ♦ Human Resources Development Canada ♦ Transport Canada ♦ Environment Canada ♦ Heritage Canada ♦ Industry Canada ♦ National Defense ♦ Department of Fisheries and Oceans ♦ The Privy Council Office ♦ Revenue Canada ♦ Department of Finance ♦ Department of Agriculture ♦ CMHC ♦ The RCMP ♦ Social Service Agencies ♦ Mental Health Agencies ♦ Police Departments ♦ Justice ♦ Fire Departments ♦ Housing Authorities ♦ Education Authorities and Schools ♦ First Nation Councils and Tribal Councils	♦ Aboriginal Veterans ♦ Aboriginal Medical Associations ♦ Aboriginal Nursing Associations ♦ Schools of Public Health ♦ Legal Associations (Indigenous Bar Association) ♦ Regional Economic Development Organizations ♦ Provincial/Territorial Organizations ♦ Churches and Religious Groups ♦ Colleges and Universities ♦ Aboriginal and Non-Aboriginal Media – newspaper, radio and television (APTN) ♦ Entertainers ♦ Professional sports organizations ♦ Domestic Violence prevention groups ♦ Child and Family Service Agencies ♦ Local businesses ♦ Hospitals, clinics, mental health institutions and rehabilitation organizations ♦ Youth clubs ♦ Women's Groups ♦ Human Rights Groups ♦ Language and Culture Groups ♦ Traditional Medicine Practitioners

Each target population requires its own cadre of prevention strategies. Based on the data presented in this paper, and in the addendum, prevention strategies must be targeted towards the needs of the population identified as in the table below.

First Nation Prevention Strategy by Target Group

Children	Youth	Women	Men	Elders	FN Persons with Disabilities
♦ Child safety car seats ♦ Parent training to prevent SIDS ♦ Safety at home to prevent falls, poisoning, fire, etc. ♦ Baby-sitting courses for caretakers ♦ Swimming and water safety ♦ FAS/FAE prevention and treatment ♦ Language and culture ♦ Health promotion ♦ Increased self-esteem	♦ Suicide prevention programs ♦ Crisis/help lines ♦ Drug and alcohol awareness ♦ Self-esteem development ♦ How to deal with peer pressure ♦ Bicycle, ATV, motor vehicle safety ♦ Violence Prevention Fire Prevention ♦ Substance abuse awareness ♦ Language and culture ♦ Health promotion	♦ Drug and alcohol awareness ♦ Crisis shelters for women and children ♦ Parenting Programs ♦ Suicide prevention programs ♦ Fire prevention ♦ Prevention of domestic violence ♦ Language and culture ♦ Religious activities ♦ Health promotion ♦ Self esteem ♦ Education ♦ Substance abuse awareness ♦	♦ Language and culture ♦ Religious activities ♦ Health promotion ♦ Self esteem ♦ Education ♦ Substance abuse awareness Drug and alcohol awareness ♦ Safe Driving and vehicle safety ♦ Gun Safety ♦ Violence Prevention ♦ Fire Prevention ♦ On the land safety programs ♦ Water and basic safety for boating, skidoo's, ATV's	♦ Falls prevention and home safety ♦ Fire and home safety ♦ Drug and alcohol awareness ♦ Help lines ♦ Language and culture ♦ Religious activities ♦ Health promotion ♦ Self esteem ♦ Substance abuse awareness ♦ Recreation and leisure	♦ Help lines ♦ Fire safety ♦ Drug and alcohol awareness ♦ Self-esteem ♦ Language and culture ♦ Religious activities ♦ Health promotion ♦ Self esteem ♦ Education ♦ Substance abuse awareness

Community prevention strategies:

