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BrainWaves

THINKFIRST CANADA: A CHARITABLE ORGANIZATION DEDICATED TO PREVENTING BRAIN AND SPINAL CORD INJURIES

OFFICIAL NEWSLETTER: SPECIAL TD THINKFIRST FOR KIDS EDITION

After years of advocacy on the part of ThinkFirst Canada and our colleagues in injury prevention, the legislative tide has finally turned on a number of injury prevention issues. Chief among these is new booster seat laws passed in provinces across Canada, including British Columbia, Ontario, Quebec, Newfoundland and Labrador, New Brunswick, Nova Scotia, and Prince Edward Island. Provincial laws make booster seats mandatory for school aged children who have outgrown their car seat, but are not well protected by seatbelts alone. To reflect this legislative change, we recently revised and enhanced our longest-running and award winning curriculum, *TD ThinkFirst for Kids*.

Both our Kindergarten and Grade 1, 2, 3 manuals now include booster seat information; in addition, we've also updated best-practices around playground safety, and have enhanced the program by adding a new educational unit on bike safety to the Kindergarten curriculum entitled "Hard Heads". For important information concerning curriculum changes please read on.

Why car/booster seats and not seat belts alone?

- Car seats can reduce the risk of death by 71 per cent for infants under age 1 and 54 per cent for children ages 1 to 4
- Car seats reduce the risk of hospitalization by 67 per cent for children age 4 and under when involved in a crash or collision
- Booster seats provide 59 per cent more protection than seat belts alone
- Car seats must be installed properly and used correctly every time: An estimated 44-81% of car and booster seats are not used correctly, and this puts children at risk.

When does a child need a booster seat?

- Once a child has outgrown the height or weight limit of his forward facing car seat
- Once a child is at least 40 pounds (18 kg)
- Until the seat belt fits a child correctly, around age 9.

Examples of laws:

- Nova Scotia booster seat legislation: As of January 1, 2007, children who are over 40 pounds (18 kilograms) must ride in a booster until they are 9 years old OR until they are a minimum of 4 feet, 9 inches (145 cm) tall. For more information on the law, please visit: www.gov.ns.ca

•British Columbia booster seat legislation:
As of July 1, 2008 children must ride in a booster seat until they are a minimum of 4 feet, 9 inches (145 cm) tall, OR a minimum of 9 years old.

For more information on booster seats:

AORP: www.boosterseats.ca

NITSA (USA): http://www.nhtsa.dot.gov/

NORP: http://www.ccmta.ca/english/committees/rsrp/norp/norp.cfm

SKC: www.safekidscanada.ca

Transport Canada: http://www.tc.gc.ca/roadsafety/safedrivers/childsafety/car/cartime/stage3.htm

For information on CSA standards, please visit, www.csa.ca.

Playground Safety

- To stay safe on the play structure, drawstrings should be removed from children's clothing. This reduces the risk of strangulation.
- Helmets should never be worn on the play structure as helmets can get caught in equipment putting children at risk for strangulation.
- Research shows that to promote child safety, playgrounds should be built and maintained according to the national standard published by the Canadian Standards Association. Key features should include fall prevention and soft surfaces (such as rubber crumb, sand, or woodchips) in case of falls
- Kids should use the structure that is suited to their age group (fall height

Booster seat images courtesy of Safe Kids Canada.

Message from the Executive Director

We are delighted that so many schools across Canada have integrated ThinkFirst Canada's life-saving injury prevention information in their classroom. *TD ThinkFirst for Kids* is our longest running and award winning school-based curriculum program for students in grades K-8 that teaches students how to think first and play safely to prevent brain and spinal cord injuries. Tying basic neuroanatomy to injury prevention lessons that cover vehicular, pedestrian, cycling, and playground safety, *TD ThinkFirst for Kids* teaches students the importance of critical thinking and managing risks. Students are empowered to use their minds to protect their bodies; while also understanding the life-altering consequences traumatic brain and spinal cord injuries can have on a life, a family, and a community. ThinkFirst's recent update and enhancement to the curriculum was made possible by the generous support of **TD Bank Financial Group**.

Injury is an invisible epidemic in our country. It is the leading killer of young people. Moreover, researchers estimate that 90% of injuries are predictable and preventable. Beyond high costs to our health and social systems, the emotional burden to families is beyond measure. Our vision is to help every child develop and maintain safety habits that will minimize their risks of sustaining a serious brain or spinal cord injury. We strive to make this learning experience fun and meaningful. That's why a component of our curriculum involves parents and caregivers. Helping your child with home activities, discussing each lesson, and assessing their application of safety information will help ensure your child develops healthy habits that will last a long lifetime.

