

BRAINTRUST CANADA

skullwise
NO BRAIN. NO GAME.

**YOUTH & CONCUSSIONS
TOOLKIT**

Grades 6, 7, 8 & 9



Bringing the issue of brain injury to the forefront, maximizing the potential of those that have been affected, and reducing preventable brain injury, especially among youth.

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C A N A D A
BRAIN INJURY PREVENTION, EDUCATION, AND SUPPORT
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RATIONALE

The Government of Canada recognizes concussions as a public health issue. Youth (aged 10-18) have a greater chance of injury due to engaging in different sports and recreational activities.

On March 6th of 2018, Ontario passed a concussion safe bill: “Rowan’s Law”. It is the first of its kind in Canada. The goal of this bill is primarily to protect and educate others about concussions. This includes removal-from-sport and return-to-sport protocols as well as a concussion recognition and code of conduct. In addition, coaches and teachers are required to review online resources to stay up to date on how to manage and identify concussions in players and students.

Though BC does not currently have any legislation in place, Brain Trust Canada has been proactively working with the UBCO Teacher Education program to develop this lesson sequence around concussions. It has been built upon their 3 core priorities: prevention, education, and support, and is fully based on BC’s current curriculum.

GOALS

Our goal is to provide a Toolkit for teachers that includes a practical lesson sequence within the topic of youth & concussions that is fully integrated with BC Curriculum and applicable for all students in **grades 6 through 9**. In addition to the lesson sequence, this toolkit includes relevant concussion-based information to help increase the background knowledge of the teacher leading the lessons. The overarching student learning “I Can...” statement is:

“I can develop and demonstrate safety in physical activities through understanding how to prevent, recognize, and recover from a concussion”.

More specifically, it is designed for **Physical and Health Education** classes embedded in the curriculum Big Idea for all three grades, “*Healthy choices influence our physical, emotional, and mental well-being*” and associated curricular competencies. Using the Toolkit, BC teachers can easily adopt and adapt the design for their classrooms.

The lesson sequence follows the criteria below:

Measurable: States clear learning outcomes with formative and summative assessment to show student learning before, during, and after

Experiential: Students will learn through doing, sharing, and reflecting

Inclusive: Adaptable for teachers and their students to allow all learners the opportunity to engage

References:

News article on Rowan’s Law: www.cbc.ca/sports/ontario-passes-concussion-safety-bill-rowans-law-1.4564465

Rowan’s Law: www.rowanslaw.ca

Government of Canada: www.canada.ca/en/canadian-heritage/services/concussions.html



TEACHER TIPS

- These lessons are designed to be delivered to one or two classes in a classroom setting. We do not recommend delivering the lessons to all grade 7's at the same time.
- The PowerPoint speaker notes provide further explanation of content on the slides to assist teachers in delivering the presentation if desired.
- Lesson 1 includes an activity with the Accelerometer app to help students understand the relationship between G-force and concussion. We recommend setting expectations before using the app so that it is used appropriately both during class and if students choose to use it outside of class.
- During the lesson sequence the terms 'concussion' and 'brain injury' are both used. Our goal is for students to understand that a concussion is a mild traumatic brain injury, but it is also possible for a brain injury to be more serious and life-changing.
 - Concussions are the most common type of brain injury sustained by youth so they are the focus of this lesson sequence.
 - **Some statistics:**
 - There are approximately 41,000 children and youth in the Central Okanagan.
 - Of the 41,000 children and youth, 66% of males and 52% of females play organized sports.
 - This averages to 59% (24,190) of all children and youth playing organized sports.
 - Since 1 in 5 (or 20%) are likely to sustain a concussion = 4,838 children and youth in the Central Okanagan are likely to sustain a concussion.
 - Students will learn about brain injuries in general but specifically how to recognize and recover from a concussion.



3-PART LESSON SEQUENCE OVERVIEW FOR TEACHERS

Lesson 1: Concussion Awareness

What are concussions and how do they occur?

What is a concussion?
G-Force and risk exploration

Lesson 2: Recognize and Recover

How can youth recognize when a suspected concussion has occurred?

Concussion signs and symptoms

Zachary Lystedt story

How can an individual help themselves and others recover from a suspected/diagnosed concussion?

Return-to-learn & play protocols

Lesson 3: Life After a Brain Injury

How can a brain injury change an individual's life?

How can we help prevent brain injuries?



BACKGROUND KNOWLEDGE FOR TEACHERS

DEFINITION OF A CONCUSSION

A concussion is a type of mild traumatic brain injury (mTBI) caused by a bump, blow or jolt to the head, neck, or body that results in the brain moving rapidly back and forth in the skull.

FACTS ABOUT CONCUSSIONS

- Most occur during falls, car accidents, and sports/recreational activities
- Generally no visible injury to the brain so tests like MRI or CT show up normal
- Damage to the brain can result in a large variety of symptoms in the following categories: physical, cognitive, emotional, behavioural, etc.
- After a first concussion, the brain needs time to heal. Those that have not recovered are more vulnerable to a second, often more severe, brain injury because they may still have symptoms (loss of balance, blurred vision) that have not subsided.
- 90% of diagnosed concussions DO NOT involve a loss of consciousness
- There are international recovery protocols for concussion victims for Return-to-Learn/Work and Return-to-Play/Sport
- The Government of Canada recognizes concussions as a public health issue, especially in youth

References:

Government of Canada: www.canada.ca/en/canadian-heritage/services/concussions.html

Parachute Canada: www.parachutecanada.org





ADDITIONAL RESOURCES

EDUCATIONAL BRAIN INJURY WEB TOOLS

BrainTrust Canada: Bringing the issue of brain injury to the forefront, maximizing the potential of those who have been affected, and reducing preventable brain injury, especially among youth. www.braintrustcanada.com

Parachute Canada: A national, charitable organization dedicated to preventing injuries and saving lives. Parachute Canada provides concussion guides and resources for teachers, coaches, athletes, and parents. www.parachutecanada.org

Concussion Awareness Training Tool for School Professionals: Series of online educational modules and resources with the goal of standardizing concussion recognition, diagnosis, treatment, and management. www.cattonline.com/school-professional



ADDITIONAL RESOURCES VIDEOS

Zachary Lystedt Story: Powerful story of a young football player that suffered a catastrophic brain injury in 2006 that later fueled his relentless drive to support brain injury awareness, prevention, and legislation. www.youtube.com/watch?v=cyxVqL7nAZ4&feature=youtu.be

Preston Plevretes Story: Another story of a football player that unfortunately suffered a major TBI. It takes a deep look at the importance of proper return-to-sport/play protocols. www.youtube.com/watch?v=F4foY1EtmKo

Rowan's Law & Concussion Safety: Doctors and advocates of concussion prevention discuss the new safety protocols addressing concussions in sport in Ontario coming into law, the first of its kind in Canada. www.youtube.com/watch?v=PMQoGm_Zlpw

Concussion 101: A primer for Kids and Parents
www.youtube.com/watch?v=zCCD52Pty4A

Concussion Management & Return to learn:
www.youtube.com/watch?v=55YmbIG9YM

