



RHS

QUEBEC FIRST NATIONS
REGIONAL HEALTH SURVEY



FIRST NATIONS OF QUEBEC
AND LABRADOR HEALTH
AND SOCIAL SERVICES
COMMISSION

UNINTENTIONAL INJURIES

Highlights

- Among individuals living in First Nations communities, 16% reported having suffered at least one injury in the year prior to the survey.
- 12-17 year-old adolescents are the group most at risk of injury.
- Major sprains or strains in the lower limbs are the most frequently reported injuries.
- Injuries occur mainly during physical exercise or recreational activities.
- The home is the main place where people get injured.
- More than one-third of First Nations using off-road vehicles or watercraft say they wear a helmet or life jacket rarely or never.



CONTEXT

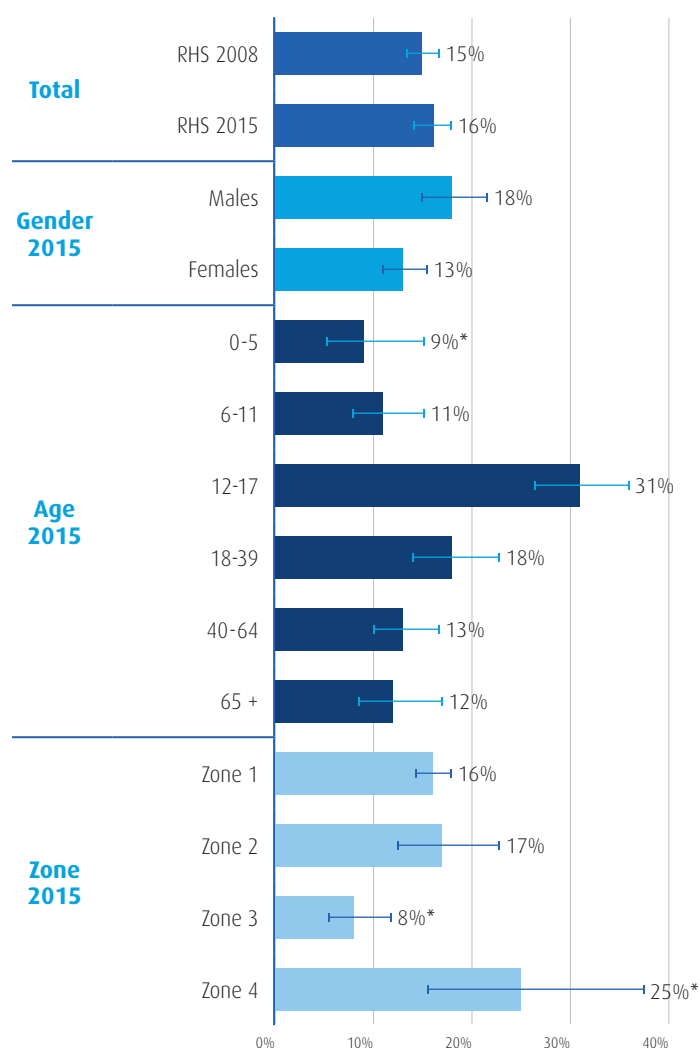
An unintentional injury is defined as an injury resulting from an unintended event (e.g., a fall, a motor vehicle collision, overdose or reaction to drugs, fire, drowning).^[1] Unintentional injuries are an important public health issue considering that they are the leading cause of death in Canada for those under 45 years old and the leading cause of lost potential years of life.^[2,3] Among First Nations in Canada, the incidence of injury is estimated to be four to five times higher than in the general population. Thus, unintentional injuries are a major cause of death, hospitalization and use of health services in First Nations communities.^[4]

PREVALENCE OF INJURIES

The RHS data reveal that 16% of the population (children, adolescents and adults) said they had been injured in the twelve months prior to the survey. This proportion is similar to that of 2008 (FIGURE 1).

Males are slightly more likely to report having been injured than are females. It seems moreover that the prevalence of injuries varies based on age, with an upward trend until adolescence, and then decreasing among adults. Thus, respondents 12-17 years old have a slightly higher prevalence of injuries than do all other age groups. When compared based on geographic isolation, residents of Zone 3 communities are significantly less likely to be injured than those from other zones.

