



BUSINESS CASE

INJURY PREVENTION FOR FIRST NATIONS COMMUNITIES

Prepared for
ASSEMBLY OF FIRST NATIONS

Prepared by
KATENIES RESEARCH AND MANAGEMENT SERVICES
OCTOBER, 2006



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The Business Case for Injury Prevention: The Cost of Injuries and its Impact on the Future of First Nations


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Background

Injury prevention assesses and manages risk that leads to injury preventing behaviors. Injury prevention leads to living in healthy ways that minimize the risk of injury. “In practical terms injury prevention means making positive choices about minimizing risk at all levels of society while maintaining healthy, active and safe communities and lifestyles. These choices are strongly influenced by the social, economic and physical environments where one lives, works, learns and plays.”¹ The choices one makes about which risks to take are driven by a variety of factors:²

- **Knowledge:** which behaviors will increase safety and well being and minimize risk for injury including knowledge to be gained from exposure to injury prevention programs;
- **Skills** to carry out injury preventing behaviors and manage risk
- Motivation to feel good about engaging in injury prevention behaviors and managing risk effectively; enhancing self esteem
- **Opportunity and access** to have reasonable opportunities to carry out injury prevention behaviors, given varied life circumstances;
- **Supportive environments** to make it easier to engage in injury preventing behaviors with the minimum of risk involves supportive policies (including legislative approaches) and environments (including physical environments designed to reduce the risk of injury).

The choices and behaviors that are influenced by these factors can have a significant influence on injury.³

The benefits of injury prevention are far reaching. According to WHO (World Health Organization) safety and the health of a population are interrelated, such that a nation’s health is determined both by environment and by concrete behaviors. The aspects of environment that shape health and well being include: physical, social, cultural, technological, political, economical and organizational. Behaviors in this context refer to both individual behaviors and collective behaviors of a group of people. Therefore it is

¹ The Canadian Collaborating Centres for Injury Prevention and Control. (n.d.). *Canadian Injury Prevention Strategy: Developing an Integrated Canadian Injury Prevention Strategy*. Canada: 7

² ibid

³ ibid





safe to say, “safety is a prerequisite for maintaining and improving the health and welfare of a population.”⁴

A national strategy specific to First Nations is imperative to address the particular needs found in their own communities. For such a strategy to work, the material must be community and nationally driven for and by indigenous peoples. Regions using their own injury surveillance data need to design injury prevention strategies that are culturally relevant and take into account indigenous values and traditions.

The costs of injury

Injury affects First Nations people at a much higher rate than other Canadians. The following list shows the reality of the situation.

- Injury is the leading cause of death for Aboriginal children, youth, and young adults in Canada.
- The injury death rate among Aboriginal teens is almost four times that of Canadians overall. Over 56 percent of the First Nations population is under the age of 25.
- The most common cause of death from injury among Aboriginal seniors are motor vehicle crashes, suicide and unintentional drug overdose.
- Aboriginal disability rates are reported at 31 percent, double the national rate with a large proportion attributed to injuries.
- First Nations and Inuit suicide rates are almost three times higher than those of Canadians overall.
- First Nations male and female youth are, respectively, five to seven times more likely to die of suicide than their peers in the population overall.⁵

The economic impact of injuries – of preventable injuries – is astounding. Conservative estimates of the cost of injuries to Canada are around \$15 billion annually. Spending \$15 billion a year on injuries that are mostly predictable and preventable is a waste of money that could be put to much better use.⁶ Costs include hospitalization and lost productivity:

- Every day about 6,000 Canadians are injured and around 40 die because of their injuries?⁷
- Injuries costs Canadians around \$14.7 billion each year in health care expenses and lost productivity?⁸

⁴ WHO. (n.d.) . *The Safe Community Network: Violence and Injury Prevention*. WHO: 9

⁵ SmartRisk. (2005). *Ending Canada's Invisible Epidemic: A Strategy for Injury Prevention*. Canada: 14