At ThinkFirst Canada we believe that the best defense against injury is prevention. This does not mean hibernation. It means getting trained, wearing the gear, and using wisdom to navigate risks. To learn more about our vision, programs, and community activities in your area, please visit us online at thinkfirst.ca.

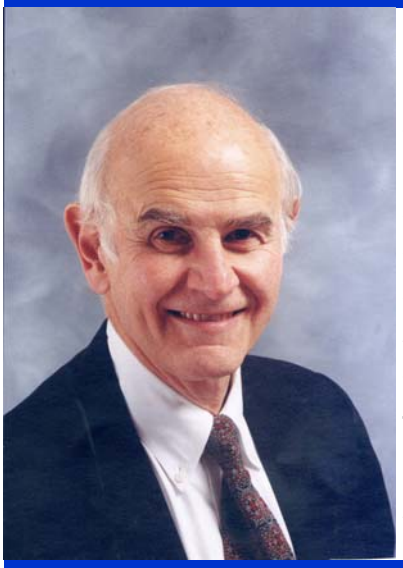
HARD HEADS—A LESSON PLAN ON BIKE HELMET SAFETY FOR KINDERGARTENERS

The "Hard Heads" educational unit is an augmentation to TD TFFK's "Kindergarten Wonderers" by the Island Network for Injury Prevention (INIP) and ThinkFirst PEI. This bicycle helmet safety program teaches youngsters about the importance of head protection while cycling. According to data, 50,000 children are injured in bicycle incidents annually. There is good news: Bicycle helmets can prevent up to 88% of brain injuries when used properly. The goal of the "Hard Heads" program is to teach kindergarteners about the importance of the brain and spinal cord as well as the principles of thinking first when cycling. These lessons help children develop positive safety habits that will last a lifetime.

Delivered to more than 1200 students in Prince Edward Island by kindergarten teachers since it piloted in 2005, the "Hard Heads" program was recently evaluated in a research study led by Dr. Michael Cusimano from St. Michael's Hospital in Toronto. This study found that knowledge increased significantly between the pre and immediate post test following the program and that this knowledge remained for at least one month following instruction. Findings from this research have been presented at Canadian and international injury prevention conferences.

This important educational unit will be available online as an enhancement to the *TD ThinkFirst for Kids* curriculum program. To download your free copy, please visit www.thinkfirst.ca/programs/tdthinkfirst.aspx.

Dr. Charles Tator - Inductee in the Canadian Medical Hall of Fame



Please join us in congratulating world-renowned neurosurgeon and founder of ThinkFirst Canada, Dr. Charles Tator on his induction in to the Canadian Medical Hall of Fame. Recipient of the Order of Canada in 2000 and inductee in the Terry Fox Hall of Fame in 2003, Dr. Tator was inducted into the Canadian Medical Hall of Fame on April 29, 2009 in an historic ceremony in Montreal, QC. Of his immeasurable accomplishments, the Canadian Medical Hall of Fame writes, "One woman calls him "her saviour". Thousands more are grateful for his dedication, compassion and skill as one of Canada's leading surgical scientists. Dr. Charles Tator has had a resounding impact on spinal cord injury research, clinical treatment and prevention."

The Canadian Medical Hall of Fame is the only national organization dedicated to celebrating the accomplishments of Canada's Medical Heroes. For more information, please see the Canadian Medical Hall of Fame's website: www.cdnmedhall.org

Research Profile

ThinkFirst Canada is committed to producing and disseminating quality, relevant injury prevention programs based on the sector's best-practices. We rely on formal evaluation of our educational resources to ensure our programs are as strong as they can be. *TD ThinkFirst for Kids is* currently the only evaluated bilingual national injury prevention curriculum program available in Canada. Read below for exciting research on *TD ThinkFirst for Kids* taking place across the country.

Ottawa Pilot Study on Navigators:

The ThinkFirst Ottawa chapter led by Dr. Michael Vassilyadi, together with the Children's Hospital of Eastern Ontario and the University of Ottawa recently completed an evaluation of *TD ThinkFirst for Kids' Navigators,* the curriculum program geared at grade 7 and 8 students, entitled "A Pilot Program Evaluation of the TFFK Injury Prevention Educational Curriculum for Grades 7& 8". While the effectiveness of *TD ThinkFirst for Kids* curriculum for younger students has been established through formal evaluations, the effectiveness of the grade 7 and 8 program had been untested before this pilot study. This study examined whether students receiving the program reported: 1) increases in their knowledge of the brain and spinal cord; and 2) changes in attitudes and behaviours with respect to participating in potentially risky activities. The favourable results of this evaluation were presented in a platform presentation at the Canadian Neurological Sciences Federation meeting in Halifax in June 2009 and the study was accepted for publication in November 2009's issue of the *Canadian Journal of Neurological Sciences*.

