Exploring Why First Nations' Children Rank First in Canadian Pediatric Unintentional Injuries

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Learning Objectives

Describe the extent and pattern of injuries of First Nation’s children relative the rest of the Canadian population.

Speak to the role of the determinants of health in contributing to these trends including colonialism and reconciliation.

Be culturally sensitive in the development of preventive strategies with this vulnerable population to reduce the burden of illness.

Appreciate the importance of autonomy in effective interventions.
ABORIGINAL PEOPLES IN CANADA – SOME TERMINOLOGY

Aboriginal is a collective name for all of the original peoples of Canada and their descendants. Most Aboriginal peoples in Canada identify themselves politically as belonging to one of three major groups: First Nations, Métis and Inuit.
The term First Nations came into common use in the 1970s to replace ‘Indian’, which some people found offensive. Despite its widespread use, there is no legal definition for this term.

A Métis is a person who self-identifies as Métis, is of historic Métis Nation ancestry, is distinct from other Aboriginal peoples and is accepted by the Métis Nation.

Inuit are a distinct group of Aboriginal people living in northern Canada, generally in Nunavut, the Northwest Territories, northern Quebec and northern Labrador.
Injury deaths by gender among children age 1-14 per 100,000 children in age group (1991-1995)

*Dark purple bars represent girls; Pale bars represent boys*
All Cause Mortality, Age < 20, Both Sexes Combined, Canada 1926-2005, Standardized to the 1991 population
The Numbers

• There have been surveys that have collected some injury data such as the First Nations Regional Longitudinal Health Survey capturing at the individual and community level.

• No systematic gathering of comprehensive injury information currently takes place across the country for First Nations children and youth in Canada.
The Numbers

• Canadian indigenous First Nations and Inuit communities have more than 50% of their populations under 25 years of age.
• Injury is by far the greatest source of potential years of life lost (PYLL) among First Nations populations.
• Rate almost 3.5 times the national average, injury accounts for 26% of deaths among First Nations, compared with 6% of deaths overall in Canada.
The Numbers

• Injury rates among indigenous teens are almost 4 times greater than those of non-indigenous Canadians.

• Hospitalization rates due to injury are also significantly higher (twice the rate) for children and youth living in areas with a high percentage of indigenous residents.

• Consistent with non-indigenous populations, male gender was associated with higher morbidity and mortality rates in Aboriginal communities.
The Numbers

• Seatbelt use in First Nations communities is reported at 50% compared to the Canadian usage average of over 80%.

• Motorized transportation related injuries are associated with the use of snowmobiles and all terrain vehicles (ATVs).

• The remoteness of many Aboriginal communities often means that people need to travel greater distances on poor-quality/ice roads or cross-country on off-road vehicles.
The Numbers

• Drowning is the second most common cause of injury-related death in Aboriginal communities, particularly as associated with snowmobile, boating/transportation, and recreational water use. Aboriginal people access bodies of water for recreation, transportation and food all serve to increase the risk of drowning. (Aboriginal children drown at a rate that is 15 times the national average.)

• Geographic remoteness and distance from emergency rescue and medical assistance also heighten the risk.

• Health Canada data in 1996 indicate that among drowning victims, only 6% of Aboriginals wore a flotation device.
The Numbers

• Aboriginal children are also at higher risk of injury and death by fire.
• Higher rates of smoking, reliance on wood heat, poor housing conditions, and a lack of smoke detectors increase this risk.
• Unlike other forms of injury, rates of poisoning in First Nations communities actually increased in the 1990s for children.
Age Specific Injury Mortality Rates per 10,000 population, British Columbia, 1992-2002

- **Indigenous**
- **non-Indigenous**

The graph shows the mortality rates for different age groups (10-14, 15-19, 20-24) with blue bars representing Indigenous populations and red bars representing non-Indigenous populations.
Age Specific Injury Hospitalization Rates per 10,000 population, British Columbia, 1992-2003

![Bar chart showing age-specific injury hospitalization rates for Indigenous population in BC from 1992 to 2003. The chart includes three age groups: 10-14, 15-19, and 20-24. The rates are represented in blue and red bars.](image-url)
The Numbers

• All major types of injury and causes of injury showed decreases in rates over time for both populations, which is contrary with US studies which show levelling of rates or even increases.
Community Well Being Index

