



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 in any athlete who sustains a significant impact to the head, face, neck, or body and reports *ANY* symptoms or demonstrates *ANY* visual signs of a concussion. A concussion should also be suspected if an athlete reports ANY concussion symptoms to one of their peers, parents, teachers, or coaches or if anyone witnesses an athlete exhibiting ANY of the visual signs of concussion. Some athletes will develop symptoms immediately while others will develop delayed symptoms (beginning 24-48 hours after the injury).

WHAT ARE THE SYMPTOMS OF A 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 and vomiting
- Blurred or fuzzy vision
- Sensitivity to light or sound
- Balance problems
- Feeling tired or having no energy
- Not thinking clearly
- Feeling slowed down

- Easily upset or angered
- Sadness
- Nervousness or anxiety
- Feeling more emotional
- Sleeping more or sleeping less
- Having a hard time falling asleep
- Difficulty working on a computer
- Difficulty reading
- Difficulty learning new information

WHAT ARE THE VISUAL SIGNS OF A CONCUSSION?

Visual signs of a concussion may include:

- Loss of consciousness or responsiveness
- Lying motionless on the playing surface
- Slow to get up after a direct or indirect hit to the head
- Disorientation or confusion, staring or limited responsiveness or inability to respond appropriately to questions
- Falling unprotected to playing surface
- Dazed, blank, or vacant look
- Seizure, fits, or convulsions
- Facial injury
- Unsteady on feet/balance problems or falling over/ poor coordination/ wobbly

WHAT SHOULD I DO IF I SUSPECT A CONCUSSION?

If any athlete is suspected of sustaining a concussion during sports they should be immediately removed from play. Any athlete who is suspected of having sustained a concussion during sports must not be allowed to return to the same game or practice.

It is important that ALL athletes with a suspected concussion undergo medical assessment by a medical doctor or nurse practitioner, as soon as possible. It is also important that ALL athletes with a suspected concussion receive written medical clearance from a medical doctor or nurse practitioner before returning to sport activities.

WHEN CAN THE ATHLETE RETURN TO SCHOOL AND SPORTS?

It is important that all athletes diagnosed with a concussion follow a step-wise return to school and sports-related activities that includes the following Return-to-School and Return-to-Sport Strategies. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 4 and 6 of the Return-to-Sport Strategy.

Return-to-School Strategy¹

Stage	Aim	Activity	Goal of each step
1	Daily activities that do not result in more than a mild exacerbation* of symptoms related to the current concussion	Typical activities during the day (i.e. reading) while minimizing screen time. Start at 5-15 minutes at a time and gradually build up.	Gradual return to typical activities. <i>Limit to <48 hours post injury.</i>
2	School activities	Homework, reading or other cognitive activities outside of the classroom.	Increase tolerance to cognitive work.
3	Return to school part-time	Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.	Increase academic activities.
4	Return to school full-time	Gradually progress.	Return to full academic activities and catch up on missed school work.

^{*}Mild and brief exacerbation of symptoms is defined as an increase of no more than 2 points on a 0-10 point scale (with 0 representing no symptoms and 10 the worst symptoms imaginable) for less than an hour when compared with the baseline value reported prior to cognitive activity.

Return-to-Sport Strategy¹

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms.	Gradual re-introduction of work/school activities.
2	Aerobic exercise 2A – Light (up to 55%	Walking or stationary cycling at slow to medium pace. May start	Increase heart rate.
	max heart rate)	resistance training that does not	
	2B – Moderate (up to	result in more than a mild or brief	
	70% max heart rate)	exacerbation of symptoms.	

3	Sport-specific exercise	Running or skating drills. No head	Add movement.		
		impact activities. Away from			
		team.			
	Steps 4-6 should begin after resolution of any symptoms, abnormalities in cognitive function, and				
	any other clinical findings related to the current concussion, including with and after physical				
	exertion.				
4	Non-contact training	Harder training drills, e.g. passing	Resume usual intensity of exercise,		
-	drills	drills. Can integrate into team	coordination and increased		
		environment.	thinking.		
5	Full contact practice	Following medical clearance.	Restore confidence and assess		
		Participate in normal training.	functional skills by coaching staff.		
6	Return to sport	Normal game play.			

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HOW LONG WILL IT TAKE FOR THE ATHLETE TO RECOVER?

Most athletes who sustain a concussion will make a complete recovery within 1-2 weeks while most youth athletes will recover within 1-4 weeks. Approximately 15-30% of patients will experience persistent symptoms (>2 weeks for adults; >4 weeks for youth) 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 their opponents, avoid head contact, and report suspected concussions.

TO LEARN MORE ABOUT CONCUSSIONS PLEASE VISIT:

Parachute Canada: www.parachutecanada.org/concussion

Climbing Escalade Canada Concussion Protocol: http://climbingcanada.ca/en/cec-policies-rules-guidelines/

SIGNATURES: The following signatures certify that the participant and his/her parent or legal guardian (if under 18 years of age) have reviewed the above information related to concussion.

Printed name	Signature	Date
Printed name of parent (if under 18)	Signature of parent	 Date

¹Source: Patricios JS, Schneider KJ, Dvorak J, et al. Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport–Amsterdam, October 2022. Br J Sports Med. 2023;57(11):695-711.