

***Injury Prevention Series - no. 4***

# DROWNING DEATHS AMONG THE CREE OF EYYOU ISTCHEE, QUÉBEC, CANADA: A TEN YEAR STUDY

Did you realise that Eeyouch are more at risk for drowning than most other Canadians? This is because adults are more likely to spend time travelling over very cold water in small boats or snowmobiles, and small children often live and play near open water.

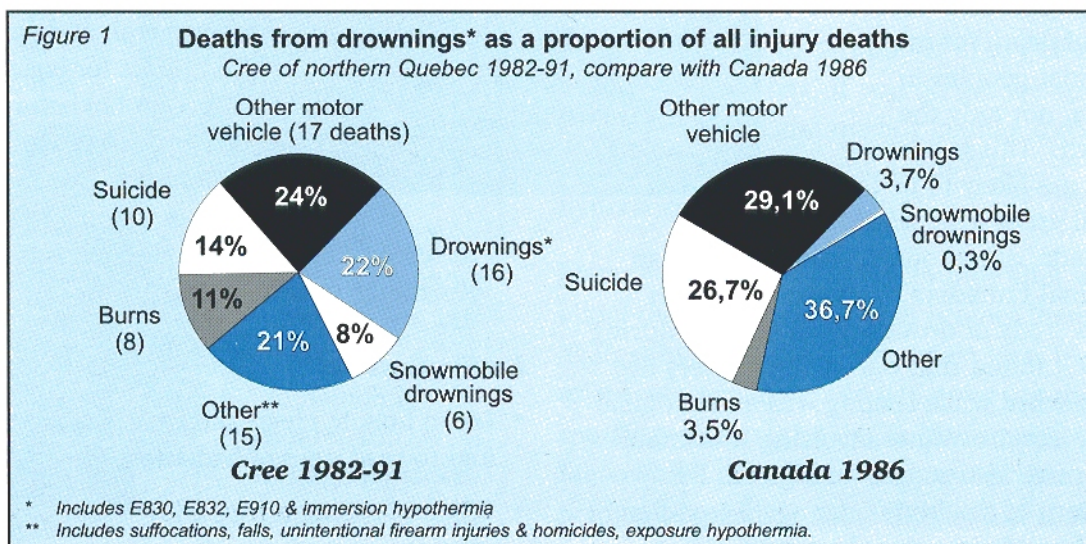
In the past, people often considered drownings as “unavoidable accidents” and part of the way of life in the north. However, with the equipment available today, falling into cold, northern water need no longer be fatal. Not long ago, 10 Inuit from Iqaluit on Baffin Island overturned while hunting walrus. At the time they were about 16 miles from shore. Two of these men were eventually rescued after spending three days hanging onto their wrecked boat in gale force winds and snow. They survived because one of them was wearing a special survival suit before the boat overturned, and he was able to help one other hunter.

In 1992, the Cree Board of Health and Social Services and the Injury Prevention Module of

the Montreal Public Health Department began to study how Cree were being hurt from injuries in Eeyou Istchee between 1982 and 1992. The project was done as the first step leading to recommendations aimed to help prevent future injuries among the Cree. The study obtained information from the Quebec Ministry of Health's records on hospital use, individual hospital files, interviews with families and friends of victims, and coroners' reports. This paper summarizes the results of the study on drownings.

## ARE DROWNINGS AN IMPORTANT HEALTH AND SAFETY CONCERN FOR CREE?

Travelling over water in small boats or snowmobiles is a part of life in Eeyou Istchee. Because of this, drownings are an occasional, but regular, tragedy in the region. The pie chart below shows drownings as a proportion of all injury deaths during the 10 year period.





## WHO DROWNS AND WHEN?

There are two groups of Eeyouch who are at high risk of drowning : men and small children.

Not surprisingly, most men drowned while travelling in the bush, or hunting or fishing. Most of these men had young families and their premature deaths left their children fatherless. Most of these tragedies occurred in the spring and fall when the water and air temperatures are cold. In extremely cold water, muscles become weak and uncoordinated and the brain loses its ability to think clearly after only minutes. Swimming is difficult; putting on a life-jacket may not be possible.

Many drownings occur after dark when visibility is limited. An often fatal combination for drowning is: darkness, alcohol, a high speed snowmobile and poor ice.

The other group at risk of drowning are toddlers between their walking out and about age four. Young children are attracted to water but at that age they are unaware of the danger and are unable to rescue themselves.

Drownings are an important cause of death for many aboriginal peoples in Canada, not only the Eeyouch. This is because people are likely to be living in rural areas near water.

In Canada, about one person in fifty is an aboriginal Canadian. However, a Health Canada study of drownings in Canada during 1991-95, found that one victim in every five who drowned while boating was an aboriginal person. For drownings involving snowmobiles, one of three victims was aboriginal. For drownings of children under age 5 (toddlers), one of four victims was aboriginal.

***Small children aged one to four are unaware of danger. They must never be left alone or with other children near the water, not even for a moment. Constant supervision of children by adults or responsible teens is needed when they are playing outside.***

***Cree men older than 15 years and children 1 to 4 years old are at highest risk of drowning.***

## WHAT CAN BE DONE TO PREVENT DROWNINGS?

When people are injured in a car crash or by a gun shot wound, most will live through their injuries, and only a few will die.

