



## 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 student may think and remember things, and can cause a variety of symptoms.

## What are the signs and symptoms of a concussion?

**A student does not need to be knocked out (lose consciousness) to have had a concussion.** The student might experience one or more of the following:

Thinking Problems	Student's Complaints	Other Problems
<ul style="list-style-type: none"> <li>• Does not know time, date, place, details about a recent activity</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 co-ordination 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 (i.e., laughing, crying, getting mad easily)</li> <li>• Not participating well</li> </ul>

**Get medical help immediately if a student has any “red flag” symptoms** such as neck pain, repeated vomiting, growing confusion, seizures, and weakness or tingling in their arms or legs. These may be signs of a more serious injury.



## 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 (e.g., a ball to the head, colliding with another person).

## What should I do if I suspect a student has a concussion?

**In all suspected cases of concussion, the student should stop the activity right away.**

Continuing increases their risk of more severe, longer-lasting concussion symptoms, as well as increases their risk of other injury.

The Concussion Recognition Tool 5 (CRT5) can be used by anyone to help recognize the signs and symptoms of a possible concussion.

The student should not be left alone and should be seen by a doctor as soon as possible that day. They should not drive.

If the student loses consciousness, call an ambulance to take them to the hospital right away. Do not move them or remove any equipment such as a helmet.

The student should not return to play the same day.

## How long will it take for the student to get better?

The signs and symptoms of a concussion often last for one to four weeks but may last longer. In some cases, students may take many weeks or months to heal. If the student has had a concussion before, they may take longer to heal.

If the student's symptoms are persistent (i.e., last longer than four weeks in youth under 18 years old or last longer than two weeks in students aged 18

or older), they should be referred to a healthcare professional who is an expert in the management of concussion.

## How is concussion treated?

After an initial short period of rest (24 to 48 hours), light cognitive and physical activity can begin, as long as these don't worsen symptoms.

As the student is recovering from concussion, they should not do any activities that may make their symptoms worse. This might mean limiting activities such as exercising, driving, and screen time on their phone or other devices. If mental activities (e.g., reading, using the computer) worsen the student's symptoms, they might have to stay home from school.

Recovering from concussion is a process that takes patience. If the student goes back to activities before they are ready, it is likely to make their symptoms worse, and their recovery might take longer.

## When should the student go to the doctor?

Anyone with a possible head injury should be seen by a doctor as soon as possible.

The student should go back to the doctor immediately if, after being told they have a concussion, they have worsening symptoms, such as:

- being more confused
- headache that is getting worse
- vomiting more than twice
- not waking up
- having any trouble walking
- having a seizure
- strange behaviour

## When can the student return to school?

The student may find it hard to concentrate in class, may get a worse headache, or feel sick to their stomach. They should stay home from school if being in class makes their symptoms worse. Once they feel better, they can try going back to school part time to start (i.e., for half days) and if they are OK with that, then they can go back full time.

On average, students with concussion miss one to four days of school. Each concussion is unique, so the student may progress at a different rate than others.

The Return-to-School Strategy provides information on the stages of returning to the classroom. Return to school must come before full return to sport.

## When can the student return to sport and physical activity?

It is very important that the student does not go back to full participation in sport if they have any concussion signs or symptoms. Return to sport and physical activity must follow a step-wise approach.

In this approach:

- Each stage is at least 24 hours.
- The student moves on to the next stage when they can tolerate activities without new or worsening symptoms.
- If any of the student's symptoms worsen, they should stop and go back to the previous stage for at least 24 hours.

**Stage 1: After an initial 24 to 48 hours of rest, light cognitive and physical activity** can begin, as long as these don't worsen symptoms. The student can start with daily activities like moving around the home and simple chores, such as making their bed.

**Stage 2: Light aerobic activity** such as walking or stationary cycling, for 10 to 15 minutes. The student

shouldn't do any heavy lifting or resistance training (e.g., bodyweight exercises, weight training).

**Stage 3: Individual physical activity with no risk of contact** for 20 to 30 minutes. The student can participate in simple, individual activities, such as going for a walk at recess or shooting a basketball. The student shouldn't do any resistance training.

**Stage 4: Begin practising with no contact** (no checking, no heading the ball, etc.). Add in longer and more challenging physical activity. Start to add in resistance training (if appropriate for the student).

**Get clearance from a doctor before moving on to Stages 5 and 6.**

**Stage 5: Participate in practice with contact**, if the student plays a contact sport.

**Stage 6: Full game play or competition.**

The Return-to-Sport Strategy provides more information on the stages of returning to sport.

## The student should never return to sport until cleared by a doctor!

Returning before full recovery from concussion puts the student at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer.

## Additional Resources

Available at [parachute.ca/concussion](https://parachute.ca/concussion):

- Return-to-School Strategy
- Return-to-Sport Strategy
- Canadian Guideline on Concussion in Sport