

Motor Vehicle Crashes in Eeyou Istchee

An overview of the death and hospitalization statistics, 1985-2007

AUGUST 2010

Did you know that motor vehicle crashes are the most common cause of injury death in Eeyou Istchee? Each year, crashes with cars, trucks, snowmobiles or ATVs claim some people's lives and put others into hospital. Many of these injuries could be prevented.

ABOUT MOTOR VEHICLE CRASHES

The term "motor vehicle crash" includes:

- ♦ Traffic crashes that happen on the road system—like collisions, loss of control, or cases where a vehicle hits a pedestrian, a bicycle, or a snowmobile.
- ♦ Off-road crashes that happen outside the road system and involve snowmobiles or all-terrain vehicles (ATVs).

It is best to consider these two types separately, because the prevention methods are different.

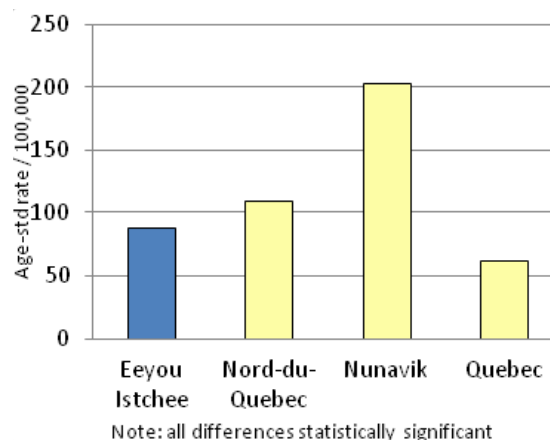
Traffic crashes

HOW BIG IS THE PROBLEM?

Motor vehicle crashes are a concern all across Canada. They cause large numbers of deaths and hospitalizations each year. Rates are usually even higher in northern areas, because northerners routinely drive long distances. This may help explain why Eeyou Istchee's rate of hospitalization for traffic crashes is above the Québec average, even though the region compares well to Nord-du-Québec and Nunavik (Figure 1).

On average, traffic crashes kill two people from Eeyou Istchee each year, and put another 13 in hospital. Many of these crashes seem to involve loss of control, rather than a collision with another vehicle.

FIGURE 1: AGE-STANDARDIZED HOSPITALIZATION RATES FOR MOTOR VEHICLE TRAFFIC INJURIES, 2001-2005

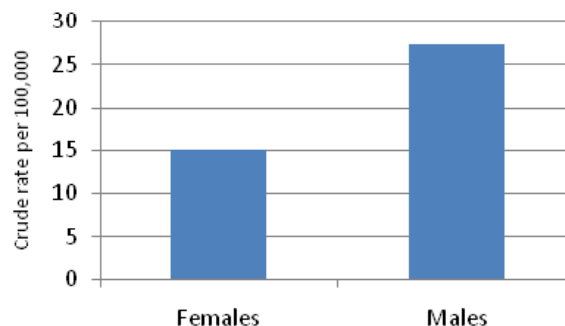


However, rates of both hospitalization and death from traffic crashes are going down. This is also the case in other parts of Canada. Some of the improvement is due to things like seatbelts, airbags, safer vehicles, and better road design.

WHO IS AT RISK OF A TRAFFIC CRASH?

Men and young people tend to travel more than others, so they are at greater risk of a crash.¹ In Eeyou Istchee, men are a third more likely to be hospitalized for a traffic crash, and nearly twice as likely to be involved in a fatal crash (Figure 2).

