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## SPORT CONCUSSION

### WHAT IS A CONCUSSION?

A concussion is a brain injury that causes a change in brain function. A concussion can occur with or without a direct blow to the head and does not have to result in a loss of consciousness. It is important to recognize a concussion when it first occurs. Proper management from time of injury can help prevent further injury and even death.

### WHAT ARE THE SIGNS AND SYMPTOMS OF A CONCUSSION?

Concussion symptoms differ with each person and with each injury. They may begin immediately or may not be noticeable for hours or days.

PHYSICAL	EMOTIONAL	COGNITIVE
<ul style="list-style-type: none"><li>• Headaches</li><li>• Nausea/Vomiting</li><li>• Dizziness</li><li>• Light/noise sensitivity</li><li>• Lightheadedness</li><li>• Balance problems</li><li>• Blurred/double vision</li><li>• Neck pain</li><li>• Ringing in the ears</li></ul>	<ul style="list-style-type: none"><li>• Irritability</li><li>• Depression</li><li>• Sadness</li><li>• More emotional</li><li>• Anxiety</li><li>• Moodiness</li></ul>	<ul style="list-style-type: none"><li>• Trouble concentrating/remembering</li><li>• Fogginess</li><li>• Trouble falling asleep</li><li>• Sleeping too much</li><li>• Decreased energy</li><li>• Fatigue</li><li>• Don't feel right</li><li>• Drowsiness/confusion</li><li>• Slow reaction time/not playing as well</li></ul>

### IF YOU DEVELOP ANY OF THE FOLLOWING SYMPTOMS, GO TO THE NEAREST EMERGENCY DEPARTMENT.

<ul style="list-style-type: none"><li>• Severe/worsening headache</li><li>• Vomiting</li><li>• Unusual behaviour</li><li>• Seizures</li><li>• Neck pain/tenderness</li><li>• Numbness/Weakness in arms/legs</li><li>• Fluid/blood leaking from the nose or ears</li></ul>	<ul style="list-style-type: none"><li>• Decreased balance/coordination</li><li>• Decreasing level of consciousness</li><li>• Disorientation/confusion</li><li>• Unequal pupils</li><li>• Irritability</li><li>• Slurred speech</li><li>• Double or blurry vision</li></ul>
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### 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.

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### **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 the 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 shovelling, cutting the lawn, moving heavy objects, etc. If the mental activities (eg: reading, concentrating, using the computer) worsen your symptoms, you may have to stay home from school. If you go back to activities before you are completely better, you are more likely to get worse, and to have symptoms last longer.

### **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.

### **RETURN TO SCHOOL**

Return to school should not happen until you feel better, and mental 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. 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.

### **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 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.)

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