Drowning is different. People are rarely hospitalized for drowning-related injuries because they die quickly on the spot. During the ten years of the Cree injury study, 22 Eeyouch drowned and not one drowning victim survived long enough to be taken to hospital for treatment. For this reason, it is especially important to prevent drownings through advance planning and preparation..

There are at least 3 different ways people can protect themselves and their families

from drowning. These include increasing personal resistance to drowning, choosing the right equipment, and careful attention to the environment. Here are a few examples of each:

### ***Personal resistance to drowning:***

- Learn as much as possible about safety, swimming, how to check the weather, safety equipment, cold water survival, and safe loading limits for boats. Don't use alcohol before or during boating and snowmobiling. Alcohol slows down your ability to respond to danger. It also lowers resistance to cold.

### ***Environment:***

- Learn how to check the weather forecast and to read signs of bad weather.
- When planning a trip, allow extra days for waiting out a storm.



## Equipment:

- All passengers on boats and snowmobiles need to wear a comfortable garment that will provide both flotation and warmth in the water. If you can't afford cold weather flotation garments for everyone in the family, buy one for the adult males who are out on the water most often. Buy at least a lifejacket for women and children. Be sure that you have what you need before the season starts. A portable weather radio can be useful for trips lasting more than a day or two.

When travelling by boat or snowmobile in northern areas, it is very important to wear something which provides adequate flotation and protection against cold. In recent years, the materials and styling of special coats or suits that will both keep a person afloat and maintain body temperature against cold water have been improved. This protective clothing, which can be purchased in either bright colours for high visibility or dark colours for hunting, can be worn while carrying out normal fishing, hunting, and travelling by boat or snowmobile

***Drownings could be prevented if boaters and snowmobilers always wear gear that provides both flotation and protection against cold water***

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**(Figure 2).** If you are planning a trip on ice, but don't have a snowmobile floater suit, wear a large lifejacket over your regular suit.

A lot of the best survival clothing is made in British Columbia, and is used by the Canadian Coast Guard, police, other professionals, and everyone concerned with safety on the water. This survival gear does not cost much more than a regular coat or snowmobile suit.

Because you must wear them at all times, it is important that lifejackets and other survival clothing fit well and are designed for your activity. It is very difficult to find and put on a lifejacket once you are in

cold water. To stay comfortable while wearing a flotation device, you may need one type for paddling a canoe during the summer and another type for travelling at high speed in a motorboat.

Wool and polyester clothing are better than cotton. If underwear and clothing become wet, you will still have some protection from the cold if they are made of wool or polyester. These materials dry out quickly too. By contrast, wet cotton clothing does not provide any protection and dries slowly. Traditional fur clothing gave more protection from the cold than the materials in most modern clothing.

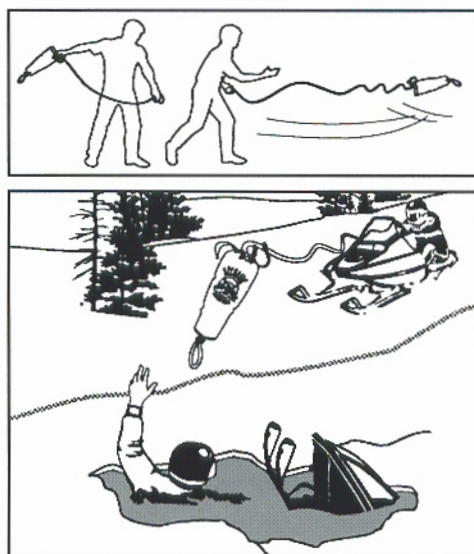
It is a good idea to carry a set of dry clothes in a waterproof bag. If you do get wet and can get to shore and quickly change into dry clothes, this can prevent death from hypothermia (cold).

Many people do not wear clothing that will allow them to float and still protect them against hypothermia, even when wet. If asked why, some people will point out that special protective clothing is too expensive. Meanwhile, these same people will think nothing of spending many thousand of dollars to buy their boat and motor or skidoo.



### Other safety tips:

- give your travel plan to someone in the community so that help can be provided if you do not keep to your plan
- travel in groups with more than one boat or skidoo so you will have help if a problem occurs.
- carry a rescue rope with a throw bag on all snowmobiles. This can be thrown to another snowmobiler in the water to pull them out (**Figure 3**).



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- avoid overloading boats — you need additional freeboard in case wind and waves increase
- when ice and wave conditions permit, keep your boat close to shore so if you are thrown into the water, you will have a better chance of reaching shore before you die from hypothermia (cold)
- do not travel when weather is not favourable
- remember that travelling on ice on rivers is never really safe, and that inlets and outflows of lakes can be dangerous.

**Safety quiz:** What are two important safety messages that you would give to the operator of this boat carrying Cree people of Eeyou Istchee (**Figure 4**).



**Answer:** Everyone should wear a flotation device (lifejacket or PFD). Avoid overloading.

### Injury Prevention Series

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geese symbolize Cree life and culture. Their upward  
flight evokes a sense of freedom, and suggests  
traditional values guiding the way to the future.

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