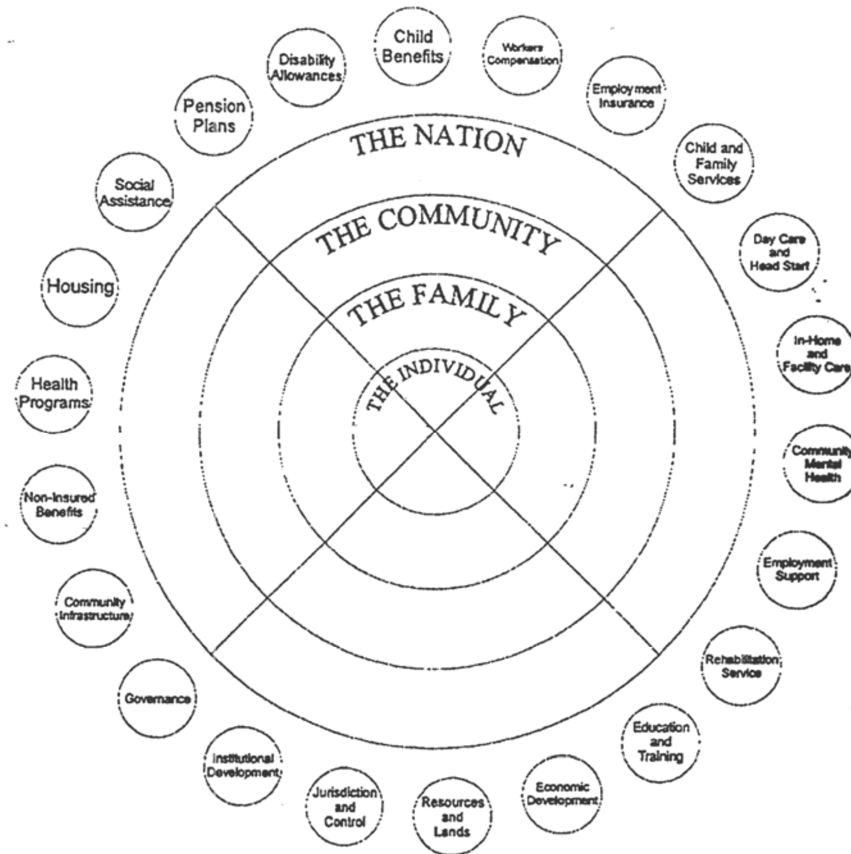
The first step in designing an injury prevention program is determining exactly what the community's needs are. Collaboration between injury prevention workers, mental health workers, home care workers, nurses, school representatives, law enforcement, etc. is required to survey and identify a map of the injury "hot spots" in our communities. Once the data is collected and analyzed priorities can be established and prevention programs put in place. For example, if the problem is motor vehicle accidents on a certain curve in the road, road work and warning signs can be implemented to address the problem. Whatever program is put in place needs to be continuously evaluated to ensure effectiveness and to ensure changes are made as required. Proactive injury prevention programming empowers First Nations to move beyond *crisis management* to well maintained healthy and safe communities. This can be done through:

1. *Identification of risk and protective factors*
2. *Intervention development*
3. *Evaluations to document progress, success and/or failure*
4. Implementation of interventions eg. suicide prevention programs, drug and alcohol awareness, violence prevention, etc.

Most importantly, any interventions must be *culturally sensitive and appropriate* to the population targeted. For example, in 1997 the *Manitoba Red Cross Society* did a video on boating safety specifically designed for First Nations people. The script was written by a First Nations individual with input from First Nation community representatives. It was translated into four major Aboriginal languages represented in the region and filming was done in a First Nation community using local residents as actors. This video was positively received by First Nations in the targeted area because it responded to their cultural values, traditions and unique dialect/language requirements.

As we have described throughout this paper injuries are caused in First Nation communities because of complex interactions of a variety of factors related to socio-economic status, cultural norms and poverty. Injury control programs *must be* designed from a nation, community, family and individual perspective to be successful. The following is an adaptation from the 1999 Assembly of First Nations research document *Sharing Solutions First Nations Social Security*

Reform the Final Report of the Aboriginal Strategic Initiative. This diagram illustrates a First Nation *holistic* approach to intervention from a community, family and individual basis as part of the nation building process.



Source: Sharing Solutions First Nations Social Security Reform AFN 1999

For any prevention program or service to be effective in meeting the needs of First Nations people they must be *holistic*. The needs of First Nations populations are *not a one size fits all*. They must be characterized by *coordination, collaboration, education , participation, be social and physically supportive, adequately resourced and address the self-government goals* of the *First Nations population of Canada*.

Despite improvements in efforts to address the crisis of injury, death and disability in First Nations communities, First Nations people continue to have poorer health and social status than the general Canadian population. To improve this situation, First Nation cultural beliefs, values and traditional views must be taken into account so that injury control solutions are flexible in design and in terms of program and service delivery. First Nation communities must be *empowered* to identify and address their own needs through capacity building, partnerships, technical support, and health and safety promotion so that solutions will be *relevant and appropriate*.

Conclusion

We are duty bound to do the following to ensure the health, safety and *survival* of First Nation communities:

- National data gathering is required to be able to track injuries and *at risk* populations. First Nations leadership must make a clear position statement to government based on the problems identified through this activity so that the crisis in First Nations communities and the injury and deaths caused by poverty and social conditions are documented;

- Promotion of a coordinated and integrated First Nations approach to injury control and prevention in the form of a national strategy must be developed immediately and *endorsed by First Nations leaders*;

- Heightened awareness to enable First Nation communities to better understand that injuries are *preventable* is required through an information campaign to bring attention to this dire situation. *Community education* is also required as a preventative measure for the control of future injuries, death and disability through improved health and safety standards in First Nation communities;

- The cost to government for *inaction* must be correlated to the savings for immediate and long-term injury control intervention re: the cost for the maintenance of an injured or disabled person over their lifetime.

