

NL Injury Prevention Coalition, NL Public Health Association & Safety NL Joint Position Paper on All-Terrain Vehicles & Snowmobiles and Safety

In May 2005, Service NL introduced amendments to the Motorized Snow Vehicles and All-Terrain Vehicles Act to help protect the safety of children regarding the operation of All-Terrain Vehicles (ATVs). There was also a safety awareness campaign implemented in consultation with the Royal Canadian Mounted Police (RCMP) and the Royal Newfoundland Constabulary (RNC). At that time, there were issues brought forward about snowmobile use and safety, however, no amendments were made to the legislation regarding snowmobile use.

Since then, more and more recreational vehicles are available in the market. Snowmobiles and All-Terrain Vehicles are bigger, faster, and heavier. Some, called side-by-sides, do not fit the description of what an ATV is and so do not fit the requirements under the ATV legislation. The recent data and medical research are indicating that the use of ATVs and snowmobiles are resulting in significantly higher numbers of injuries, especially among youth. One CIHI e-newsletter states, "The number of serious injuries involving all-terrain vehicles (ATVs) is growing faster than that for any other major type of wheel- or water-based activity."¹

ATV and Snowmobile Use

More people are using ATVs and snowmobiles, whether it is for recreation or for transportation. They are an important part of daily life in the many rural and remote communities in the country and province, and especially so in the more northern communities. "ATVs are used by many children in rural and remote areas of Canada, including First Nations, Inuit and Metis communities...ATVs are frequently used as transportation for children of all ages in First Nations communities, as well as for family and farm work-related activities in many rural and remote communities".² "The popularity of offroad vehicles, particularly ATVs, has increased significantly over the past 20 years".³

The children and youth who use these motorized vehicles do not have the physical strength or stamina to use them safely, which leads to an increase in injuries in this age group. "Dr. Natalie Yanchar says that in addition to their lack of size and strength to use these heavy machines, kids are risk-takers and can lack judgment. They don't perceive danger the way adults do, including speed, approaching vehicles, rocky ledges, or sharp inclines."¹

In Newfoundland and Labrador (NL), youth are not allowed to drive cars until they are 16 years old, nonetheless according to current NL regulations it is acceptable to let youth drive a 600 lb machine that can travel at speeds of over 140 km/h on a ridged, iced over lake or bumpy wooded path without any supervision, as long as they don't cross a road. The machines of the past were less powerful and certainly did not go as fast as the new models. If youth drove them then, there was little risk of injury. Today, that is not so.

ATV and Snowmobile Safety

The injuries caused by ATV and snowmobile incidents have steadily increased in recent years. Several published reports indicate that these injuries, especially among children and youth, are significant enough to warrant a closer look at the data and have made recommendations specifically for these causes of injury.^{3,4,5,6}