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ThinkFirst/Pensez d'Abord Quebec Survey

ThinkFirst/Pensez d'Abord Québec surveyed teachers using the TD TFFK curriculum on knowledge outcomes following both TD TFFK school presentations and follow-up lesson plans implemented in classrooms. The presentations covered basic neuroanatomy and an injury survivor who spoke about their experiences before and after injury. The respondents indicated that attending the presentation stimulated students' interest in the functioning and importance of the brain and the spinal cord, which allowed teachers to enhance this learning with TD TFFK classroom lessons and activities.

For more information on program evaluations please visit www.thinkfirst.ca/research

ALL-TERRAIN VEHICLE INJURY PREVENTION TIPS

DID YOU KNOW?

The rise in popularity of all-terrain vehicles (ATVs) has been accompanied by a rise in catastrophic injury. Like cars, ATVs are motorized vehicles that require adult skills and judgment to operate safely. ATVs can travel up to speeds of 105 Km/h and can weigh up to 227kg, approximately 500lbs. ThinkFirst Canada recognizes that while ATVs pose a degree of risk to all riders, the risks are greater for children and youth.

MythBuster

ATVs are powerful machines that require strength and skill to operate. So it makes sense to start teaching kids to ride early, right? NO! The truth is that ATVs cause more permanent disabilities and death (commonly called "catastrophic injuries") than most other sport or recreational activity. Children and youth lack the knowledge, development and skills to safely operate these vehicles. ATV use by children has resulted in serious injury and death.

In 2000/2001, severe injuries related to ATV use accounted for 13% of all severe injuries sustained through sports and recreational activities, making ATV related injuries the third most common cause of severe injuries in sports and recreation in Canada. Many studies have drawn attention to the burden of ATV injuries including the Canadian Paediatric Society and the work of Dr. Natalie Yanchar. ThinkFirst Canada's Ontario Neurotrauma Foundation-funded research project found that there were 16 ATV related deaths in Ontario alone in both 2004 and 2005, the last two years studied, and that the majority of these were due to brain or spinal injuries. Catastrophic outcomes from ATV use were also found through research by Heinicke and Tator, published in "All Terrain Vehicle Riding" in *Catastrophic Sports and Recreation Injuries in Canada: Causes and Prevention—A Canadian Study,* a book recently *published by the University of Toronto Press*. During the four years studied, 34 individuals under the age of 20 were catastrophically injured. That represents 41% of all individuals injured; of those 34 injured, 11 were under the age of 11. In addition to vehicle size and rider age, alcohol and lack of equipment are documented factors in ATV injuries.

Preventing Child and Youth ATV-related injury

ThinkFirst Canada and its valued partners in injury prevention recommend that children under the age of 16 refrain from operating any type of all-terrain vehicle (ATV). In addition, ThinkFirst Canada recommends requiring mandatory use of appropriate helmets and safety training for all those operating ATVs regardless of age.

TOP TIPS: THINKFIRST BEFORE OPERATING AN ATV

* Wait until you are 16 to ride

* Limit engine output. Excessive speed is a major risk factor for ATV related deaths.

* Wear a helmet! Anyone riding an ATV should wear a helmet up to the standard recommended for motorcycles. A US Consumer Product Safety Commission found that helmet use could reduce the risk of ATV non-fatal head injuries by 64% and risk of death by 42%.

* Do not ride an ATV on roads and highways

* Always ride sober

* Follow manufacturer instruction for proper ATV use, maintenance and passenger limits

* Respect the environment. Make sure you can see your environment, and can respond in time to avoid objects, people, trees, and other hazards.

* Take an ATV training program

* Supervise youth

WHAT YOU CAN DO:

Please pass on this information to young people, their parents and educators, to medical personnel, police, governments, equipment makers and retailers. Think *first* Canada!

FEEDBACK PLEASE! Tell us what you think about ATV use and child and youth health:

info@thinkfirst.ca

TD THINK FIRST FOR KIDS

TD ThinkFirst for Kids is available free of charge to all Canadian schools. The resource is available in both English and French. Sample lesson plans are available online for your review on our TD ThinkFirst for Kids web page at thinkfirst.ca.

To order this resource, please visit our website at thinkfirst.ca and click on the 'Order Resource' tab to have this important program sent directly to your school. Already have the resource in your school? Please contact ThinkFirst Canada's National Office to ensure your school is on the list to receive the updated CD-ROM: Deirdre@thinkfirst.ca, 1800-335-6076, ext 225.

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