⁶ SMARTRISK & Insurance Bureau of Canada. (2005). *Press Release: Canada's home, car and business insurers join SMARTRISK in calling on the federal government to cure Canada's invisible epidemic*. Toronto: 1-2

⁷ ibid

⁸ SMARTRISK & Insurance Bureau of Canada. (2005). *Press Release: Canada's home, car and business insurers join SMARTRISK in calling on the federal government to cure Canada's invisible epidemic*. Toronto: 1-2





- Injuries are the fourth highest burden on the health care system?⁹

Injuries sustained by First Nations people in their communities are often at least double that of the national rate:

- Suicide rates for First Nations people are 5 times higher than that of other Canadians?¹⁰
- Aboriginal people are 8 times more likely to die as homicide victims as other Canadians?¹¹
- Aboriginal peoples being charged with murder was found to be 10 times higher than the mainstream Canadian population?¹²
- Fire- and flame-related injuries are four to eight times higher than in the Canadian population?¹³
- Nearly 40% of all deaths in First Nations males were due to injury and poisoning?¹⁴
- The rate of drowning in Aboriginal men is 25 for every 100,000 people, while the mainstream Canadian rate for men is about 3 for every 100,000 people?¹⁵
- Car/truck/ATV/snowmobile accidents resulting in death is a leading cause of death among all age groups of First Nations?¹⁶
- Only 50% of First Nations communities report seatbelt use; sharply contrasting with 80% seatbelt use in mainstream Canada?¹⁷
- A death rate from falls among Status Indians was almost 3 times that of the provincial average for B.C. in the period between 1991-1998?¹⁸

The benefits of an injury prevention plan

Key findings regarding injury prevention initiatives

Research has shown that many injuries are, in fact, avoidable. Furthermore, one study noted that for any successful interventions the savings (minus the costs of a prevention program) would be in the billions. Investing in prevention initiatives can substantially reduce costs.¹⁹ The study, conducted in the United States found that the following savings were made:

⁹ ibid

¹⁰ Health Canada. (date?). *Injury Prevention – National Statistics and Trends: Injury in Canada*. Canada: 1.

¹¹ http://www.hc-sc.gc.ca/fnih-spni/pubs/ads/literary_examien_review/rev_rech_1_e.html. January 17, 2006.

¹² ibid.

¹³ http://www.niichro.com/fas/fas_14.html. January 16, 2006.

¹⁴ Health Canada. (date?). *A Statistical Profile on the Health of First Nations in Canada*. Canada: 28.

¹⁵ http://www.hc-sc.gc.ca/fnih-spni/promotion/injury-bleess/stat/96_drownings-noyade_sex_e.html. January 16, 2006.

¹⁶ Health Canada. (date?). *A Statistical Profile on the Health of First Nations in Canada*. Canada: 32.

¹⁷ ibid

¹⁸ http://www.hc-sc.gc.ca/fnih-spni/pubs/injury-bleess/2001_trauma/5b_motor-moteur_e.html#falls. January 17, 2006.

¹⁹ SmartRisk. (1999). *The Economic Burden of Unintentional Injury in Ontario*. Ontario: 6





- Air bags (\$5-\$19 billion)
- Minimum licensing age of 17 (\$1.7-\$4.3 billion)
- High seat backs in cars (\$14 million)
- Motorcycle helmet laws in states without them (\$94-\$1,200 million)²⁰

The costs of injury

The facts indicate that injuries incurred at work and at home are the leading cause of death among Canadians up to the age of 20 and the 4th leading cause of death among adults.²¹ The impact of injuries is far reaching:

Personal and emotional costs: Injuries and death can be very difficult on families. The statistics show that often serious accidents are accompanied by depression, substance abuse and family breakdowns.²²

Economic costs: There is a domino like effect with injuries in terms of costs. The costs that accompany one individual who is injured may include one or more of the following emergency services: police, fire, hospital care. Other costs may be counseling associated with the injury, care-giving services for injured people and their families, the cost to local businesses in lost worker productivity; and increased workers' compensation premiums. Data cites that in 1995, preventable injuries cost Canadians \$8.7 billion or \$300 per person in Canada.²³