- Adequate and sustainable resourcing of First Nation injury prevention and control programs along with research to support and identify models and programs that work is also required.

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Appendix 1

Risk Factors in First Nation and Aboriginal Communities in Canada

Table 1 (a) Risk Factors for First Nation and Aboriginal Communities in Canada

Risk Factor Category	Characteristic	Statistical Indicators of Risk
Community Environment	**Poverty**	*Most Aboriginal people are at or below the poverty line. In major western cities, four times as many Aboriginal people as other citizens are below the poverty line.*
	High unemployment	*50% of First Nation children living on or off-reserve are living in poverty. Aboriginal people are less active in the labour force. They represent 47% of the those employed on-reserve and 57% off-reserve compared to the national labor force employment rate of 68%*
	Inadequate Housing	*First Nations houses on-reserve are ten times more likely to be crowded than houses the general population live in. Only 54% of houses have adequate water supplies and 47% have adequate sewage disposal. More than 20% of First Nations have problems with their water supply which threatens health and safety.*
	Cultural devaluation	*There are 633 First Nations in Canada, 52 Nations and cultural groups. There are 57 Aboriginal languages and 12 language families represented in Canada and only 3 languages are predicted to survive – Cree, Inuktitut and Ojibway.*
	Culture and language barriers	*According to Census and APS data 21.9% of Aboriginal persons age 5-14, 27.5% aged 15-24, 36.7% aged 25-54 and 63.1% aged 55+ speak an Aboriginal language. As the Elders die the languages are dying with them.*
	Low educational levels	*The education of Aboriginal people lags behind other Canadians. 18% of Aboriginal people 15 years or older have less than grade 9 compared to 13.8% for Canadians, 8.1% Aboriginal people are high school graduates compared to 12.9% for Canadians. 4.7% Aboriginal people have University degrees compared to 11.6% Canadians.*
	Low achievement expectations from society	*69% of First Nation youth never complete high school compared to 31% of the general youth population for Canada. Rates of First Nation youth aged 20-24 attending university was 12% compared to 35% for the general population. Completion rates for First Nation youth are approximately 31% compared to 58% for the general population.*
Family Environment	**Alcohol, tobacco and other dependency of parents**	*According to the FNIRHS 78% of respondents said they used tobacco in non-traditional ways. 62% smoked cigarettes, 4% used snuff and 1% used chewing tobacco. The majority of the population of smokers are under the age of 40 and the smoking rates are up to 72% for the youngest adult age group (age 20-24). Smoking for Aboriginal children begins as early as 6 to 8 years (0-8%) but rapidly increases at age 11 to 12 (10% to 65%) with a peak initiation at about age 16 years.*
	Parental abuse and neglect	*25% of Aboriginal adults reported sexual abuse is a problem in their community and 15% reported rape as problems. 25 % of First Nation youth reside in one parent households and 18% live in non-family settings. Compared to their non-Aboriginal counterparts First Nations youth are 1.6 more times likely to report living in a non-family setting. Mortality rates among Aboriginal youth indicate there are 250 deaths per 100,000 persons, a rate of approximately 3.6 times higher than deaths reported for all Canadian youth.*