The Well-Being of Inuit, First Nation and Other Canadian Communities, 2001

<table>
<thead>
<tr>
<th>Community Type</th>
<th>Average CWB Score 1991</th>
<th>Average CWB Score 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inuit</td>
<td>0.63</td>
<td>0.69</td>
</tr>
<tr>
<td>First Nations</td>
<td>0.58</td>
<td>0.66</td>
</tr>
<tr>
<td>Other Canadian</td>
<td>0.77</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Indian and Northern Affairs Canada has created a Community Well-Being index which results in a composite score for a community based on the characteristics of its residents – specifically their income, education, housing quantity and quality, and labour force characteristics (participation and employment rates).
Housing Stock

### Repairs Required for Dwellings Located On Reserve (2002–03) and for Canada (2003)

<table>
<thead>
<tr>
<th>Type of Repairs Needed</th>
<th>Dwellings on Reserve</th>
<th>Canadian Dwellings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major repairs</td>
<td>33.6</td>
<td>7.5</td>
</tr>
<tr>
<td>Minor repairs</td>
<td>31.7</td>
<td>26.9</td>
</tr>
<tr>
<td>Regular maintenance only</td>
<td>24.0</td>
<td>65.6</td>
</tr>
</tbody>
</table>

### Percentage of Inuit, Métis, First Nation and Non-Aboriginal People Living in Crowded Dwellings, Canada, 2006

<table>
<thead>
<tr>
<th>Housing Condition</th>
<th>Inuit</th>
<th>Métis</th>
<th>First Nation</th>
<th>Non-Aboriginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in Crowded Dwellings</td>
<td>31</td>
<td>3</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Living in Dwellings in Need Of Major Repairs</td>
<td>28</td>
<td>14</td>
<td>28</td>
<td>7</td>
</tr>
</tbody>
</table>
1 in 4
The number of children in First Nations communities living in poverty.

1 in 9
The number of Canadian children on average living in poverty.

Nine escape fire that destroyed duplex on Pauquachin First Nation

A fire destroyed a duplex on Xpaen Lane on Friday morning. Photograph By North Saanich Fire
A family struggles to rebuild after narrow escape from fire

KATIE DEROZA / TIMES COLONIST
FEBRUARY 12, 2014 09:49 PM

Maurice Tom, left, and Ralph Henry look over the damage caused by a fire last week at a house on the Pauquachin First Nation. The homeowners did not have insurance, but the family of 16 is thankful everyone survived. Photograph By ADRIAN LAM, Times Colonist
Man, 59, dies in fire on Tsawout reserve on Vancouver Island

Published on: January 15, 2016 | Last Updated: January 15, 2016 4:56 PM PST

Although the fire is not deemed to be suspicious, the investigation by the fire department, police, and B.C. Coroners Service is continuing, Fraser said.

It is not yet known whether the home had a smoke detector and if so, if it was working.

“We have a smoke detector program and we have given them to both First Nations to ensure every resident on band lands have them,” French said. “I’m not sure if the smoke detector was working or if he even had one.”
Four deaths in three fires: Coroner’s office to probe recent cluster of tragedies on Island reserves

Coroner’s office to probe cluster of fire deaths on Island reserves

“We are keenly aware this is the third incident, with four deaths, in a little over a month,” said regional coroner Matt Brown after two young boys died in a house fire Wednesday morning. “We are taking it very seriously and we want to see if there are common factors.”

The worst fire on a Vancouver Island reserve in recent years was in January 2009, when five people died after fire ravaged a home on the Stz’uminus [Chemainus] First Nation.

Four women and a seven year old girl — three generations of one family — were trapped in a house that burst into flames.
Pauquachin home destroyed by fire

The North Saanich Fire Department battles a blaze on Pauquachin First Nation land early Monday morning. Four trucks and 18 firefighters responded to the fire that started in the laundry room of the home. Five people were at home when the fire broke out but escaped without injuries. The family lost everything in the fire and is uninsured. Donations to the family can be made at the Pauquachin band office. The cause of the fire is still under investigation.
Rundown houses commonplace in ‘model community’

By Bob Lowery
Winnipeg Free Press

SOUTH INDIAN LAKE — Badly overcrowded, rundown houses are commonplace in this once so-called model community.

Made up of about 400 treaty Indians and 300 Metis residents, the community was transplanted across South Indian Lake after Manitoba Hydro's Churchill River diversion began operating in 1976.

As compensation for the uprooting, Hydro developed the townsite, which included a modern school, nursing station, community store, a laundromat, docks and houses.

Almost all the residents were given new houses. In a few cases, existing homes in good repair were moved across the lake to the new site.

In the early 1980s, many homeowners complained their houses were shifting and deteriorating because they were built on wooden piles, most resting on permafrost.

Hydro responded with a $3-million to $5-million program to replace the wooden foundations with concrete. However, some houses were not repaired.

Recently, more than 70 of 106 local homeowners organized a housing association.