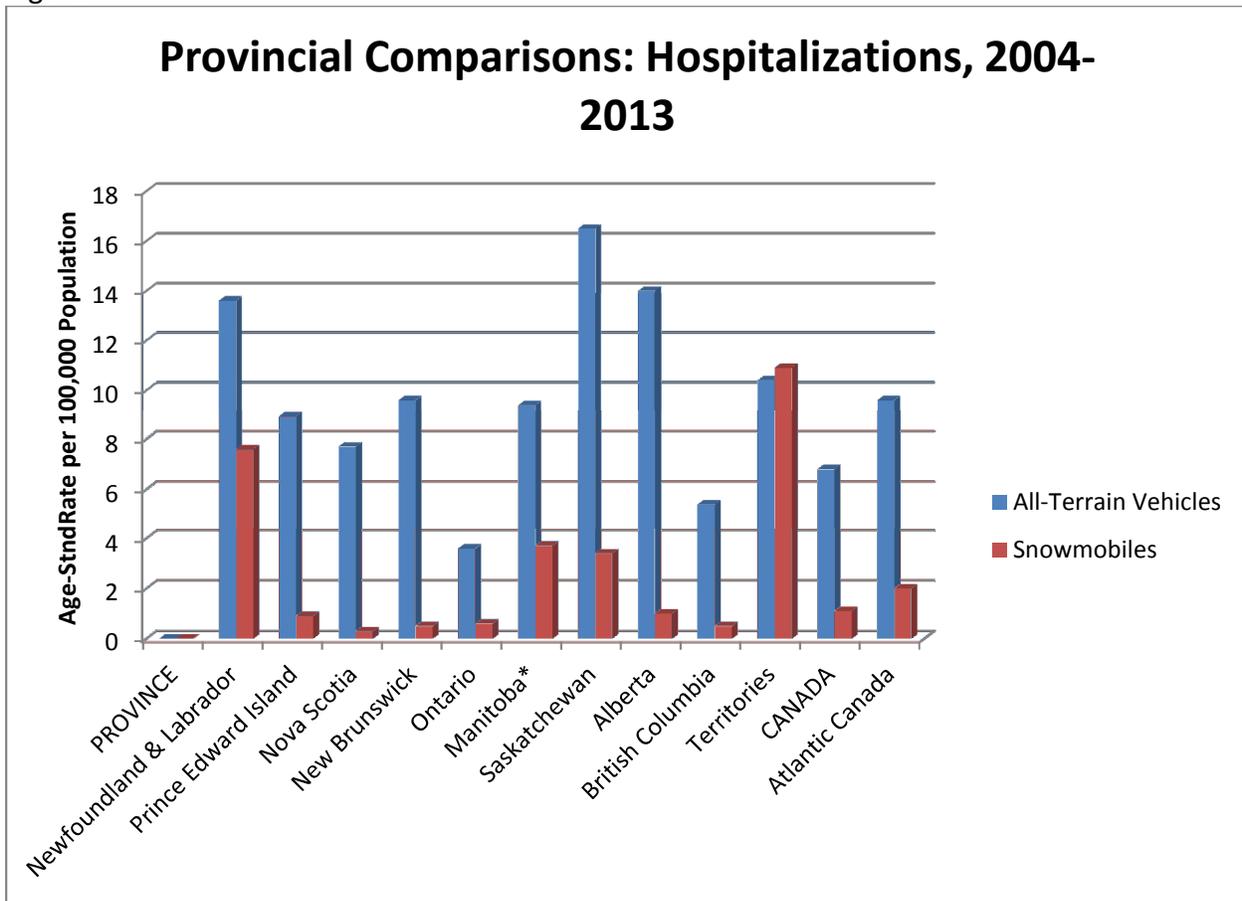
The Atlantic Canada -Child and Youth Unintentional Injury Hospitalizations: 10 years in Review report states that the ATV injuries increased by 1.8% annually. The 1-4 year old age group experienced an increase of 3.4% annually, while the 10-14 age group experienced an increase of 1.1% annually. The rate of snowmobile-related hospitalizations for the 10-14 age group remained unchanged. Of the Atlantic provinces, Newfoundland Labrador (NL) had the highest rate of ATV-related injuries, 13.6 hospitalizations/100,000 population. The rate for Canada was 6.8 hospitalizations/100,000 population. Similarly, NL had the highest rate of snowmobile-related injury (7.6 hospitalizations/100,000 population) of the Atlantic provinces and only second to the Territories in all of Canada.⁴

Table 1 - Provincial Comparisons: Hospitalizations, 2004-2013

(Merged tables from Atlantic Canada: Child & Youth Unintentional Injury Hospitalizations, 10 years in Review)

	All-Terrain Vehicles	Snowmobiles
PROVINCE	Age-stnd Rate per 100,000 Population	Age-stnd Rate per 100,000 Population
Newfoundland & Labrador	13.6	7.6
Prince Edward Island	8.9	0.9
Nova Scotia	7.7	0.3
New Brunswick	9.6	0.5
Ontario	3.6	0.6
Manitoba*	9.4	3.7
Saskatchewan	16.5	3.4
Alberta	14	1
British Columbia	5.4	0.5
Territories	10.4	10.9
CANADA	6.8	1.1
Atlantic Canada	9.6	2
*Manitoba rates from 2005-2013		

Figure 1:



Please also see Appendix A: Snowmobile Laws in Canadian Provinces.

These statistics are mirrored in other reports: in Canada, emergency visits due to ATVs have increased with admission rates of 5.2 times the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) average and the median age for ATV emergency cases was less than the legal driving age⁵; in NL, hospitalizations due to ATV and snowmobile incidents had a rate of 27% in 2010, which does not include the deaths, permanent or partial disability figures⁶; the greatest number of injuries was among young men age 15-19¹. In a span of only two years (2015 & 2016), there were 280 hospitalizations due to offroad vehicle incidents for all ages in NL alone. This does not include the emergency room visits that did not lead to a hospitalization, deaths, or incidents where people did not go to the hospital. In Labrador-Grenfell Health (LGH) region, the most northerly of the regions in the province, the number of hospitalizations due to offroad vehicle incidents was higher than those due to motor vehicle collisions, 47 and 39 respectively!⁷

