What is a concussion?
A concussion is a brain injury that affects how the brain works. A concussion can't be seen on x-rays or brain scans.

What causes a concussion?
Any blow or hit to the head, face, neck, or body that causes sudden shaking of the head can cause a concussion. Concussions can happen from falling, during sports like hockey, soccer, or volleyball, or during motor vehicle collisions.

When should a concussion be suspected?
A concussion should be suspected in any child/adolescent who takes a blow to the head, face, neck, or body and shows ANY of the signs or symptoms of a concussion.

What are the symptoms of a concussion?
Symptoms of concussion describe how someone feels after they are injured. A child/adolescent does not have to be knocked out (black out or unconscious) to have a concussion. Some symptoms may not appear until the next day. Common symptoms of a concussion are:
- Headaches or head pressure
- Dizziness
- Nausea and vomiting
- Blurred or fuzzy vision
- Sensitivity to light or sound
- Balance problems
- Feeling slow, tired or having no energy
- Not thinking clearly
- Easily upset or angered

What are the visible (can be seen) signs of a concussion?
Signs of concussion describe how a child/adolescent looks or acts when they are injured. Common signs of a concussion are:
- Lying still on the ground or ice
- Slow to get up
- Confusion or can't answer questions
- Emotional lability
- Blank stare
- Difficulty standing or walking
- Injury to the face or holding their head

What should a child/adolescent do if they think they or a friend has a concussion?
All children/adolescents who may have a concussion should stop the activity they are doing right away and see a medical doctor or nurse practitioner. All children/adolescents with a concussion should get permission from a doctor or nurse practitioner before returning to full contact sport or high-risk activities.

When should a child/adolescent with a concussion go back to see a doctor or nurse?
Children/adolescents with a concussion should see the doctor or nurse if they have any of the following signs or symptoms:
- Increased confusion
- Worsening headache
- Vomiting more than once
- Seizures
- Not waking up
- Trouble walking
- Difficulty talking
- Strange behaviour

What can a child/adolescent do to help recover from a concussion?
It is important that all children/adolescents with a concussion give their brain time to heal. Here are some tips:
- Return to activities that can be tolerated and do not worsen symptoms
- Avoid activities that may involve contact or falling
- Get regular amounts of sleep
- Drink water and eat balanced meals
- Spend time with friends and family
- Avoid drugs and alcohol
- Go to all medical appointments
- If school is more difficult or if they feel sadder or more nervous than normal, they should tell someone they are comfortable with. This might be a trusted friend, family member, teacher, guidance counsellor, doctor, nurse, or Elder.

What are red flag symptoms?
Red flag symptoms that may indicate a more serious injury (severe or worsening headache, neck pain or tenderness, double vision, seizures or convulsions, loss of consciousness, increase in confusion, restlessness, agitation, or aggressive behaviours, repeated vomiting, or slurred speech) call an ambulance as soon as possible. Symptoms may appear right away or up to a couple of days after the injury.
When can a child/adolescent return-to-school, activities, and sports after a concussion?

Begin by resting for the first 1-2 days. After this short rest, the child/adolescent should start activities (physical and thinking) that do not make symptoms worse or bring on new symptoms. These gentle activities are encouraged 1-2 days after a concussion, even if the child/adolescent still has symptoms. Avoid any activity where the child/adolescent could fall or hit their head. Resting completely for more than 1-2 days after a concussion may slow recovery.

It is important that all children/adolescents with a concussion make a gradual (step-by-step) return to school/activity/sport. Use the steps below to guide this gradual process. Each step should take about one day. If symptoms get worse, go back to the last step. Try it again until the child/adolescent can do it without bringing on new symptoms or making symptoms worse. It is important to get medical clearance from a Doctor before returning to full contact sport or high-risk activities. Missing more than one week of school is also not suggested.

<table>
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<tr>
<th>Return-to-activity/sport steps:</th>
<th>Return-to-school steps:</th>
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<tbody>
<tr>
<td><strong>Steps</strong></td>
<td><strong>Activity</strong></td>
</tr>
<tr>
<td>1</td>
<td>Complete rest (maximum 1-2 days)</td>
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<tr>
<td>2</td>
<td>Light physical activity</td>
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<td>3</td>
<td>Sport-specific exercise</td>
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<td>5</td>
<td>Full-contact activities (Clearance from your doctor is required)</td>
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<tr>
<td>6</td>
<td>Return to all activities and sports (Clearance from your doctor is required)</td>
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</table>

How long does it take a child/adolescent to recover after a concussion?
Most children/adolescents with a concussion will recover in 1-4 weeks, but it can take longer for some people.

What can happen if a child/adolescent goes back to full-contact sports or game-play too early after a concussion?
If children/adolescents with a concussion go back to activities that include a risk of hitting their head or falling down again too early after a concussion, they can have another injury. Having another injury can lead to worse symptoms that last longer, or result in a more severe or fatal brain injury.

How can children/adolescents help prevent concussions and their consequences?
To prevent concussions, children/adolescents should follow the rules of their sport, respect their opponents, and avoid head contact. Youth should always wear helmets during outdoor activities such as skating or riding bikes, snowmobiles, or all-terrain vehicles.

It is important for children/adolescents to tell parents, teachers, or coaches if they think anyone may have a concussion.

Content from this tool was adapted with permission from the Parachute Canadian Guideline on Concussion in Sport.

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