Concussion Guide for

COACHES AND 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 player may think and remember things, and can cause a variety of symptoms.

What are the signs and symptoms of a concussion?

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

| Cognitive (thinking) | Physical | Emotional/behavioural |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------|
| Does not know time, date, | Headache or head pressure | Nervousness or anxiety |
| place, period of game, opposing team, score of game | Dizziness | Strange or inappropriate |
| Difficulty remembering things that happened before and after | Stomachache, nausea, vomiting | emotions (i.e., laughing, crying, getting mad easily) |
| the injury | Blank or vacant stare | Slow to answer questions or follow directions |
| Difficulty concentrating | Blurred or fuzzy vision | Easily distracted |
| Not thinking clearly | Sensitive to light or sound | Not playing well |
| Feeling like "in a fog" | Sees stars, flashing lights | Changes in sleep patterns |
| | Ringing in the ears | (sleeping more or less than usual) |
| | Problems with balance or co- ordination | |
| | Feels tired or no energy | |
| | "Don't feel right" | |

Get medical help immediately if a player 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.



Parachute is Canada's leading national charity dedicated to injury prevention.



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., hitting their head on the ice, colliding with another player, being checked into the boards).

What should I do if I think a player might have a concussion?

In all suspected cases of concussion, the player should stop playing right away. Continuing to play increases their risk of more severe, longer-lasting concussion symptoms, and increases their risk of other injury.

Refer to the Concussion Recognition Tool 6 (CRT6) to help recognize the signs and symptoms of a possible concussion.

The player should not be left alone and should be seen by a doctor as soon as possible that day. Older players who have driver's licences should not drive.

If the player loses consciousness or demonstrates any red flag symptoms, call an ambulance to take them to the hospital right away and initiate your Emergency Action Plan. Do not move them or remove any of their equipment, such as their helmet.

The player should not return to training, practice or gameplay the same day.

How long will it take for the player to get better?

The signs and symptoms of a concussion usually last up to four weeks, but may last longer. In some cases, it may take many weeks or months for the player to heal. If the player has had a previous concussion, they may take longer to recover. No two concussions are the same. Avoid comparing one player's recovery to another's.

If the player's symptoms are persistent (i.e., last longer than four weeks) they should be referred to a healthcare professional who is an expert in the management of concussion.

How is concussion treated?

For the first 24 to 48 hours after the injury, the player can engage in activities of daily living, such as light walking and preparing meals, and social interactions at home. Screen time should be minimized in the first 48 hours. Then, school and sport activities can be introduced and increased gradually.

As the player is returning to activities, their symptoms may feel a little worse. This is common and OK as long as it is mild and brief. "Brief" means their symptoms should settle back down within an hour. If activities make their symptoms worsen more than this, they should take a break and adapt activities.

Recovering from concussion is a process that takes patience. If the player 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 player go to the doctor?

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

The player 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 player return to school?

On average, students with a concussion miss one or more days of school. Each concussion is unique, so the player may progress at a different rate than others. Generally, more than one week of complete absence from the school environment is not recommended.

The Return-to-School Strategy provides detailed information on the stages of returning to the classroom and can be accessed at **parachute.ca/smarthockey.**

Return to school must come before full return to sport.

When can the player return to sport?

Return to hockey and other physical activity must follow a step-wise approach. Returning before full recovery from concussion puts players at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer. Return to hockey and other physical activity must follow a step-wise approach.

In the Return-to-Sport Strategy:

- Each stage is at least 24 hours.
- If their symptoms worsen more than mildly and briefly, the player should stop and try again the next day at the same step.
- According to Hockey Canada's Concussion
 Protocol, if the player experiences concussion
 symptoms after medical clearance (i.e., during
 steps 4 to 6), they should return to step 3 to
 establish full resolution of symptoms. Medical
 clearance will be required again before progressing
 to step 4.

Step 1: Activities of daily living and relative rest (first 24 to 48 hours). The player can start with daily activities, such as moving around the home, simple chores (such as making their bed), preparing meals, light walking and social interactions (such as talking with friends or family). Minimize screen time.

Step 2: Light to moderate aerobic exercise.

2A: Start with light aerobic exercise such as walking or stationary cycling at a slow to medium pace (for 10 to 15 minutes). The player may begin light resistance training, if appropriate, that does not result in more than mild and brief worsening of symptoms.

2B: Gradually increase the intensity of aerobic exercise to moderate effort, such as stationary cycling or walking at a brisk pace. Moderate effort means the activity may cause faster breaking and heart rate, but not enough to prevent you from being able to talk comfortably.

Step 3: Individual sport-specific activities, without risk of inadvertent head impact. Add sport-specific activities that can be done individually (away from other participants) in a low-risk environment for 20 to 30 minutes (e.g. running, skating, shooting a puck). Activities should be supervised by a coach, trainer, teacher or parent/caregiver. Continue progressing at this step until symptom-free, even when exercising. Medical clearance is required before step 4.

Stage 4: Training drills and activities with no contact. Ensure teammates give the recovering player extra space. Progress to usual intensity exercise and add in more challenging drills (e.g., shooting and passing drills). Participate in multiathlete training (if applicable) and non-contact practices. There should be no impact activities (e.g., no checking).

Stage 5: Return to non-competitive activities, full-contact practice and physical education activities. Progress to typical physical activities, except for competitive gameplay. Restore confidence and skills.

Step 6: Return to hockey and full game play without restriction. A player should never return to contact practice or gameplay until cleared by a doctor!





How can I help players prevent concussions?

Invest time into pre-season concussion education meetings and use the pre-season team meeting checklist to guide your meetings. Ensure your team understands all necessary concussion information and provide them with the resources available in this kit. Let them know they can ask questions at any time and should always report any concussion symptoms to you, their parents, or another adult they trust.

Enforce the 12 on-ice tips during practice and gameplay. Ensure players are made aware when

they are playing unsafe and putting themselves or others at risk of injury. Support enforcement of the rules by officials, especially rules in place to reduce head contact.

Ensure players have all the required equipment to participate in practices and games safely. Skates should fit properly and be in good condition, to prevent falls and crashes. Helmets do not prevent concussions but should always be worn properly to prevent other head injuries. Mouthguards have not been proven to prevent concussions, but may reduce risk and should always be worn to prevent injuries to the mouth and teeth.