Why the plan should be adopted

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, roadwork 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

²⁰ ibid

²¹ Safe Communities Foundation. (2000). *The Safe Communities Guide Book*. Canada: 7

²² ibid

²³ ibid





2. *Intervention development*
3. *Evaluations to document progress, success and/or failure*
4. Implementation of interventions e.g. suicide prevention programs, drug and alcohol awareness, violence prevention, etc.²⁴

Principles to guide the development of a First Nations Injury Prevention Plan

The following six factors are key to establishing a national strategy for injury prevention at the First Nations level: National Leadership and coordination; an effective surveillance system; Research; Community Supports and Resources; Policy Analysis and Development; and, Public Information and Education.

National Leadership and Coordination

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.²⁵

An Effective Surveillance System

A surveillance system that is national in scope must be developed to support the efforts of injury prevention. In many cases, more is known about the injury itself than what caused the injury in the first place. A surveillance system could track injuries, the long-term impact of these injuries, risks, and lead to effective measures in injury prevention.²⁶

Research

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.²⁷

Community Supports and Resources

[A]ny 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

²⁴ McDonald, R. (2004). *Injury Prevention and First Nations: A Strategic Approach to Prevention*. Akwesasne, Canada: 32

²⁵ *ibid*

²⁶ Health Canada. (n.d.) *Canadian Injury Prevention Strategy: Developing an Integrated Canadian Injury Prevention Strategy*. Ottawa: 14

²⁷ McDonald, R. (2004). *Injury Prevention and First Nations: A Strategic Approach to Prevention*. Akwesasne, Canada: 34





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.²⁸

A sustained effort is required to have a significant impact on injury prevention. For initiatives to have the best chance of being successful and sustainable over the long-term, they should:

- Be locally owned and managed (including setting priorities, making decisions, and planning, implementing, and evaluating activities),
- Make effective use of local resources, and
- Address issues that are relevant to the local population

These initiatives must, however, be supported by infrastructure, resources and policies from all levels of government since communities often do not have the capacity to deal with these issues entirely on their own. Community development, ... builds on existing human and material resources in the community. This includes the development of networks and sustainable infrastructures that build social capital (the formal and informal networks that exist between individuals and groups in a community) and enhance public participation. This requires full and continuous access to information about issues and evidence-based practices, support for voluntarism and learning, and funding support. Community development builds stronger communities that have an increased capacity to deal with a range of injury issues (Adapted from Ottawa Charter for Health Promotion, WHO, Ottawa, 1986).²⁹

Policy Analysis and Development

Policies around injury prevention must be developed by and for First Nations that define priorities and commitments for action. Healthy policies should encourage people to make healthy choices and to lead safe lives. Policies in injury prevention may include changes or policy development in areas such as bylaws, licensing requirements, regulatory changes and even labeling changes in the case of drugs and other substances.³⁰

²⁸ *ibid* pg. 32

²⁹ The Canadian Collaborating Centres for Injury Prevention and Control. (n.d.) *Canadian Injury Prevention Strategy: Developing an Integrated Canadian Injury Prevention Strategy*. Ottawa: 15

³⁰ Health Canada. (n.d.) *Canadian Injury Prevention Strategy: Developing an Integrated Canadian Injury Prevention Strategy*. Ottawa: 13





Public Information and Education

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 Nations communities.³¹

Integration

Integration will allow for targeting specific issues in a coordinated manner. The four elements in this approach are as follows:

- Targeting common risk factors for major injuries
- Recognizing and addressing the relationship between personal choice and behavior and the environment
- Coordinating promotion activities and prevention efforts directly in the communities
- Mobilizing action and engaging partners across regions and sectors that affect injury (e.g. transportation).³²

Integration at the public policy level, research and interventions will add value to all other initiatives currently happening in mainstream society. As First Nations communities control their own injury prevention initiatives, resources will be put to be used much more efficiently and effectively.³³

Participation strategy

All planning, development, analysis, and use of the data results must be directly relevant to the community. The community leaders must be willing to invest their time and effort into this initiative. Finally, community leaders must assist in mobilizing a full range of community partners to deal with injury prevention. This step is critical for program success.