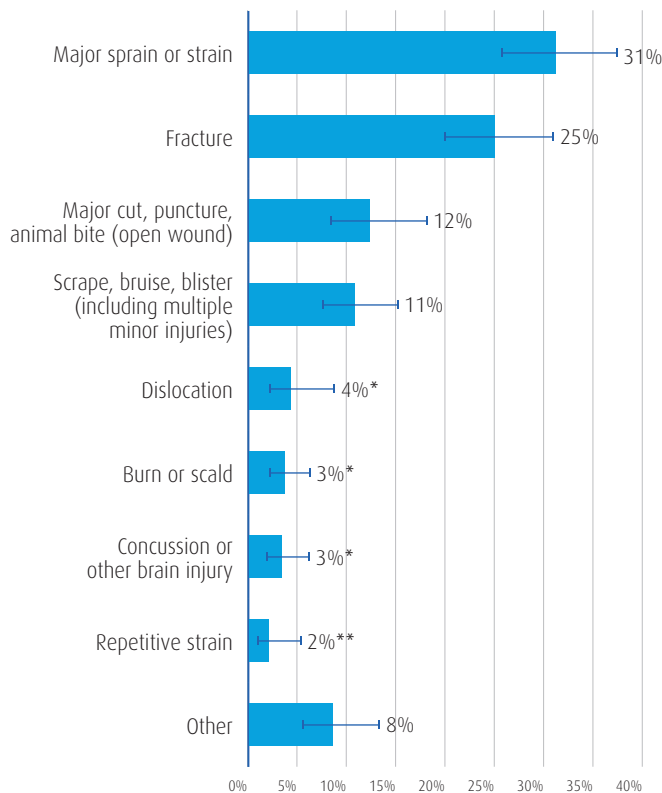
FIGURE 1
Prevalence of injuries in the year prior to the survey



TYPES OF INJURIES

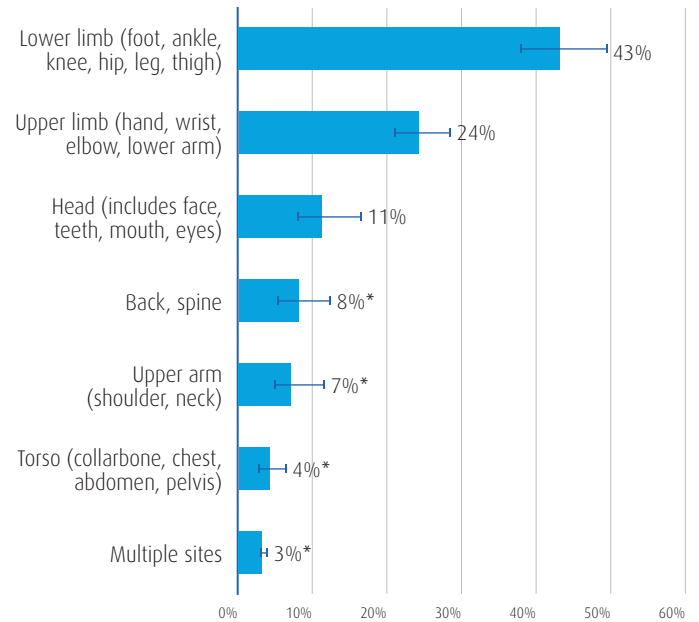
As shown in **FIGURE 2**, the major types of injuries reported are major sprains or strains and fractures. These two categories alone account for more than half of injuries. Then, to a lesser extent, cuts, punctures and bites as well as scrapes, bruises and blisters. No significant difference could be observed for these data by gender, age or geographic isolation.

FIGURE 2
Types of injuries incurred



In addition, **FIGURE 3** indicates that two-thirds of respondents reported being injured in their limbs (upper or lower).