Association chairman Glen Lawson said a questionnaire was sent to each householder asking for information or live in houses constructed by Central Mortgage and Housing Corp.

Lawson said the chief complaints involved foundations and electric wiring. As well, there was evidence of considerable overcrowding. In some cases, 14 to 16 people were living in three-bedroom houses measuring 73 metres by 11.3 metres.

Coun. Vickie Moore, also a housing association member, has 16 occupants in her house.

The house has a large crack in the foundation under the front door. Inside, the floor slopes in from both ends of the building. Because of the crack in the foundation and heaving from frost in the winter, the front door does not shut.

Lifting doors are a common problem.

People usually wind up boarding off the door to keep the cold out,” Moore said. “This means there’s only one way out of the place if a fire starts. That’s against every regulation in the book.”

Moore said the Hydro housing inspector looked at the foundation of the house three years ago and said “You need a new foundation.” But nothing has happened.

Tommy Thomas, 69, recently retired after 14 years as the community’s health representative. He said his house had electrical problems.

On June 26, 1983, a fire levelled his house and killed his grandson Shawn Thomas, 7.

Thomas said the RCMP investigated his grandchild’s death, but “no investigation into the cause of the fire was ever made.” He said he feels it was caused by faulty wiring, noting there were often sparks coming from the electrical base heaters.

In another fire last year, a 16-year-old girl saved the lives of two young children. Five houses have been destroyed by fire over the last three years.

Robert Baker, former mayor of South Indian Lake, is alarmed at the condition of the wiring in the house he’s occupied for the last ten years.

“There are a lot of shorts in the wiring and sparks fly from the panel every time you reset a breaker. Baker claims the problems are result of poor insulation at the time the house was built under the Rural Remote Housing Program.

Baker also complained about poor insulation and cheap sheeting used on the outside walls.

Coun. Hilda Dysart estimated 35 to 40 new houses are needed. The community’s most frustrated would-be homeowners include 21 individuals who applied for CMHC houses six years ago. Their applications were lost “somewhere in the bureaucratic machinery,” Moore said. Eventually, six applicants reapplied two years ago and their new homes are to be ready soon for occupancy.
What has transpired in Canada

Fig. 1: Rates of death from unintentional injury per 100,000 children aged 14 years and less.

Determinants of Health

• Improving daily living conditions (Social Determinants of Injury), will reduce the incidence and severity of injury and make individuals more receptive to injury prevention initiatives.

• World Health Organization’s investigation into health determinants now recognizes European colonization as a common and fundamental underlying determinant of Indigenous health.
Determinants of Health

• Injury prevention, like the broader area of health promotion, must take into account the immediate realities of individuals’ day-to-day lives that include their home and work environments, their communities, and the economic, educational, and social resources each setting makes available – in conjunction with individuals’ own personal resources.

Dennis Raphael PhD, Professor of Health Policy and Management, York University, Toronto, Ontario
Determinants of Health

• The social determinants of health are linked to injury through a variety of pathways including risks and hazards in community and home environments, stress caused by poverty and social exclusion, hazards, and access to safety equipment, services, and education.

• The connection between socioeconomic status (SES) and injury is mediated by conditions in housing, education, family, and neighbourhood contexts as well as type of injury.
Determinants of Health

• Observed decreases in SES are associated with increases in fatal and serious injuries in a variety of studies. Conversely, as SES increases, rates of injury decline.

• The Canadian Institute for Health Information states that the poorest Canadians experience injury at a rate 1.3 times higher than the wealthiest.
Determinants of Health

• Higher injury rates are also correlated with living in areas of concentrated poverty and/or concentrated minority group status. It is partially explained by housing conditions, for children who live in older or rented homes experience higher rates of injury from falls and burns.

• These communities also experience more fatal and non-fatal injuries from causes such as motor vehicle collisions and fire.
Indigenous Determinants of Health

• These additional determinants incorporate the historical experiences and culture of Aboriginal people in Canada and include the effects of colonization, globalization, and migration, as well as the need for cultural continuity, access, territory, and self-determination.
Interaction of the Determinants of Health

• Early childhood experiences of material or social deprivation can affect learning ability, relationships, and mental well-being. In the absence of safe and supportive environments, youth may be more likely to take excessive risk that place them at high risk for injury.
The Challenges

• Low SES individuals are less likely to believe that injuries are preventable and are less likely to practice effective injury prevention measures.

