

## **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 participant 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 excessive jarring during a jump or falling in the water with direct head impact on the water.

## **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/legal guardians, teachers, coaches or activity leaders 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 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:

- 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, gait difficulties, motor incoordination, stumbling, slow labored movements
- 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 activity. Any participant who is suspected of having sustained a concussion during sports activity must not be allowed to return to the sports activity or competition.

**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 AND SPORTS?

It is important that all participants 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-participants return to full-time school activities before progressing to stage 5 and 6 of the Return-to-Sport Strategy.

#### Return-to-School Strategy

| Stage | Aim                                                                        | Activity                                                                                                                                                                 | Goal of each step                                                     |
|-------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 1     | Daily activities at home that do not give the student-participant 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 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 schoolwork. |

#### Return-to-Sport Strategy

| 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     | Light aerobic activity    | Walking or stationary cycling at slow to medium pace. No resistance training.                                                                                                                                                            | Increase heart rate.                               |
| 3     | Sport-specific exercise   | Out of water training activities with limited minimal resistance.<br><br>Low to moderate in-water activities that pose no risk for any head impact and minimal resistance. (i.e. low intensity swimming)<br><br>No towed boat activities | Add movement.                                      |

|   |                              |                                                                                                                                                                                                                                                |                                                                    |
|---|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 4 | Non-impact training activity | Harder out of water training activities- may include greater resistance and higher intensity<br><br>More intense in-water activities.<br><br>Towed boat activities should be at reduced speeds and participant should wear helmet at all times | Exercise, coordination and increased thinking.                     |
|   | Full impact activity         | Following medical clearance.                                                                                                                                                                                                                   | Restore confidence and assess functional skills by coaching staff. |
| 6 | Return to sport              | Normal sport activity                                                                                                                                                                                                                          |                                                                    |

#### 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 participants 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 environment, avoid head contact, and report suspected concussions.

**TO LEARN MORE ABOUT CONCUSSIONS PLEASE VISIT:** Parachute Canada:  
[www.parahutecanada.org/concussion](http://www.parahutecanada.org/concussion)

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

\_\_\_\_\_  
Printed name of participant

\_\_\_\_\_  
Signature of participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of parent/legal guardian

\_\_\_\_\_  
Signature of parent/legal guardian

\_\_\_\_\_  
Date