Buy-in from community leaders may be achieved through collecting current data available within the communities on injury rates. Evidence-based research will be used to encourage participation.

³¹ McDonald, R. (2004). *Injury Prevention and First Nations: A Strategic Approach to Prevention*. Akwesasne, Canada: 34

³² The Canadian Collaborating Centres for Injury Prevention and Control. (n.d.) *Canadian Injury Prevention Strategy: Developing an Integrated Canadian Injury Prevention Strategy*. Ottawa: 12

³³ *ibid*





Measuring success activities

The community must remain the central focus in order to address the particular causes of injury in each community and to then change behaviors with respect to safety. The measure of success will be right at the community level, seeing fewer injuries, for example because of a change made in the behavior.

Results from project outcomes and lessons learned provided by the communities will be measured in terms of changes over time in the numbers of injuries and the transferability of results between communities, i.e. the success of best practices working between communities.

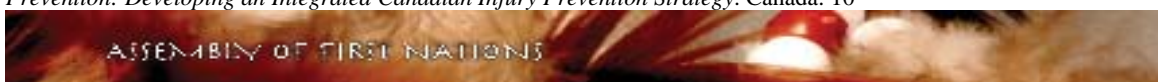
Recommended scope and objectives of the program

According to WHO, both the determinants of health are the environment and behaviors manifested by people. In the case of First Nations, in other words, housing, accessibility to services and programs, income and education levels – all these factors are determinants of health and affect the risk of injury. The scope of the national strategy is to identify key areas of risk and begin to implement prevention strategies to improve the well being of First Nations communities and to lessen the burden of preventable injuries on the health care system.

There are five main objectives of this program, consistent with the Canadian Injury Prevention Strategy:

1. To promote the integrated action of government and First Nations communities to reduce preventable injuries.
2. To increase awareness and support for injury prevention in First Nations communities.
3. To help communities develop, based on their own issues, and implement, in a way that is relevant to them, community based solutions to preventable injuries.
4. To reduce societal burden of injury and improve the health of First Nations. The cost of injury to the health care system is enormous and causes much unnecessary long-term suffering.
5. To reduce health disparities that increase the risk of injury in First Nations. First Nations generally do not enjoy the same level of health and their risk of injury, as already illustrated, is at least double in many cases, that of mainstream Canadians. The ultimate goal is to minimize the risk of injury to a more vulnerable population.³⁴

³⁴ The Canadian Collaborating Centres for Injury Prevention and Control (CCCIPC). (n.d.). *Canadian Injury Prevention: Developing an Integrated Canadian Injury Prevention Strategy*. Canada: 10





Professional leaders

The strategy will be driven from the community, regional and national levels. At the community level certain individuals will be chosen by their communities to be responsible for the program. These individuals will be accountable to their communities, to provincial/territorial organizations and to the national leaders. They will work along with health and other applicable sectors to improve accessibility and to receive just-in-time training in handling and managing data.

Regional First Nations leaders will participate by rolling data up from all the communities in their region and analyzing the results.

At the national level, leaders will compile the data, analyze the data and evaluate best practices which will then be shared with all regions.

Evaluation

Evaluation shall be practical and not too complex. However, the need for accountability and improved implementation will be addressed.

There will be a formative evaluation conducted at the community level and driven by the people of each community. The outcomes of the strategy will be measured by each provincial/territorial organization and compiled at the national level by the AFN. Finally, research and evaluation activities will take place in partnership with relevant government departments and universities to ensure data validity and credibility.

Cost of recommended program

Each of the AFN 10 regions should receive the amount of \$100 000 annually to begin implementing of the strategy for injury prevention for one year.