Table 1(b) Risk Factors for First Nation and Aboriginal Communities in Canada

Risk Factor Category	Characteristic	Statistical Indicators of Risk
	Financial strain	*More than 45% of all First Nation youth were living in a low income household, a rate of roughly 1.9 times that of non-First Nation youth*
	Large, overcrowded family	*More than half (52%) of First Nation households live in homes that fall below one or more of the housing standards as compared to 32% for Non-First Nation households*
	Unemployed or underemployed parents	*Earned income per employed Aboriginal person in 1991 was $14,561 compared to $24,001 for the general Canadian population. First Nations people are economically disadvantaged in that they earn an average of half what Canadians earn and subsist on social assistance at a rate of five times higher than the rest of the Canadian population.*
	Parents with little education	*Half of the First Nations school age population do not complete high school.*
	Single female parent without family/other support	*32% of Aboriginal children live in households with a lone-parent and are at elevated risk for living in poverty*
	Family violence or conflict	*39% of Aboriginal adults reported that family violence is a problem in their community. Incarceration rates of Aboriginal people are 5-6 times higher than the national average. The highest rates of Aboriginal sentenced admissions were in the NWT (80%), the prairies (50%) and BC (20%)*
	Frequent family moves	*High rates of mobility characterize the First Nation youth population. Between 1995 and 1996, more than one third of First Nation youth reported a change in residence, a rate roughly 1.4 times higher than that of non-Aboriginal youth*
	Low parent/child contact	*5% of First Nations children were in the custody of Child and Family services in 1996/97.*
Vulnerability of the Child	**Child of an alcohol, tobacco or drug abuser**	*Incidences of FAS/FAE in First Nation communities are 30 times the national average.*
	Birth defects and physical disabilities	*Aboriginal people are more likely than other Canadians to have hearing, sight and speech difficulties. Mobility impairment occurs at the same rate for both populations. The rate of disability for Aboriginal people is 31%.*
	Physical or mental health problems	*The most prevalent health problems among First Nation children include ear infections, respiratory conditions, broken bones, emotional and behavioral problems. First Nation children are also at a greater risk of contracting diseases such as tuberculosis, Hepatitis A and B, meningitis and gastroentieritis than non-First Nation children.*

Table 1(c) Risk Factors for First Nation and Aboriginal Communities in Canada

Risk Factor Category	Characteristic	Statistical Indicators of Risk
	Learning disabilities	*Aboriginal youth are at elevated risk of suffering from a physical developmental or learning disability. According to the APS nearly a third of all First Nations people aged 15 and older had a disability which is more than double the national rate during the same period*
Early Behavior Problems	**Emotional problems**	*The suicide rates for First Nations females are 4 times higher than for Canadian females and 32.6 times higher for First Nation males than Canadian males*
	Inability to cope with stress	*Solvent abuse by youth is a particular concern: 22% of First Nations youth who report solvent abuse are chronic users and come from homes where there is financial hardship, neglect, family conflict or child abuse. Suicide rates for registered First Nation youth ages 15-24 are eight times higher than the national rate for females and five times higher for males.*
	Low self-esteem	*Incidences of FAS/FAE in First Nation communities are 30 times the national average*
	Aggressiveness	*Rates of incarceration (age group 15-19) are nine times higher among the First Nation population at approximately 45.7 per 10,000 compared to non-First Nation youth at 4.9 per 10,0000.*
Adolescent Problems	**School failure and dropout**	*65% of First Nation youth never complete high school compared to 31% of non-Aboriginal children.*
	At risk of dropping out	*31% of First Nation youth do not attend school compared to the 69% who do*
	Violent Acts	*Rates of incarceration for violent crimes are nearly 9 times higher for First Nation youth at 103 per 10,000 compared rates of 11.8 per 10,000*
	Drug use and abuse	*62% of First Nations people aged 15 and over perceive alcohol abuse as a problem in their community while 48% state that drug abuse is an issue.*
	Teenage pregnancy/teen parenthood	*Aboriginal youth are at elevated risk of becoming pregnant at an early age and greater risk of contracting a sexually transmitted disease.*
	Unemployed/under-employed	*Earnings from employment per person aged 15+ First Nation persons = $9,140 compared to $17,020 for the Canadian population*
	Suicidal	*Suicide rates for registered First Nation youth ages 15-24 are eight times higher than the national rate for females and five times higher for males.*

Table 1(d) Risk Factors for First Nation and Aboriginal Communities in Canada

Risk Factor Category	Characteristic	Statistical Indicators of Risk
Negative Adolescent Behavior and Experience	**Lack of bonding to family, school, community**	*65% oF First Nation youth never complete high school compared to 31% of non-Aboriginal children. Rates of incarceration for violent crimes are nearly 9 times higher for First Nation youth at 103 per 10,000 compared rates of 11.8 per 10,000*
	Hopelessness	*Solvent abuse by youth is a particular concern: 22% of First Nations youth who report solvent abuse are chronic users and come from homes where there is financial hardship, neglect, family conflict or child abuse. Suicide rates or registered First Nation youth ages 15-24 are eight times higher than the national rate for females and five times higher for males.*
	Feelings of failure	*The most prevalent health problems among First Nation children include ear infections, respiratory conditions, broken bones, emotional and behavioral problems. Half of the First Nations school age population do not complete high school.*
	Vulnerability to negative peer pressure	*Solvent abuse by youth is a particular concern: 22% of First Nations youth who report solvent abuse are chronic users and come from homes where there is financial hardship, neglect, family conflict or child abuse*

Sources: Statistics Canada, Aboriginal Peoples Survey, DIAND Indian Register, Health Canada – Medical Services Branch, First Nations and Inuit Regional Health Survey, DIAND *Gathering Strength*