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

What are the signs and symptoms of a concussion?
You do not need to be knocked out (lose consciousness) to have had a concussion. You might experience one or more of the following:

<table>
<thead>
<tr>
<th>Thinking Problems</th>
<th>How You Might Feel</th>
<th>Other Problems</th>
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</thead>
<tbody>
<tr>
<td>• Do not know time, date, place, period of game, opposing team, score of game</td>
<td>• Headache</td>
<td>• Poor co-ordination or balance</td>
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<tr>
<td>• General confusion</td>
<td>• Dizziness</td>
<td>• Blank stare/glassy-eyed</td>
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<td>• Cannot remember things that happened before and after the injury</td>
<td>• Feeling dazed</td>
<td>• Vomiting</td>
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<tr>
<td>• Knocked out</td>
<td>• Feeling “dinged” or stunned; “having my bell rung”</td>
<td>• Slurred speech</td>
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<td>• Seeing stars, flashing lights</td>
<td>• Slow to answer questions or follow directions</td>
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<td>• Ringing in the ears</td>
<td>• Easily distracted</td>
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<td></td>
<td>• Sleepiness</td>
<td>• Poor concentration</td>
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<td>• Loss of vision</td>
<td>• Strange or inappropriate emotions (i.e., laughing, crying, getting mad easily)</td>
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<td></td>
<td>• Seeing double or blurry vision</td>
<td>• Not playing as well</td>
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<td></td>
<td>• Stomachache, stomach pain, nausea</td>
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</tbody>
</table>

Get medical help immediately if you have any “red flag” symptoms such as neck pain, repeated vomiting, growing confusion, seizures, and weakness or tingling in your arms or legs. These may be signs of a more serious injury.
Concussion guide for athletes

What causes a concussion?
Any blow to your head, face or neck, or a blow to your body which causes a sudden jarring of your head may cause a concussion (e.g., a ball to the head, being checked into the boards).

What should I do if I think I might have a concussion?
You should stop playing right away. Continuing to play increases your risk of more severe, longer-lasting concussion symptoms, as well as increases your risk of other injury.

Tell a coach, parent, official, or other responsible person that you are concerned you might have a concussion. You should not be left alone and should be seen by a doctor as soon as possible that day. You should not drive.

If you lose consciousness, an ambulance should be called to take you to a hospital immediately.

Do not return to play the same day.

What should I do if I think my teammate might have a concussion?
If another athlete tells you about symptoms or if you notice signs they might have a concussion, tell a coach, parent, official or other responsible person. They should not be left alone and should be seen by a doctor as soon as possible that day.

If another athlete is knocked out, an ambulance should be called to take them to a hospital immediately.

How long will it take to get better?
The signs and symptoms of a concussion usually last for one to four weeks, but may last longer. In some cases, it may take many weeks or months to heal. If you have had a previous concussion, you may take longer to heal.

If your symptoms are persistent (i.e., last longer than four weeks if you’re under 18 or last longer than two weeks if you’re 18 or older) you 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 your symptoms.

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

Recovering from concussion is a process that takes patience. Going back to activities before you are ready is likely to make your symptoms worse, and your recovery may take longer.

When should I go to the doctor?
Anyone with a possible head injury should be seen by a doctor as soon as possible. If you are diagnosed with a concussion, your doctor should schedule a follow-up visit with you within the next one to two weeks.

You should go back to the doctor immediately if, after being told you have a concussion, you have worsening symptoms, such as:
Concussion guide for athletes

- 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 I return to school?

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

On average, students with concussion miss one to four days of school. Each concussion is unique, so you may progress at a different rate than other people you know.

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

When can I return to sport?

It is very important that you do not go back to full participation in sport if you 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.
- Move on to the next stage when you can tolerate activities without new or worsening symptoms.
- If any symptoms worsen, 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 your symptoms. Start with daily activities like moving around your home and simple chores, such as making your bed.

Stage 2: Light aerobic activity such as walking or stationary cycling, for 10 to 15 minutes. Don’t do any resistance training or other heavy lifting.

Stage 3: Individual sport-specific exercise with no contact for 20 to 30 minutes (e.g., running, throwing). Don’t do any resistance training.

Stage 4: Begin practising with no contact (no checking, no heading the ball, etc.). Add in more challenging drills. Start to add in resistance training.

Stage 5: Participate in practice with contact, once cleared by a doctor.

Stage 6: Full game play or competition.

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

Never return to sport until cleared by a doctor!

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

Additional Resources

Return-to-School Strategy

Return-to-Sport Strategy

Canadian Guideline on Concussion in Sport
http://www.parachutecanada.org/guideline