FIGURE 3
Site of the injury



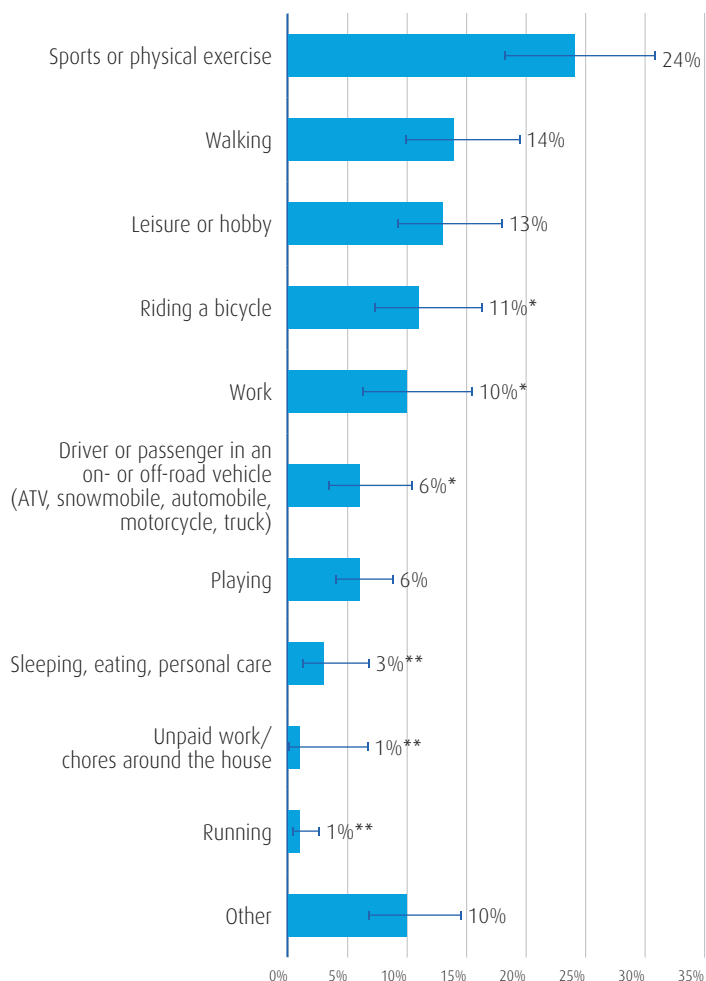
When the type and site of injury are combined, the most common events are lower limb sprains (18.8%), lower limb fractures (11.3%), upper limb fractures (9.9%) and cuts, perforations and bites on the upper limbs (6.1%*).



CIRCUMSTANCES OF THE INJURY

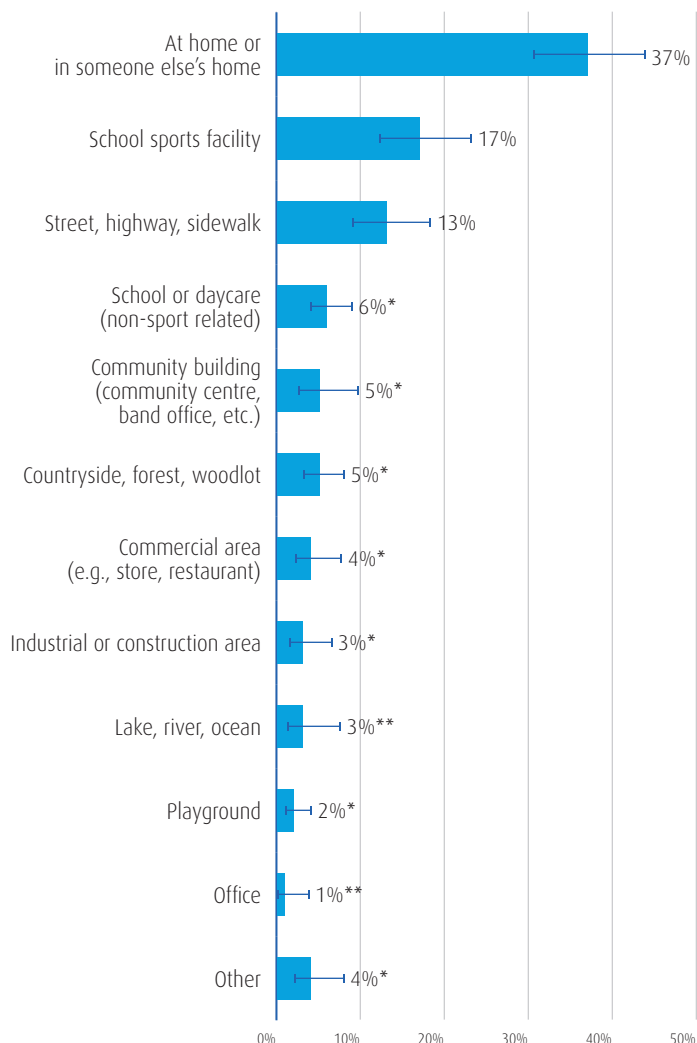
As shown in FIGURE 4 below, one-quarter of the population who have been injured reported being injured during a sports activity or physical exercise. Followed by walking, leisure-time activity, cycling and work.

