### 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 a player 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 to 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:

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- · 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



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



### What are the visual signs of a concussion?

Visual 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
- Blank or vacant stare
- Balance and gait difficulties, poor co-ordination, stumbling, slow laboured movements
- · Facial injury after head trauma
- Clutching head

### What should I do if I suspect a concussion?

If any player is suspected of sustaining a concussion during sports they should be

immediately removed from the game or practice. Any player 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 players with a suspected concussion undergo medical assessment by a medical doctor or nurse practitioner, as soon as possible. It is also important that ALL players with a suspected concussion receive written medical clearance from a medical doctor before returning to sport.

## When can the player return to school and sports?

It is important that all players 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 return to full-time school activities before progressing to step 4 of the Return-to-Sport Strategy.

Stage	Activity	Description	Goal of each step
1	Activities of daily living and relative rest (first 24 to 48 hours)	Typical activities at home (e.g. preparing meals, social interactions, light walking) that do not result in more than mild and brief worsening of symptoms. 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

#### **Return-to-School Strategy**



3	Part-time or full days at school with accommodations (as needed)	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 and catch up on missed school work.

#### Sport-Specific Return-to-Sport Strategy

Stage	Activity	Description	Goal of each step
1	Activities of daily living and relative rest (first 24-28 hours)	Typical activities at home (e.g. preparing meals, social interactions, light walking). Minimize screen time.	Gradual re- introduction of typical work/school activities.
2	<ul><li>2A: Light effort aerobic exercise</li><li>2B: Moderate effort aerobic exercise</li></ul>	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, skating drills, shooting a puck). Perform activities individually and under supervision.	Increase the intensity of aerobic activities and introduce low- risk sport-specific movements.
4	Non-contact training drills and activities	Following medical clearance, progress to exercises with no body contact at high intensity, including more challenging drills and activities (e.g., passing drills, multi- player 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 game play and physical activity	

Tables adapted from

Patricios, Schneider et al., 2023; Reed, Zemek et al., 2023





# How long will it take for the player to recover?

Most players who sustain a concussion will make a complete recovery within four weeks. Approximately 15 to 30 per cent of patients will experience persisting symptoms (more than four weeks) that may require additional medical assessment and management.

# How can I help prevent concussions and their consequences?

Concussion prevention, recognition and management require players 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:

www.parachute.ca/concussion

SIGNATURES (OPTIONAL): The following signatures certify that the athlete and his/her parent or legal guardian have reviewed the above information related to concussion.

