

# A parent's guide to dealing with concussions

Heads Up!



## Be Alert: Know that concussions are brain injuries

Concussions pose a significant injury risk to Canadians. They are often viewed as minor events that are tacitly accepted as part of sports. In reality, concussions are injuries to the brain that can have lasting effects. A group of world-renowned researchers recently defined concussion as a complex issue, in which one's brain is injured as the result of a direct force to the body, such as a blow to the head or elsewhere that causes a shaking or jarring to the brain<sup>1</sup>.

As a busy parent, you may not understand the full complexity of concussions – they are a tricky topic! It's easy to identify your child's bruise or scrape, but it's not always as simple to identify an injury inside the head. If your child has experienced a sudden blow or impact, some signs of concussion include: headache, nausea, difficulty concentrating and various emotional issues – a full list of symptoms is available on the Parachute website<sup>2</sup>. You

need to be alert to these symptoms – just as you would treat a sprained ankle, you also need to make sure you treat and respond to “sprained brains”!

Another way to be alert is to understand your role – parents are key influences on children's risk-taking patterns, particularly through the knowledge they have about their children's lives and experiences<sup>3,4,5</sup>. As a parent, you may wonder how you can help reduce your child's risk of concussion. First, be aware of the behaviours you display to your children as they are constantly looking to you for examples. In fact, research has demonstrated that parents' risk-taking behaviours are strong predictors of children's behaviours in the present and future<sup>6</sup>. Setting proper examples and encouraging safe practices will help ensure your children are learning and viewing the best ways to keep their most important body part safe and healthy!



[www.parachutecanada.org](http://www.parachutecanada.org)

36 Eglinton Ave. W., suite 704

Toronto, ON M4R 1A1

647.776.5100

[info@parachutecanada.org](mailto:info@parachutecanada.org)

## Be Safe: Have the tools that help to prevent and identify concussions

Beyond being alert to the symptoms and being a good role model, parents can also find the tools and information to prevent, identify and manage concussions. These tools are available online and include:

- Pocket Concussion Recognition Tool<sup>7</sup>
- Hockey Canada's Concussion App<sup>8</sup>
- Things to Know About Concussions Tip Sheet<sup>2</sup>

Another important way to prevent concussions is ensuring that you teach children to respect the rules of sports and the players. As a parent, you should talk with your children about the meaning of good sportsmanship. One helpful example is the *Player Code of Conduct* form<sup>9</sup>, which was developed for hockey players but could be adapted for other activities.

Here are some common myths about concussions that might surprise you...

## Concussions: Myths and Facts

Myth	Fact
Helmets can protect against concussions	There is no helmet available to make your child concussion-proof
My child didn't get hit on the head, so there's no way he has a concussion	A hit does not have to be directly to the head in order to result in a concussion
As long as I keep my child out of sports until she's better, she can do anything else	Concussions require mental and physical rest, beyond avoiding the activity where the concussion occurred
As long as my child rests, it is not necessary to see a doctor	Concussions are injuries - they are best treated by someone with experience
If my child did not lose consciousness, he probably doesn't have a concussion	Concussions do not always include a loss of consciousness and symptoms can take time to emerge

## Be Aware: Know how to manage concussions

Even when following the rules of fair play, concussions can still happen. In the event that your child suffers a concussion, you need to be aware of how to best manage and treat this injury. First, it's always better to be safe than sorry – *when in doubt, sit them out*. It's better to miss a few games or classes and have a healed brain! Second, if you are unsure whether your child may have suffered a concussion or if they are healing properly, see a doctor – *when in doubt, check them out*.

Even if your child says they feel better, specific guidelines and recommendations outline how best to return to sports and education:

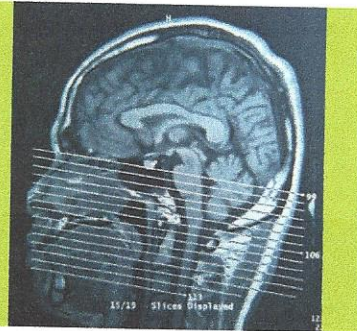
- Return to Play Guidelines<sup>10</sup>
- Return to school: information for teachers and parents<sup>11</sup>

Concussions are not always a one-time event: symptoms may reappear or get worse, and after the first concussion, a child may be more susceptible to a second and subsequent concussions. It is important to be aware that multiple concussions can add increased strain to your child. Repeated concussions should be taken seriously and activities may need to be altered or even permanently stopped. The advice of a physician is important to consider when making these decisions.