FIGURE 4
Activity when the injury occurred



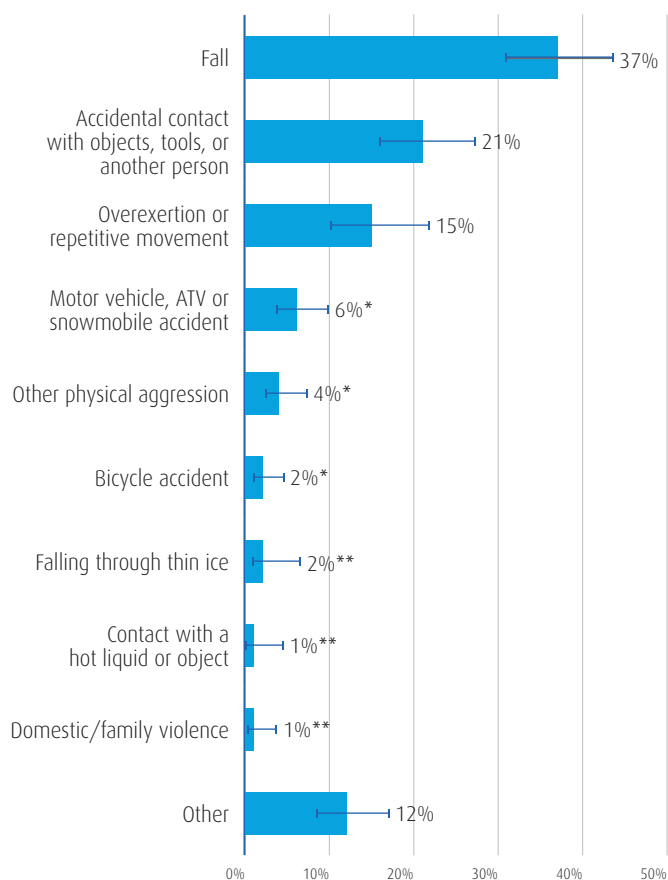
The top three places where First Nations said they had been injured are at home, in sports facilities, and on streets and sidewalks. This seems to corroborate the demonstrated fact that housing conditions have a direct influence on their occupants' health and risk of injury.^[2] Living in an environment with safety deficiencies puts you at greater risk of injury. Considering that 45% of adults reported living in dwellings requiring repairs, it is possible that some percentage of the reported injuries are the result. On the other hand, the home is, for many, the place where we spend the most time, so it is normal that it is the primary place where people have suffered injuries.

FIGURE 5
Location where the injury occurred



More than half of the injuries occurred as a result of falls and accidental contacts with objects, tools or another person. Then come overexertion or repetitive movements. Motor vehicle, ATV and snowmobile accidents account for 6% of injuries, and physical assaults account for 4% of injuries. Although other causes of injury have been listed, they appear to be negligible.

FIGURE 6
Causes of injuries



CARE RECEIVED AS A RESULT OF AN INJURY

More than eight out of ten people who reported being injured in the last year sought care. Of these, almost half (46%) went to the emergency department, 15% to a doctor's office, 13% to the health centre or nursing station in their community or to a walk-in clinic (11%).

ALCOHOL AND CANNABIS

According to the Canadian Centre on Substance Use and Addiction guidelines, consumption of more than four alcoholic drinks on the same occasion for males and three drinks for females significantly increases the risk of injury.^[5] Some research shows that each intake of alcohol on the same occasion increases the risk of being injured by 25%.^[6]

With respect to cannabis use, Health Canada states that it affects coordination, reaction time, concentration, decision-making ability and ability to estimate distances. As a result, it increases the risk of falling or other accidents.^[7]

