



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 experiencing whiplash in car accident or hitting one's head after a fall.

WHEN SHOULD I SUSPECT A CONCUSSION?

A concussion should be suspected in any participant 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 a participant reports ANY concussion symptoms to one of their peers, parents, teachers, work colleagues, or coaches or if anyone witnesses a participant exhibiting ANY of the visual signs of concussion. Some participants 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	▶ Easily upset or angered	▶ Feeling tired or having no energy
▶ Dizziness	▶ Sadness	▶ Not thinking clearly
▶ Nausea and vomiting	▶ Nervousness or anxiety	▶ Feeling slowed down
▶ Blurred or fuzzy vision	▶ Feeling more emotional	▶ Difficulty working on a computer
▶ Sensitivity to light or sound	▶ Sleeping more or sleeping less	▶ Difficulty reading
▶ Balance problems	▶ Having a hard time falling asleep	▶ Difficulty learning new information

WHAT ARE THE VISUAL SIGNS OF A CONCUSSION?

Visual signs of a concussion may include:

▶ Lying motionless on the playing surface	▶ Blank or vacant stare
▶ Slow to get up after a direct or indirect hit to the head	▶ Balance, gait difficulties, motor incoordination, stumbling, slow labored movements
▶ Disorientation or confusion or inability to respond appropriately to questions	▶ Facial injury after head trauma
▶ Clutching head	

WHAT SHOULD I DO IF I SUSPECT A CONCUSSION?

If any participant is suspected of sustaining a concussion during sports they should be immediately removed from play. Any participant 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 participants with a suspected concussion undergo medical assessment by a medical doctor or nurse practitioner, as soon as possible. It is also important that ALL participants with a suspected concussion receive written medical clearance from a medical doctor or nurse practitioner before returning to sport activities.

WHEN CAN THE PARTICIPANT RETURN TO SCHOOL/WORK AND SPORTS?

It is important that all participants diagnosed with a concussion follow a step-wise return to school/work and sports-related activities that includes the following Return-to-School/Work and Return-to-Sport Strategies. The Bowls-Specific Return-to-Sport Strategy should be used to help participants, coaches, trainers, and licensed healthcare professionals to partner in allowing the participant to make a gradual return to sport activities. An initial period of 24-48 hours of rest is recommended before starting the Return-to-Sport Strategy. If the participant experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult participants return to full-time school/work activities before progressing to stage 5 and 6 of the Return-to-Sport Strategy.

Return-to-School/Work Strategy¹

Stage	Aim	Activity	Goal of each step
1	Daily activities at home that do not give the student-athlete symptoms	Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.	Gradual return to typical activities.
2	School/work activities	Homework, reading or other cognitive activities outside of the school/workplace.	Increase tolerance to cognitive work.
3	Return to school/work part-time	Gradual introduction of schoolwork/workload. May need to start with a partial attendance or with increased breaks during the day.	Increase academic/work activities.
4	Return to school/work full-time	Gradually progress.	Return to full academic/work activities and catch up on missed work.

¹Source: McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847. <http://dx.doi.org/10.1136/bjsports-2017-096691>

Bowls-Specific 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 school/work activities
2	Light aerobic activity	Walking or stationary cycling at slow to medium pace. No resistance training.	Increase heart rate
3	Sport-specific exercise and drills	Moderate intensity jogging for 30-60 minutes. Delivering bowls (moderate intensity and duration). No head impact activities. No resistance training.	Add movement
4	Full bowls participation	Bowls practice and competition. May start progressive resistance training.	Exercise, coordination and increased thinking
Bowls participants who also participate in other sports should receive medical clearance before proceeding to Stages 5 and 6 in non-bowls activities.			
5	Full contact practice (outside bowls)	Following medical clearance. Participation in full practice without activity restriction.	Restore confidence and assess functional skills by coaching staff
6	Return to sport (outside bowls)	Normal game play.	

HOW LONG WILL IT TAKE FOR THE PARTICIPANT TO RECOVER?

Most participants 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 participants 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

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