• Campaigns should be accessible and clear to individuals with low literacy rates and basic levels of comprehension, to ensure adequate outreach to people most likely at risk. (Failure to do so could increase disparity by only benefiting those at lower risk for injury.)
The Challenges

• There have been extensive public safety campaigns and training programs that have been used in attempts to enhance water based injury prevention and reduce risk in the NWT and Nunavut over the past 40 years (e.g. Canadian Red Cross swimming lessons, Lifesaving Society lifesaving/lifeguarding programs, Department of Transportation boating safety programs).
The Legend of Qallupilluit the Female Sea Monsters
The Challenges

A Gathering of Elders
The Challenges

• No amount of information will make a difference if one is unable to afford the safety devices, such as car seats, helmets and safety gates, that make a difference to injury rates and severity.

• Active involvement of members of the target population in program development is needed to increase the effectiveness of community-specific strategies.
The Approach

Excessive focus on either micro- or macro-level influences is likely to result in ineffective strategies.
The Approach

• To address these injury disparities, respectful approaches that are collaborative, sustainable and culturally sensitive and that reflect the unique identities of First Nations and Inuit peoples are recommended.

• The OCAPTM principles underlying the collection of indigenous peoples’ data and information in Canada.
OCAPTM Principles

• The data are Owned, Controlled, Accessed and Possessed by the indigenous community.

• Development of Canadian indicators by coalition - the First Nations and Inuit Child and Youth Injury Indicators Project Working Group.
THE TRANSFORMATIVE CHANGE ACCORD:
FIRST NATIONS HEALTH PLAN

SUPPORTING THE HEALTH AND WELLNESS
OF FIRST NATIONS IN BRITISH COLUMBIA
2005 Action Plan

- **Governance, Relationships and Accountability - 2015**
- 2. The Provincial Health Officer will appoint an Aboriginal physician to advise on Aboriginal health issues.
- 3. Each health authority and the First Nations in their service delivery area will develop Aboriginal Health Plans that are consistent with the priorities in this Plan, and that emphasize actions on issues unique or specific to each region.
- 4. Establish a First Nations Health Advisory Committee.
- 5. Establish a province-wide Health Partners Group.
- 6. Develop a reciprocal accountability framework to address gaps in health services for First Nations in B.C.
Canadian Supplement to
THE STATE OF THE WORLD’S CHILDREN 2009

Aboriginal children’s health:
Leaving no child behind

STRENGTHENING PUBLIC HEALTH ACROSS CANADA
APPUYER LA SANTÉ PUBLIQUE AU CANADA

NATIONAL COLLABORATING CENTRE FOR ABORIGINAL HEALTH
CENTRE DE COLLABORATION NATIONALE DE LA SANTÉ AUTOCHTONE

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RECOMMENDATIONS FOR ACTION

• Collect more high-quality data on all areas of Aboriginal health and well-being by and for Aboriginal peoples to meet their specific and various needs for evidence-based policy, practice and service. Allocate greater resources and funding for research, policy development and service provision.

• Increase capacity-building initiatives for Aboriginal peoples to actively and effectively govern their own social, health and education initiatives.
RECOMMENDATIONS FOR ACTION

• Inherent inequality in Canadian governance structures is a fundamental contributing factor to health disparities. Remove jurisdictional boundaries blocking effective health care delivery.

• Increase capacity-building initiatives for Aboriginal peoples to actively and effectively govern their own social, health and education initiatives.
First Nations Health Authority

• The FHHA occupies a completely unique place in the health system in BC, holding strategic policy functions, service delivery functions, and population health functions at all levels.

• The FNHA offers a full spectrum of health services and support depending on the needs of the 203 First Nations communities in BC.

• The FNHA community-based services are largely focused on health promotion, disease prevention, and primary care.
Wellness philosophy based on First Nations teachings is the perspective through which the FNHA approaches every aspect of its work and carries out its roles as health and wellness champions and partners.
First Nations Perspective on Wellness
A Holistic Perspective of Health

• It has become widely accepted in mainstream health literature and, to some extent, practice that a “silo” approach to prevention and treatment of ill-health fails to address the complexity of most health issues. This is particularly true for Aboriginal peoples, who have historically been collectivist in their social institutions and processes, specifically the ways in which health is perceived and addressed.

• Indigenous ideologies embrace a holistic concept of health that reflects physical, spiritual, emotional and mental dimensions. However, it is the interrelatedness of these dimensions that is perhaps most noteworthy.
NANAIMO, B.C. – Members of a First Nation on Vancouver Island have ratified a nearly $50-million settlement with the federal government, compensating the community for a piece of land in what is now downtown Nanaimo, B.C.

The agreement will also give the First Nation the right to request a replacement parcel of land, which White said could potentially include part of a former military camp in Nanaimo.

Money from the settlement will go into a trust that will create economic opportunities for the Snueymuxw First Nation both immediately and into the future, White said.
THANK YOU