## References

- 1 McCrory, P, Meeuwisse, W.H., Aubry, M. et al. (2013). Consensus statement on concussion in sport: the 4th international conference on concussion in sport held in Zurich, November 2012. *British Journal of Sports Medicine*, 47, 250-258.
- 2 *Things to Know About Concussions* Retrieved May 6, 2013, at [http://www.parachutecanada.org/downloads/programs/safekidsweek/Concussion\\_supplement\\_e06-handout.pdf](http://www.parachutecanada.org/downloads/programs/safekidsweek/Concussion_supplement_e06-handout.pdf)
- 3 Morrish, J., Kennedy, P. and Groff, P. (2011). Parental influence over teen risk-taking: A review of the literature. SMARTRISK: Toronto, ON
- 4 Stattin, H., & Kerr, M. (2000). Parental Monitoring: A reinterpretation. *Child Development*, 71, 1072-1085.
- 5 Willoughby, T. & Hamza, C. (2011). A longitudinal examination of the bidirectional associations among perceived parenting behaviors, adolescent disclosure and problem behavior across the high school years. *Journal of Youth and Adolescence*, 40, 463-478.
- 6 Morrongiello, B., Corbett, M. & Bellissimo, A. (2008). 'Do as I say, not as I do?': Family influences on children's safety and risk behaviours. *Health Psychology*, 27, 4, 498-503
- 7 *Pocket Concussion Recognition Tool*. Retrieved May 6, 2013, at <http://www.parachutecanada.org/downloads/programs/safekidsweek/Pocket-Concussion-Recognition-Tool2013.pdf>
- 8 Hockey Canada Concussion Mobile App. Information retrieved May 6, 2013, at: <http://www.hockeycanada.ca/en-ca/mobile-apps.aspx>.
- 9 Smart Hockey Pledge Form. Retrieved May 6, 2013, at [http://www.parachutecanada.org/downloads/programs/activeandsafe/Concussion\\_PlayerPledge.pdf](http://www.parachutecanada.org/downloads/programs/activeandsafe/Concussion_PlayerPledge.pdf).
- 10 Return to Play Guidelines. Retrieved May 6, 2013, at [http://www.parachutecanada.org/downloads/programs/activeandsafe/Concussion\\_Guidelines\\_for\\_the\\_Coach/Trainer.pdf](http://www.parachutecanada.org/downloads/programs/activeandsafe/Concussion_Guidelines_for_the_Coach/Trainer.pdf)
- 11 Concussion guidelines. Retrieved May 6, 2013, at <http://www.parachutecanada.org/active-and-safe>

# Concussion Guidelines for THE ATHLETE



## WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things for a short time, and can cause a variety of symptoms.

## WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

YOU DON'T NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	CHILD'S COMPLAINTS	OTHER PROBLEMS
<ul style="list-style-type: none"> <li>• Does not know time, date, place, period of game, opposing team, score of game</li> <li>• General confusion</li> <li>• Cannot remember things that happened before and after the injury</li> <li>• Knocked out</li> </ul>	<ul style="list-style-type: none"> <li>• Headache</li> <li>• Dizziness</li> <li>• Feels dazed</li> <li>• Feels "dinged" or stunned; "having my bell rung"</li> <li>• Sees stars, flashing lights</li> <li>• Ringing in the ears</li> <li>• Sleepiness</li> <li>• Loss of vision</li> <li>• Sees double or blurry</li> <li>• Stomachache, stomach pain, nausea</li> </ul>	<ul style="list-style-type: none"> <li>• Poor coordination or balance</li> <li>• Blank stare/glassy eyed</li> <li>• Vomiting</li> <li>• Slurred speech</li> <li>• Slow to answer questions or follow directions</li> <li>• Easily distracted</li> <li>• Poor concentration</li> <li>• Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>• Not playing as well</li> </ul>

## WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

## WHAT SHOULD YOU DO IF YOU GET A CONCUSSION?

**You should stop playing the sport right away.**

Continuing to play increases your risk of more severe, longer lasting concussion symptoms, as well as increases your risk of other injury. You should tell your coach, trainer, parent or other responsible person that you are concerned you have had a concussion, and should not return to play that day. You should not be left alone and should be seen by a doctor as soon as possible that day. You should not drive. If someone is knocked out, call an ambulance to take them to a hospital immediately.

