



## Appendix A: Concussion Information for Parents and Students

### Context

Knowledge of how to properly manage a diagnosed concussion is critical in a student’s recovery and is essential in helping to prevent the student from returning to school or unrestricted physical activities too soon and risking further complications.

The management of a student’s concussion is a shared responsibility, requiring regular communication between the home, school and outside sports/activities (where appropriate), with consultation from the student’s medical doctor or nurse practitioner.

### Concussion Definition A

*Concussion:*

- is a traumatic brain injury that causes changes in how the brain functions, leading to signs and symptoms that can emerge immediately or in the hours or days after the injury;
- may be caused by a significant impact to the head, face, neck or body, that causes the brain to move rapidly and hit the walls of the skull (for a visual description of how a concussion occurs, consult [How a concussion occurs](#));
- signs and symptoms can be physical (e.g., headache, dizziness), cognitive (e.g., difficulty concentrating or remembering), emotional/behavioural (e.g., depression, irritability) and/or related to sleep (e.g., drowsiness, difficulty falling asleep);
- can occur even if there has been no loss of consciousness (in fact most concussions occur without a loss of consciousness); and,
- cannot normally be seen on X-rays, standard CT scans or MRIs.

### Common Concussion Signs and Symptoms

Following a significant impact to the head, face, neck or body, a concussion should be suspected with the presence of any one or more of the following signs or symptom:

**Presence of ANY Red Flag sign(s) and or symptom(s) – Call 911.**

✓ Neck pain or tenderness	✓ Severe or increasing headache	✓ Deteriorating conscious state
✓ Double vision	✓ Seizure or convulsion	✓ Vomiting
✓ Weakness or tingling/burning in arms or legs	✓ Loss of consciousness	✓ Increasingly restless, agitated or combative

**Other Concussion Signs:** *Visual cues (what you see).*

Lying motionless on the playing surface (no loss of consciousness)	Disorientation or confusion, or an inability to respond appropriately to questions	Balance, gait difficulties, motor incoordination, stumbling, slow laboured movements
Slow to get up after a direct or indirect hit to the head	Blank or vacant look	Facial injury after head trauma

**Other Concussion Symptoms:** *What the student is saying (what you hear).*

Headache	Blurred vision	More emotional	Difficulty concentrating
"Pressure in head"	Sensitivity to light	More irritable	Difficulty remembering
Balance problems	Sensitivity to noise	Sadness	Feeling slowed down
Nausea	Fatigue or low energy	Nervous or anxious	Feeling like "in a fog"
Drowsiness	'don't feel right'	Dizziness	

➤ **IF ANY SIGN(S) OR SYMPTOM(S) WORSEN, CALL 911.**

**Concussion Diagnosis and Management**

**Medical doctors** and **nurse practitioners** *are the only* healthcare professionals in Canada with licensed training and expertise to diagnose a concussion; therefore, all students with a suspected concussion should undergo evaluation by one of these professionals.

Other licensed healthcare providers (Examples include nurses, physiotherapists, chiropractors, and athletic therapists) may play a role in the management of a diagnosed concussion.

**Second Impact Syndrome**

Research suggests that a child or youth who suffers a second concussion before he or she is symptom-free from the first concussion is susceptible to a prolonged period of recovery, and possibly **Second Impact Syndrome**—a rare condition that causes rapid and severe brain swelling and often catastrophic results.

**Additional Information:**

- Signs and symptoms can appear immediately after the injury or may take hours or days to emerge. It is possible for symptoms to take up to 7 days to appear.
- Most students who sustain a concussion while participating in sport/physical activities will make a complete recovery and be able to return to full school and sport/physical activities within 1-4 weeks of injury.
- Individuals who experience ongoing concussion symptoms beyond 4 weeks (for youth athletes) may benefit from referral to a medically supervised multidisciplinary concussion clinic that has access to professionals with licensed training in traumatic brain injury that may include experts in sport medicine, neuropsychology, physiotherapy, occupational therapy, neurology, neurosurgery, and rehabilitation medicine.
- Signs and symptoms may be different for everyone.
- A student may be reluctant to report symptoms because of a fear that they will be removed from the activity, their status on a team or in a game could be jeopardized, or academics could be impacted.
- It may be difficult for students with special needs or those for whom English/French is not their first language to communicate how they are feeling.
- Signs for younger students (under the age of 10) may not be as obvious as in older students.

**Information for Parents/Guardians when a concussion is suspected**

A student with a suspected concussion will NOT participate in any physical activity for a duration of 24 hours.

Student <i>has</i> signs and symptoms:	Student <i>has no</i> obvious signs or symptoms (student will be monitored because the supervising school staff/volunteers recognized that a possible concussion event occurred):
<p>Parent/Guardian will be:</p> <ul style="list-style-type: none"> <li>• provided with appropriate documentation;</li> <li>• informed that the student needs to be examined by a medical doctor or nurse practitioner as soon as possible that day; and</li> <li>• informed that they need to communicate to the school principal the results of the medical assessment prior to the student returning to school.</li> </ul> <p><b><u>If no concussion is diagnosed:</u></b> the student may resume regular learning and physical activities.</p> <p><b><u>If a concussion is diagnosed:</u></b> the student follows a medically supervised, individualized and gradual Return to School (RTS) and Return to Physical Activity (RTPA) Plan with support from the school team.</p>	<p>Parent/Guardian will be:</p> <ul style="list-style-type: none"> <li>• provided with appropriate documentation;</li> <li>• informed that the student will:               <ul style="list-style-type: none"> <li>o attend school;</li> <li>o not participate in physical activity for a minimum of 24 hours;</li> <li>o be monitored for signs and/or symptoms for 24 hours;</li> <li>o be monitored at school by teachers; and</li> <li>o be monitored at home by parents/guardians.</li> </ul> </li> <li>• informed that monitoring information needs to be shared with the principal after the monitoring period is completed.</li> <li>• <b>if any signs or symptoms emerge, the student needs to be examined by a medical doctor or nurse practitioner as soon as possible that day.</b></li> </ul>

**Management for a Diagnosed Concussion**

If a concussion is diagnosed by a medical doctor or nurse practitioner, the student follows a medically supervised, individualized, and gradual Return to School (RTS) and Return to Physical Activity (RTPA) Plan.

There are two parts to a student’s RTS and RTPA plan. The first part occurs at home and prepares the student for the second part which occurs at school.

Please refer to Appendix E1 and E2 for more information.