FIGURE 2: RATES OF FATAL TRAFFIC CRASHES, BY SEX, 1985-2006



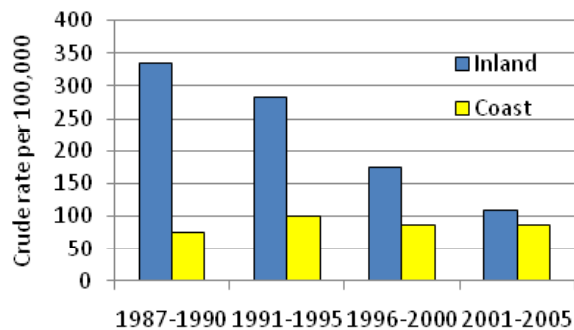
Conseil Crie de la santé et des services sociaux de la Baie James
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 Cree Board of Health and Social Services of James Bay



People are at risk throughout all the main driving years (15-64), but those under 45 are at somewhat greater risk than older adults.

In the 1990s, rates of traffic crashes were much higher Inland than on the Coast. Since then, rates have dropped faster Inland, and the gap between the two regions has shrunk (Figure 3).

FIGURE 3: HOSPITALIZATION RATES FOR MOTOR VEHICLE TRAFFIC INJURIES, INLAND AND COASTAL, 1985-2006

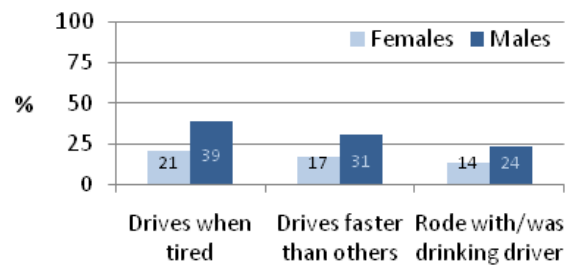


The risk of being in a traffic crash (or injured if one does happen) depends in part on individual behaviours like:

- ◆ how much a person travels
- ◆ what kind of vehicle they drive
- ◆ whether they take risks like speeding or driving while impaired
- ◆ whether they use seatbelts

A 2003 survey¹ asked people in Eeyou Istchee about some of these risks. It found that appreciable proportions of drivers—especially men—admitted to speeding and to driving when they were tired. Besides this, nearly one person in five had ridden with a drinking driver in the past year, or been one themselves. Finally, just 57% of drivers in Eeyou Istchee said they usually wore a seatbelt when driving—and even fewer did so as a passenger. (In other rural parts of Québec, 89% of people wore seatbelts.)

FIGURE 4: RISKY ACTIONS WHEN DRIVING, BY SEX, 2003



WHAT HELPS TO PREVENT TRAFFIC CRASHES?

Some actions can help prevent crashes. Others help protect people from serious injury if a crash does happen.

People and their families can...

- ◆ Reduce speed.
- ◆ Make sure they don't drink and drive.
- ◆ Wear seatbelts. Seatbelts reduce the risk of death in a crash by 45-60%.² And they reduce the risk of serious injuries to the head, chest, and limbs by at least 50%.³
- ◆ Use child car seats. These reduce deaths by at least 40%, and hospital admissions by 69%. They do this by directing impact to the strongest parts of the child's body.⁴
- ◆ Take driving instruction.

*Communities and health departments can...*⁵

- ◆ Pay attention to how intersections are laid out and how traffic is regulated.
- ◆ Promote the use of safety equipment.
- ◆ Take action to reduce drinking and driving—such as training waiters, or having “ride” services or designated drivers.
- ◆ Enforce the laws on traffic safety.

SUMMARY: TRAFFIC INJURIES

Traffic crashes are among the top causes of both death and hospitalization in Eeyou Istchee, even though rates have gone down over time. Risk is higher in men than women, and tends to be highest among youth and adults under 45.



Off-road crashes

In Eeyou Istchee, off-road vehicles are in common use. A 2003 survey¹ found that one person in four had ridden an ATV in the previous year. One in two had ridden a boat or snowmobile.

Off-road vehicles account for more than a third of the crashes that put people in hospital. However, they are less likely than traffic crashes to cause death: only 12% of the fatal crashes over the past 22 years involved off-road vehicles.

ATV CRASHES

ATV crashes put an average of three people in hospital each year, and kill one person every five or six years.