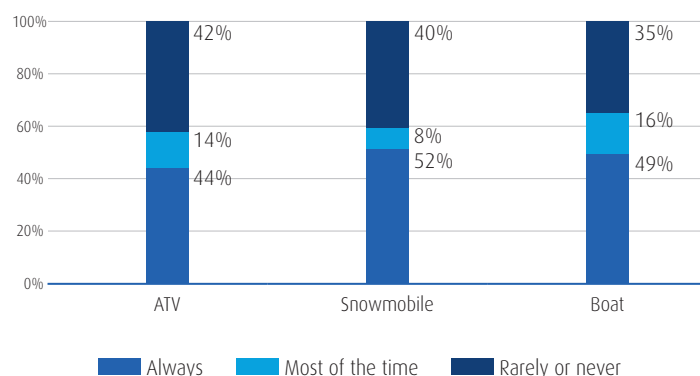
The data of the RHS indicate that 12% of people 12 years and over who were injured in the past year were under the influence of alcohol at the time of the injury. This proportion is 4% for marijuana.

TRANSPORTATION SAFETY (OFF-ROAD VEHICLES AND WATERCRAFT)

According to the Institut national de santé publique du Québec, off-road vehicle accidents are responsible for 10% of all motor vehicle deaths in Quebec.^[8] In addition, according to the Drowning Prevention Research Centre Canada, 28% of drowning deaths from 2010 to 2014 are attributable to recreational boating. In 79% of drowning cases related to navigation, the main cause raised is not wearing a life jacket.^[9]

The RHS data show that a significant proportion of individuals of all ages use off-road vehicles (ATV 28%, snowmobile 27%) and watercraft (29%). Among ATV users, 42% said they rarely or never wear a safety helmet. This proportion is comparable among snowmobile users. Lastly, just over one-third of respondents who use a boat report rarely or never wearing a life jacket (FIGURE 7).

FIGURE 7
Frequency of wearing a helmet or life jacket



CONCLUSION

In 2015, 16% of the population living in First Nations communities reported having suffered at least one injury in the year prior to the survey. This proportion is comparable to that of the RHS 2008. Adolescents (12-17 years old) seem to be the group where the prevalence of unintentional injuries is the highest. The main injuries listed are major sprains or strains and fractures of the lower or upper limbs.

In most cases, people who were injured went to the emergency department, to a doctor's office or the health facility in their community to seek care. Nearly one out five people did not seek care as a result of an injury.

It is very common for off-road vehicles or watercraft to be used on First Nations territory. Proper use of such vehicles requires the wearing of a safety helmet or floatation vest to reduce the risk of injury. More than one-third of those who use such methods of transportation said they rarely or never wore these protections.

In Canada, the cost of unintentional injuries in 2010 was estimated at \$22.1 million.^[10] In addition, they are among the leading causes of death and hospitalization in the Canadian, Quebec and First Nations populations. Whether at home, in playgrounds while doing recreational activities or on the road, most of the injuries experienced by the population could be avoided thanks to, among other things, compliance with safety rules.

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METHODOLOGY IN BRIEF

The third phase of the First Nations Regional Health Survey (RHS) aims to describe the health status of the population in First Nations communities in Quebec. It was conducted from February 2015 to May 2016 in 21 communities from eight nations and reached 3,261 people (825 children aged 0 to 11 years, 769 adolescents aged 12 to 17 years and 1,667 adults aged 18 years and over) who responded to an electronic questionnaire submitted by field agents.

Data followed by the “*” sign have a coefficient of variation of 16.6% to 33.3% and should be interpreted with caution. The sign “***” indicates a coefficient of variation greater than 33.3%. This data is not published, except for estimates below 5%, which must be interpreted with caution. The lines presented in the bar or line charts are the confidence intervals calculated using a 95% confidence level.

In certain cases, the data are presented according to the geographic zone of the community of the respondents. These zones are defined as follows:¹

- Zone 1 (urban): less than 50 km from a service centre with road access;
- Zone 2 (rural): between 50 and 350 km from a service centre with road access;
- Zone 3 (isolated): more than 350 km from a service centre with road access;
- Zone 4 (difficult to access): no road.

Service centre: The nearest access to suppliers, banks and government services.

In the context of the RHS, the term “community” is used to represent “Indian reserves.”

For more details, please refer to the *Methodology* booklet of the RHS.

The RHS report consists of 20 thematic booklets. All the booklets can be consulted at the FNQLHSSC documentation center: <https://centredoc.cssspnql.com>.

¹ INAC, <http://fnppn.aandc-aadnc.gc.ca/fnp/main/Definitions.aspx?lang=eng> [accessed 2018-01-03].

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