Do not move them or remove athletic equipment such as a helmet until the paramedics arrive.



Parachute is bringing attention to preventable injury and helping Canadians reduce their risk of injury and enjoy long lives lived to the fullest.

[www.parachutecanada.org](http://www.parachutecanada.org)

## HOW LONG WILL IT TAKE TO GET BETTER?

The signs and symptoms of a concussion often last for 10-14 days but may last much longer. In some cases, athletes may take many weeks or months to heal. If symptoms are persistent (e.g., more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion. Having had previous concussions may increase the chance that a person may take longer to heal.

## HOW IS A CONCUSSION TREATED?

**THE GENERAL RECOMMENDATION IS A BRIEF 24-48 HOUR PERIOD OF REST FOLLOWED BY A GRADUAL RETURN TO LIGHT PHYSICAL AND COGNITIVE ACTIVITIES AS TOLERATED BY THE INDIVIDUAL. IT IS IMPORTANT TO REMEMBER TO NOT PUSH TOO HARD, AND ONLY INDULGE IN THOSE ACTIVITIES THAT DO NOT WORSEN SYMPTOMS WHILE PROGRESSING THROUGH THE STAGES OF RECOVERY.**

You should not exercise or do any activities that may make you worse, like driving a car, reading, working on the computer or playing video games. No snow shoveling, cutting the lawn, moving heavy objects, etc. If mental activities (eg: reading, concentrating, using the computer) worsen your symptoms, you may have to stay home from school. You may also have to miss work, depending on what type of job you have, and whether it worsens your symptoms. If you go back to activities before you are completely better, you are more likely to get worse, and to have symptoms last longer. If symptoms are persistent (e.g., more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion.

Return to school should not happen until you feel better, and these activities do not aggravate your symptoms. It is best to return to school part-time at first, moving to full time if you have no problems. Once you are completely better at rest, you can start a step-wise increase in activities (see “When can I return to sport?”) It is important that you are seen by a doctor before you begin the steps needed to return to activity, to make sure you are completely better. If possible, you should be seen by a doctor with experience in treating concussions.

## WHEN SHOULD I GO TO THE DOCTOR?

Anyone who gets a head injury should be seen by a doctor as soon as possible. You should go back to the doctor IMMEDIATELY if, after being told you have a concussion, you have worsening of symptoms like:

1. being more confused
2. headache that is getting worse
3. vomiting more than twice
4. not waking up
5. having any trouble walking
6. having a seizure
7. strange behaviour

## WHEN CAN I RETURN TO SPORT?

**It is very important that you do not go back to sports if you have any concussion symptoms or signs.** Return to sport and activity must follow a step-wise approach:

**STEP 1)** After an initial short period of rest of 24-48 hours, light cognitive and physical activity can be initiated as long as they don't worsen symptoms. A physician, preferably one with experience managing concussions, should be consulted before beginning a step-wise return to learn and sport strategy.

**STEP 2)** Light exercise such as walking or stationary cycling, for 10-15 minutes.

**STEP 3)** Sport specific aerobic activity (ie. skating in hockey, running in soccer), for 20-30 minutes.  
**NO CONTACT.**

**STEP 4)** “On field” practice such as ball drills, shooting drills, and other activities with **NO CONTACT** (ie. no checking, no heading the ball, etc.).

**STEP 5)** “On field” practice with body contact, once cleared by a doctor.

**STEP 6)** Game play.

There should be at least 24 hours (or longer) for each step of the progression. If any symptoms worsen during exercise, you should go back to the previous step. Resistance training should be added only in the later stages (Step 4 or 5 at the earliest). If symptoms are persistent (e.g., more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion.

You should not go back to sport until you have been cleared to do so by a doctor.

