



Canadian Association of Pediatric Surgeons' position statement on the use of all-terrain vehicles by children and youth

Trauma Committee of the Canadian Association of Pediatric Surgeons*

Pediatric General Surgery, Medical Director, IWK Trauma Care, IWK Health Centre, 5850 University Ave Halifax, Nova Scotia, Canada B3J 3G9

Received 30 November 2007; accepted 3 December 2007

Key words:

All terrain vehicles;
Childhood injuries;
Youth injuries

Abstract The goal of the Canadian Association of Pediatric Surgeons is to improve the surgical care of infants and children in Canada. Its areas of interest include all aspects of general and thoracic pediatric surgery with recognition of its unique responsibility to infants born with congenital anomalies and children with malignancies. Although its responsibility to pediatric trauma is not unique, that injury remains the number one cause of death of all children beyond infancy creates a pivotal role of this association in issues related to pediatric trauma. With modern methods of first aid, transportation, resuscitation, intensive care, and specialized surgical team effort, many of these seriously traumatized children can be saved. However, despite these advances in trauma care, it is recognized that the most important and ultimate approach to childhood injuries lies in the realm of prevention.

© 2008 Elsevier Inc. All rights reserved.

1. Preface

Injuries are a significant health issue to all children and youth in Canada. For the past few decades, all-terrain vehicles (ATVs) have become very popular among young Canadians for both work but especially for recreation. All-terrain vehicles, first introduced in 1969, are primarily 3- or 4-wheeled motorized vehicles, with large, low-pressure tires, designed for a single-operator riding in off-road areas. Although a recognized crisis with 3-wheeled versions was recognized in the 1980s with a subsequent ban of their sales, injuries have continued to rise since then with the

development of faster and more powerful machines and aggressive marketing of these vehicles as recreational entities for children and youth. These vehicles are especially dangerous when used by children and young adolescents because they lack the knowledge, physical size and strength, and cognitive and motor skills to operate them safely [1–4].

Consequently, the numbers of injuries and deaths related to the use of these vehicles, among Canadian children and youth, have been rising dramatically for the past decade. Data from the Canadian Institute of Health Information state the number of ATV-related injuries severe enough to require hospitalization jumped 50% in Canada between 1996 and 2001, with 36% of these hospitalizations occurring among children and youth [5]. On Canadian farms, one third of agricultural machinery injuries in children are related to ATV use compared to 1 of 10 in adults [6]. All-terrain and other

Presented at the 39th Annual Meeting of the Canadian Association of Pediatric Surgeons, August 23–26, 2007, St John's Newfoundland, Canada.

* Tel.: +02 470 8114; fax: +02 470 7260.

E-mail address: natalie.yanchar@iwk.nshealth.ca.

off-road motor vehicles rank as the fourth most common cause of injury-related deaths among Canadian children and youth aged 5 to 19 years [7]. Even with the introduction of “youth model” ATVs, which have been shown to still carry a higher risk of injury to those younger than 16 years than the adults, ATV-related trauma in this population continues to increase [8].

Evidence suggests that the risk of significant injury to a child is at least 6-fold higher when riding an ATV compared to riding in a conventional motor vehicle [9]. Motor vehicles come with passenger protection and strict safety policies, including licensing and rules of the road; ATVs do not. All-terrain vehicles must be treated like motorized vehicles and should not be operated by children.

All-terrain vehicles have now become one of the most dangerous recreational activities for children and adolescents in this country. As the professionals who must deal with many of the injuries sustained by children and the grief experienced by their families, we are first witnesses to this serious yet preventable problem. Children must be allowed to play. However, when recreation becomes lethal or results in permanent disability and heartache for a family, then it can no longer be considered “fun.”

2. Recommendations

In view of the alarming statistics and rising rates of injuries, ATVs can no longer be considered as safe recreational activity for any child younger than 16 years. It is recommended that

1. Children younger than 16 years should not operate ATVs, anytime, anywhere, any size.
2. Children should never ride as passengers on ATVs. Most ATVs are designed for a single rider, and no passenger of any age should ever be taken on board.
3. All-terrain vehicle drivers should always wear a government-approved helmet (such as a helmet meeting the Canadian Standards Association, Department

of Transportation/Federal Motor Vehicle Safety Standard, Snell, or American National Standards Institute motorcycle helmet standards), eye protection, and appropriate clothing (boots, gloves, long pants).

4. All-terrain vehicle drivers should not operate the vehicle after drinking alcohol or at night.
5. All-terrain vehicle drivers should complete an approved training course.
6. Provinces and territories should harmonize ATV legislation, including the following elements: minimum operator age of 16 years, restriction of passengers to the number for which the vehicle was designed, compulsory helmet use with no exemptions, mandatory training, licensing and registration, and ban the use of 3-wheeled vehicles.

References

- [1] Canadian Paediatric Society, Accident Prevention Committee. Two-, three- and four-wheel unlicensed off-road vehicles. *CMAJ* 1987;136:119-20.
- [2] American Academy of Pediatrics, Committee on Accident and Poison Prevention. All-terrain vehicles: two-, three-, and four-wheeled unlicensed motorized vehicles. *Pediatrics* 1987;79:306-8.
- [3] American Academy of Pediatrics Committee on Injury and Poison Prevention. All-terrain vehicle injury prevention: two-, three-, and four-wheeled unlicensed motor vehicles. *Pediatrics* 2000;105:1352-4.
- [4] The Canadian Paediatric Society Injury Prevention Committee. Preventing injuries from all-terrain vehicles. *Paediatrics and Child Health* 2004;9(5):337-40.
- [5] Canadian Institute for Health Information. All terrain vehicle (ATV) injuries resulting in hospitalization on the rise, reports Canadian Institute for Health Information. Available at: http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_05feb2003_e. Accessed March 15, 2003.
- [6] Lim GW, Belton KL, Pickett W, et al. Fatal and non-fatal machine-related injuries suffered by children in Alberta, Canada, 1990-1997. *Amer J of Indust Med* 2004;45:177-85.
- [7] Statistics Canada, Causes of Death. Available at: www.statcan.ca/english/freepub/84-208-XIE/2003/tables.htm; 2003. Accessed December, 2006.
- [8] US Consumer Product Safety Commission. All-terrain vehicle 2001 Injury and Exposure Studies. Available at: <http://cpsc.gov/library/foia/foia03/os/atvex2001.pdf>. Accessed September, 2005.
- [9] Yanchar, Kennedy R, Russell C. ATVs—motorized toys or vehicles for children? *Injury Prevention* 2006;1(2):30-4.