

Pre-Season Concussion Education Sheet

What is a concussion?

A concussion is a brain injury that can't be seen on x-rays, CT or MRI scans. It affects the way an athlete thinks and can cause a variety of symptoms.

What causes a concussion?

Any blow to the head, face or neck, or somewhere else on the body that causes a sudden jarring of the head may cause a concussion. Examples include getting body-checked in hockey or hitting one's head on the floor in gym class.

When should I suspect a concussion?

A concussion should be suspected if an athlete sustains an impact to the head, face, neck or body and:

- demonstrates one or more observable signs of a suspected concussion, OR
- reports one or more symptoms of suspected concussion.

Some athletes will develop symptoms immediately while others will develop delayed symptoms (up to 48 hours after the injury).

What are the observable signs of a suspected concussion?

Signs of a concussion may include:

- ▶ Lying motionless on the playing surface
- ▶ Slow to get up after a direct or indirect hit to the head
- ▶ Disorientation or confusion, or inability to respond appropriately to questions
- ▶ Unresponsive
- ▶ Unsteady on feet, balance problems, poor co-ordination, wobbly
- ▶ Blank or vacant stare
- ▶ Facial injury

What are the symptoms of a suspected concussion?

A person does not need to be knocked out (lose consciousness) to have had a concussion. Common symptoms include:

- ▶ Headaches or head pressure
- ▶ Dizziness
- ▶ Nausea or vomiting
- ▶ Blurred or fuzzy vision
- ▶ Sensitivity to light or sound
- ▶ Balance problems
- ▶ Feeling tired or having no energy
- ▶ Not thinking clearly
- ▶ "Don't feel right"
- ▶ Feeling more emotional, easily upset or angered
- ▶ Sadness
- ▶ Nervousness or anxiety
- ▶ Difficulty concentrating
- ▶ Difficulty remembering
- ▶ Feeling like "in a fog"
- ▶ Feeling slowed down
- ▶ Sleeping more or sleeping less
- ▶ Having a hard time falling asleep

What should I do if I suspect a concussion?

In all cases of suspected concussion, the athlete should be removed from the activity immediately

and undergo medical assessment as soon as possible. **It is important that all athletes with a concussion receive written medical clearance from a medical doctor or nurse practitioner before returning to sport activities with a risk of contact or falls.**

When can the athlete return to school and sport?

It is important that all athletes diagnosed with a concussion follow a step-wise return to school (if applicable) and sports-related activities that includes the following Return-to-School and Return-to-Sport Strategies. Note that these strategies begin at the same time, can happen concurrently and the first step of both is the same. It is important that athletes return to full-time school activities, if applicable, and provide a medical clearance letter before progressing to step 4 of return to sport.

Return-to-School Strategy

Step	Activity	Description	Goal of each step
1	Activities of daily living and relative rest (first 24-48 hours)	Typical activities at home (e.g. preparing meals, social interactions, light walking). Minimize screen time.	Gradual reintroduction of typical activities
2	School activities with encouragement to return to school (as tolerated)	Homework, reading or other light cognitive activities at school or home. Take breaks and adapt activities as needed. Gradually resume screen time, as tolerated.	Increase tolerance to cognitive work and connect socially with peers
3	Part-time or full days at school with accommodations	Gradually reintroduce schoolwork. Part-time school days with access to breaks and other accommodations may be required. Gradually reduce accommodations related to the concussion and increase workload.	Increase academic activities
4	Return to school full-time	Return to full days at school and academic activities, without accommodations related to the concussion.	Return to full academic activities

Return-to-Sport Strategy

Step	Activity	Description	Goal of each step
1	Activities of daily living and relative rest (first 24-48 hours)	Typical activities at home (e.g. preparing meals, social interactions, light walking). Minimize screen time.	Gradual reintroduction of typical activities.
2	2A: Light effort aerobic exercise 2B: Moderate effort aerobic exercise	Walking or stationary cycling at slow to medium pace. May begin light resistance training. Gradually increase intensity of aerobic activities, such as stationary cycling and walking at a brisk pace.	Increase heart rate.
3	Individual sport-specific activities, without risk of inadvertent head impact	Add sport-specific activities (e.g., running, changing direction, individual drills). Perform activities individually and under supervision.	Increase the intensity of aerobic activities and introduce low-risk sport-specific movements.

Medical clearance			
4	Non-contact training drills and activities	Exercises with no body contact at high intensity. More challenging drills and activities (e.g., passing drills, multi-athlete training and practices).	Resume usual intensity of exercise, co-ordination and activity-related cognitive skills.
5	Return to all non-competitive activities, full-contact practice and physical education activities	Progress to higher-risk activities including typical training activities, full-contact sport practices and physical education class activities. Do not participate in competitive gameplay.	Return to activities that have a risk of falling or body contact, restore confidence and assess functional skills by coaching staff.
6	Return to sport	Unrestricted sport and physical activity	

Tables adapted from: Patricios, Schneider et al., 2023; Reed, Zemek et al., 2023

How long will it take for the athlete to recover?

Most athletes who sustain a concussion will make a complete recovery within four weeks. Approximately 15-30% of patients will experience persisting symptoms (>4 weeks) that may require additional medical assessment and management.

How can I help prevent concussions and their consequences?

Concussion prevention, recognition and management require athletes to follow the rules and regulations of their sport, respect other participants, avoid head contact and report suspected concussions.

To learn more about concussions visit: www.parachute.ca/concussion

Signatures (Optional): The following signatures certify that the athlete and their parent or legal guardian has reviewed the above information related to concussion.

_____ Signature of athlete Date

Printed name of athlete

_____ Signature of parent/guardian Date

Printed name of parent/guardian