## RESOURCES

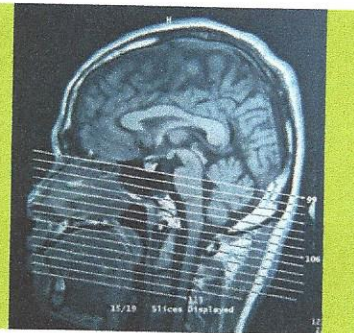
Return to Learn Protocol

<http://horizon.parachutecanada.org/en/article/parachutes-return-to-learn-protocol/>

To learn more visit [www.parachutecanada.org/concussion](http://www.parachutecanada.org/concussion)

## Concussion Guidelines for

# COACHES & TRAINERS



## WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things, and can cause a variety of symptoms.

## WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

A STUDENT DOES NOT NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	ATHLETE'S COMPLAINTS	OTHER PROBLEMS
<ul style="list-style-type: none"> <li>• Does not know time, date, place, period of game, opposing team, score of game</li> <li>• General confusion</li> <li>• Cannot remember things that happened before and after the injury</li> <li>• Knocked out</li> </ul>	<ul style="list-style-type: none"> <li>• Headache</li> <li>• Dizziness</li> <li>• Feels dazed</li> <li>• Feels "dinged" or stunned; "having my bell rung"</li> <li>• Sees stars, flashing lights</li> <li>• Ringing in the ears</li> <li>• Sleepiness</li> <li>• Loss of vision</li> <li>• Sees double or blurry</li> <li>• Stomachache, stomach pain, nausea</li> </ul>	<ul style="list-style-type: none"> <li>• Poor coordination or balance</li> <li>• Blank stare/glassy eyed</li> <li>• Vomiting</li> <li>• Slurred speech</li> <li>• Slow to answer questions or follow directions</li> <li>• Easily distracted</li> <li>• Poor concentration</li> <li>• Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>• Not playing as well</li> </ul>

## WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

## WHAT SHOULD YOU DO IF AN ATHLETE GETS A CONCUSSION?

**The athlete should stop playing the sport right away.** They should not be left alone and should be seen by a doctor as soon as possible that day. If an athlete is knocked out, call an ambulance to take them to a



Our aim is an injury-free Canada. Parachute is bringing attention to the issue of preventable injury and to help Canadians reduce their risks of injury and enjoy long lives lived to the fullest.

[www.parachutecanada.org](http://www.parachutecanada.org)

rev. 2017-06-15

hospital immediately. Do not move the athlete or remove athletic equipment like a helmet as there may also be a cervical spine injury; wait for paramedics to arrive.

**An athlete with a concussion should not go back to play that day, even if they say they are feeling better.** Problems caused by a head injury can get worse later that day or night. They should not return to sports until he/she has been seen by a doctor.

## HOW LONG WILL IT TAKE FOR THE ATHLETE TO GET BETTER?

The signs and symptoms of a concussion often last for 10-14 days but may last much longer. In some cases, athletes may take many weeks or months to heal. If symptoms are persistent (e.g, more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion. Having had previous concussions may increase the chance that a person may take longer to heal.

## HOW IS A CONCUSSION TREATED?

**IT IS VERY IMPORTANT THAT AN ATHLETE DOES NOT GO BACK TO SPORTS IF THEY HAVE ANY CONCUSSION SYMPTOMS OR SIGNS.**

Return to sport and activity must follow a step-wise approach:

**STEP 1)** After an initial short period of rest of 24-48 hours, light cognitive and physical activity can be initiated as long as they don't worsen symptoms. A physician, preferably one with experience managing concussions, should be consulted before beginning a step-wise [return to learn](#) and sport strategy.

**STEP 2)** Light exercise such as walking or stationary cycling, for 10-15 minutes.

**STEP 3)** Sport specific aerobic activity (ie. skating in hockey, running in soccer), for about 20-30 minutes. NO CONTACT.

**STEP 4)** "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT

(ie. no checking, no heading the ball, etc.).

**STEP 5)** "On field" practice with body contact, once cleared by a doctor.

**STEP 6)** Game play.

There should be at least 24 hours (or longer) for each step of the progression. If any symptoms worsen during exercise, STOP activity and go back to the previous step. Resistance training should be added only in the later stages (Step 4 or 5 at the earliest). If symptoms are persistent (e.g, more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion.

## WHEN CAN AN ATHLETE WITH A CONCUSSION RETURN TO SPORT?

It is very important that an athlete not play any sports if they have any signs or symptoms of concussion. When he/she is back to normal and has been seen by a doctor, he/she can then go through the steps of increasing activity described above. When the athlete has progressed through these steps with no symptoms or problems, and has received clearance from a doctor, he/she may return to the sport.

## RESOURCES

Return to Learn Protocol

<http://horizon.parachutecanada.org/en/article/parachutes-return-to-learn-protocol/>

To learn more visit [www.parachutecanada.org/concussion](http://www.parachutecanada.org/concussion)