Males are more likely than females to be injured in an ATV crash, but the gap is smaller than for some other kinds of injury. Similarly, teenagers do not stand out in the numbers as strongly as they do for other injuries. It seems that ATVs injuries happen to people of all ages, including children (Table 1). Unlike traffic crashes, rates of ATV crashes are not clearly going down over time.

HOSPITALIZATIONS FOR ATV INJURIES BY AGE GROUP,
EYEU ISTCHEE. TOTAL FOR THE YEARS 1987-2005.

Age	Number	Crude rate per 100,000
0-14 yrs	10	13.8
15-24 yrs	7	15.9
25-44 yrs	11	18.5
45-64 yrs	4	16.9
65+ yrs	5	51.6*

* Caution: rates based on small numbers and likely to vary greatly from year to year.

Rates are similar in both the Coast and Inland, but Whapmagoostui stands out in the statistics. Nearly half the hospitalizations for ATV crashes involve people from Whapmagoostui. This is probably because people in Whapmagoostui use ATVs a lot, since they are not connected to the road system.

More people than before are routinely wearing helmets on an ATV, and this may be preventing some injuries. However, helmet use varies a lot between the communities. In the smaller communities where ATV use is most common (Eastmain, Nemaska, Whapmagoostui and Oujé-Bougoumou), only 42% of people wear helmets. More widespread use of helmets might have kept another seven people out of hospital over the 1987-2006 period.

SNOWMOBILE CRASHES

Snowmobile crashes seem to be a bit more common than ATV ones. On average, snowmobile crashes put five people in hospital each year, and kill one person every six years. And the rates are not clearly going down.

At all ages, males are almost twice as likely as females to be hurt in a snowmobile crash. And all the *fatal* crashes over the past 18 years have involved males. Youth and adults under the age of 44 are at greatest risk.



SUMMARY: OFF-ROAD CRASHES

Crashes with off-road vehicles cause hospitalization, although they are much less likely than traffic crashes to result in death. Unlike traffic crashes, there are no clear signs that rates of off-road crashes are dropping. Based on hospitalization data, snowmobile crashes seem to be slightly more common than ATV ones, and they typically involve young men. ATV crashes, in contrast, seem to happen at all ages.



WHAT HELPS TO PREVENT OFF-ROAD CRASHES?

Some things help to reduce the number of crashes with snowmobiles and ATVs, or the severity of the injuries if there is a crash.

Individuals and their families can...

- ◆ Control speed and drive sober.
- ◆ Wear helmets on snowmobiles and ATVs. This reduces the risk of serious head injuries.⁶
- ◆ Wear reflective clothes. These make snowmobile or ATV riders far more visible, so drivers have more time to avoid them.⁷
- ◆ Use caution when driving snowmobiles on ice and when visibility is poor (darkness, white-outs).
- ◆ Carry safety equipment on snowmobiles (throw ropes, flotation devices, GPS, survival kits).
- ◆ Be cautious about how many passengers they take.

Communities can...⁵

- ◆ Establish separate trails for snowmobiles and ATVs. This prevents collisions with cars and other vehicles.
- ◆ Promote helmet use.
- ◆ Enforce community bylaws on snowmobile and ATV safety.
- ◆ Be aware of Quebec-wide safety laws for snowmobiles and ATVs. The law was revised in 2006 and now limits passengers on ATVs. It also says that for both snowmobiles and ATVs,
- ◆ The driver must be at least 16.
- ◆ 16 and 17-year-olds require a Certificate of Competence.
- ◆ Helmets must be worn.
- ◆ These vehicles cannot be operated on a public road.⁸

About these statistics

The statistics in this factsheet are drawn from a larger report called *Injuries in Eeyou Itstchee: Analysis of Mortality and Hospitalization Statistics 1985-2007*. They are based on mortality records for the years 1985 to 2006, and hospitalization records for the fiscal years 1987-88 to 2007-08. The report was prepared for the Public Health Department of the Cree Board of Health and Social Services of James Bay.

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Copies of this factsheet may be found at:
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