This critical investment is expected to result in significant reductions in national injury related costs. For example in: reduction in death, and therefore, a corresponding lessening of productive year revenue; less hospital use and use of emergency vehicles, as well as, other services will improve hospital wait times and decrease use due to injury; *communities will be safer, healthier and more productive.*

Resource use

Funding for this initiative will be used for:

- Planning
- Data collection and analysis



- Community needs assessments based on data
- Outreach activities
- Conferences and seminars on injury and prevention
- Community awareness campaigns, educational activities and resource materials
- Consensus building
- Network and coalition building
- Training
- Evaluation
- Building partnerships

Projected cost/benefit analysis for First Nations

Injury prevention interventions are cost-effective.³⁵ The greatest cost of injury is in human suffering and loss. However, the economic burden of both intentional and unintentional injury is estimated at \$12.7 billion annually or 8% of the total of direct and indirect costs of illness.³⁶ Yet, interestingly, less than 1% of total health research expenditures go towards research in this area. Injury prevention can help drastically to reduce these numbers.

Strategies

A National Strategy will encompass the following features:

- Provide communities with the opportunity to participate.
- Help communities to develop local injury profiles.
- Assist communities choose priorities for action, by identifying safety promotion and injury prevention strategies, creating imperatives for action and facilitating the monitoring, documentation, reflection and analysis of experience.
- Facilitate local safety promotion and injury prevention groups to set priorities, provide access to skilled injury prevention workers, provide advocacy support for local groups in approaching and negotiating action among communities, and facilitate communication and documentation.
- Provide education and training for First Nations injury prevention workers.
- Facilitate communication and visiting between communities involved in safety promotion, and facilitate skill development in recording events in multi-media format.
- Assist on an as needed basis in formative evaluation, outcome evaluation of community driven projects and research and evaluation activities in partnership

³⁵ The Canadian Collaborating Centres for Injury Prevention and Control (CCCIPC). (n.d.). *Canadian Injury Prevention: Developing an Integrated Canadian Injury Prevention Strategy*. Canada: 15

³⁶ *ibid* pg. 13



with university and government to build evidence of effectiveness and efficiency of interventions and countermeasures.³⁷

Measurement, outcomes, and evaluation

Provincial and territorial First Nations councils will conduct their local evaluations. A national evaluation will also be conducted to measure results based on the data collected, actions taken by communities, and best practices to be shared.

Communities would work in conjunction with other communities and at the national level. In concert with WHO recommendations for safe communities the following activities should ultimately be the outcome of the national strategic plan:

- Support, nurture and demonstrate the involvement of the local community networks
- Demonstrate the existence of mobilization strategies to develop cross-sectoral groups responsible for injury prevention
- Facilitate community-based strategic planning processes that support a program covering all ages, environments and situations
- Create interest and action that results in programs that show concern for high risk groups and environments and aim particularly at ensuring justice for vulnerable groups
- Provide data and support to those responsible to document the frequency and causes of injuries
- The program/injury prevention service must be long-term rather than short-term
- Provide and support those responsible to utilize appropriate indicators to evaluate processes and the effects of change
- Assist and guide communities to analyze their community's organizations and their possibility of participation in injury prevention programs
- Support the involvement of health care organizations within communities to be involved in both the registration of injuries and the prevention programs
- Facilitate the involvement of all levels of the community in solving the injury problem
- Disseminate experiences both nationally and internationally³⁸

Results will be measured through surveillance data collected and every 6 months afterwards to track changes in injury statistics in communities. Regional councils will conduct evaluation of programs and changes experienced by communities due to using

³⁷ Adapted from: Aboriginal and Torres Strait Islander Injury Prevention Action Committee (ATSIIIPAC). (2004). *The Draft National Aboriginal and Torres Strait Islander Safety Promotion Strategy*. Canberra: 13-14

³⁸ WHO. (n.d.) . *The Safe Community Network: Violence and Injury Prevention*. WHO: 29-30





those results. At the national level, results will be rolled up and best practices compiled and shared.

Anticipated overall results

The rate of injury experienced by those in First Nations communities will dwindle to and possibly surpass that of the mainstream Canadian population. In turn, the economic burden on the health care system will be significantly reduced.

Mission Statement

To create safe environments for First Nations communities where preventable injuries are significantly reduced and in some cases eliminated.