The risk for injury due to ATVs and snowmobiles increases for children and youth and those living in more northern, rural and remote communities. The risk comes from the offroad vehicle itself, but also from the cultural norms of children using those machines and the availability of

appropriate health services^{7,8}. In the most northerly region of NL (LGH), there were 20 hospitalizations due to offroad vehicles for those under 18 for the years 2015 and 2016, whereas there were only 8 hospitalizations for motor vehicle collisions for that age group⁷. This supports the supposition that children and youth are using these machines much more than vehicles at this point in their lives and are getting injured. Minh T. Do et al. says that hospitalizations for ATV and snowmobiling-related injuries are much higher in the North than that in the rest of Canada combined and that the seriousness of the problem is magnified because of the need for those with serious injuries to be evacuated by air to the nearest major centre⁸. There are communities in NL that have this issue of having to be evacuated by air in order to receive treatment for serious injuries. This of course depends on the inclement weather and may take several hours of flight to get to the destination.

The cost of these injuries is immense, even for a province with a small population in comparison to other provinces. In 2010, ATV and snowmobile-related injuries cost the province of NL a total of \$12 million⁶. This is an amount for injuries that can be prevented. That is an amount that can be saved for a province going through difficult financial times.

Though there is an increased risk for the population of NL because of geography and remoteness, these risks can be lessened. There are recommendations from the Canadian Paediatric Society, the Public Health Association of Canada, Parachute Canada, Child Safety Link, and individual health professionals^{1,2,5,9,10,11} that provide solid, actionable ways to reduce the injuries due to ATV and snowmobile use. Provinces such as Ontario and Quebec have taken these recommendations and implemented them into their respective legislation regarding offroad vehicles which were amended in 2016 (Appendix A).

A few of the recommendations include imposing an age restriction for the driver of the ATV and snowmobile (16 years and older), mandatory use of an appropriate helmet and protective gear, mandatory safety training, and public education^{2,3,9,10}.

Regulation

The evidence available about the increase in injuries and the recommendations from so many national injury prevention proponents have influenced other provinces to update their legislation. It is time Newfoundland Labrador followed suit. The current regulation of ATV and snowmobile use, which can be found as the Motorized Snow Vehicles and All-Terrain Vehicles Act, is due for an amendment.

Legislation is only one piece of a coordinated approach to reducing the ATV and snowmobile injuries in our province. However, legislation can be a powerful motivator. In Nova Scotia, one year after “restricting children younger than 14 years of age from operating ATVs, related injuries in that age group declined by one-half”³. In 2010, ATV and snowmobile injuries cost the province of Nova Scotia a total of \$11 million⁶. The resulting savings if you correlate the decline in injuries caused by ATVs and snowmobiles as quoted above would be \$5.5 million in that one year.

Other legislation has had positive effects on society such as smoking legislation, bicycle helmet legislation, and seat belt legislation. Regulation of ATVs and snowmobiles can have the same positive effect. It sends a clear message to our population that these machines need to be handled properly and with respect. Parents and the Community will look more closely at when they allow their children to use these machines.

Conclusions

The evidence is clear – ATVs and snowmobiles are a safety issue in the country and especially in the province of Newfoundland Labrador. Safety promotion is necessary for the general population, but especially children and youth. The injuries are compounded by the province's geography, which cannot be controlled. There can be control over preventing these injuries before they happen. Enhanced legislation and education is essential to creating a culture of safety while utilizing these machines.

Recommendations

1. Legislation:
 - a) Legislate a minimum operator age of 16 years of age for snowmobiles.
 - b) Introduce mandatory helmet use for all off-road vehicles (including snowmobiles, side-by-sides).
 - c) Introduce mandatory driver training and licensing.
 - d) Update the definition of a 'vehicle' in the Motorized Snow Vehicle and All-Terrain Vehicle (MSV-ATV) Act and Regulations to include newer models of off-road vehicles (side-by-sides and youth-model ATVs).
 - e) Remove section 25.(a) MSV-ATV Act and Regulations.
2. Education and Awareness:
 - a) Educate the public about the risks associated with ATV and snowmobile use through promotional campaigns (when the Act is amended and another campaign one year later), promotion and offers of community safety programs for ATV and snowmobile use, and partnerships of RCMP, RNC and community or school groups to provide safety presentations in communities.

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