



CONCUSSION TOOL FOR COACHES, TEACHERS, PARENTS AND ATHLETIC THERAPISTS

What is a concussion?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things and can cause a variety of symptoms and signs. You do NOT need to lose consciousness to have a concussion.

What causes a concussion?

Any blow to the head, face or neck, or a blow to the body that transmits a force to the head may cause a concussion, e.g., a ball to the head in soccer, being checked into the boards in hockey.

What are the symptoms and signs of a concussion?

Any one or more of the following symptoms and signs may suggest a concussion:

	Symptoms Reported:		Signs Observed:	
Physical	<ul style="list-style-type: none"> • Headache • Neck pain • Stomach ache • Blurred vision 	<ul style="list-style-type: none"> • Pressure in head • Dizziness • Nausea • Sensitivity to light/noise 	<ul style="list-style-type: none"> • Loss of consciousness • Nausea/vomiting • Seizure/convulsion • Poor coordination/balance 	<ul style="list-style-type: none"> • Amnesia • Slowed reaction time • Slurred speech
Cognitive	<ul style="list-style-type: none"> • Feeling in a fog • Difficulty concentrating 	<ul style="list-style-type: none"> • Difficulty remembering 	<ul style="list-style-type: none"> • Difficulty concentrating • Difficulty remembering 	<ul style="list-style-type: none"> • Confusion • Slowed reaction time
Behavioural	<ul style="list-style-type: none"> • Irritability • Sad/emotional 	<ul style="list-style-type: none"> • Nervous/anxious • Depressed 	<ul style="list-style-type: none"> • Inappropriate emotions • Depression 	
Sleep	<ul style="list-style-type: none"> • Drowsiness 	<ul style="list-style-type: none"> • Difficulty falling asleep 	<ul style="list-style-type: none"> • Drowsiness 	

Note: It may be more difficult for students under the age of 10, those with special needs or students for whom English or French is not their first language, to communicate how they are feeling. The signs of a concussion for younger students may not be as obvious.

Action plan: What to do if you suspect a student has a concussion

If the student is **unconscious**:

- Initiate the Emergency Action Plan and call 911.
- Assume a possible neck injury and, only if trained, immobilize the student before EMS arrives.
- Do not move the student or remove athletic equipment; wait for EMS to arrive.
- Do not leave the student alone.
- Contact the student's parent/guardian.

If the student is **conscious**:

- Stop the activity immediately.
- When the student can be safely moved, remove from activity.
- Conduct an initial concussion assessment – review Symptoms and Signs, perform Memory Testing and Balance Testing (optional).
 - i. Following the initial assessment, if a **concussion is suspected**:
 - Do not allow the student to return to activity.
 - Contact the student's parent/guardian to pick up student.
 - Stay with the student until parent/guardian arrives.
 - If any signs or symptoms worsen, call 911.
 - Inform the parent/guardian that the student needs to be examined by a medical doctor or nurse practitioner as soon as possible and provide them with a copy of this tool.
 - ii. Following the initial assessment, if a **concussion is not suspected**:
 - The student may return to activity.
 - Contact the student's parent/guardian to inform them of the incident.
 - Provide the parent/guardian with a copy of this tool and inform them that the student should be monitored for 24-48 hours since signs and symptoms may take hours or days to emerge.

Memory Testing

Failure to answer any one of these questions correctly may suggest a concussion.

- What activity/sport are we playing right now?
- What field/facility are we at today?
- What part of the day is it?
- What is the name of your teacher/coach?
- What school do you go to?

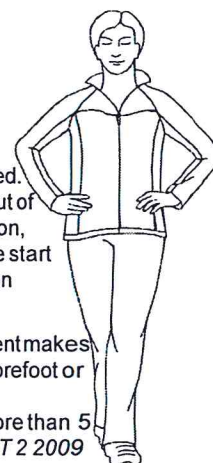
Note: Questions should be geared to student's age and activity.

Balance Testing (OPTIONAL) Instructions for tandem stance

Ask the student to stand heel-to-toe with non-dominant foot in back. Weight should be evenly distributed across both feet.

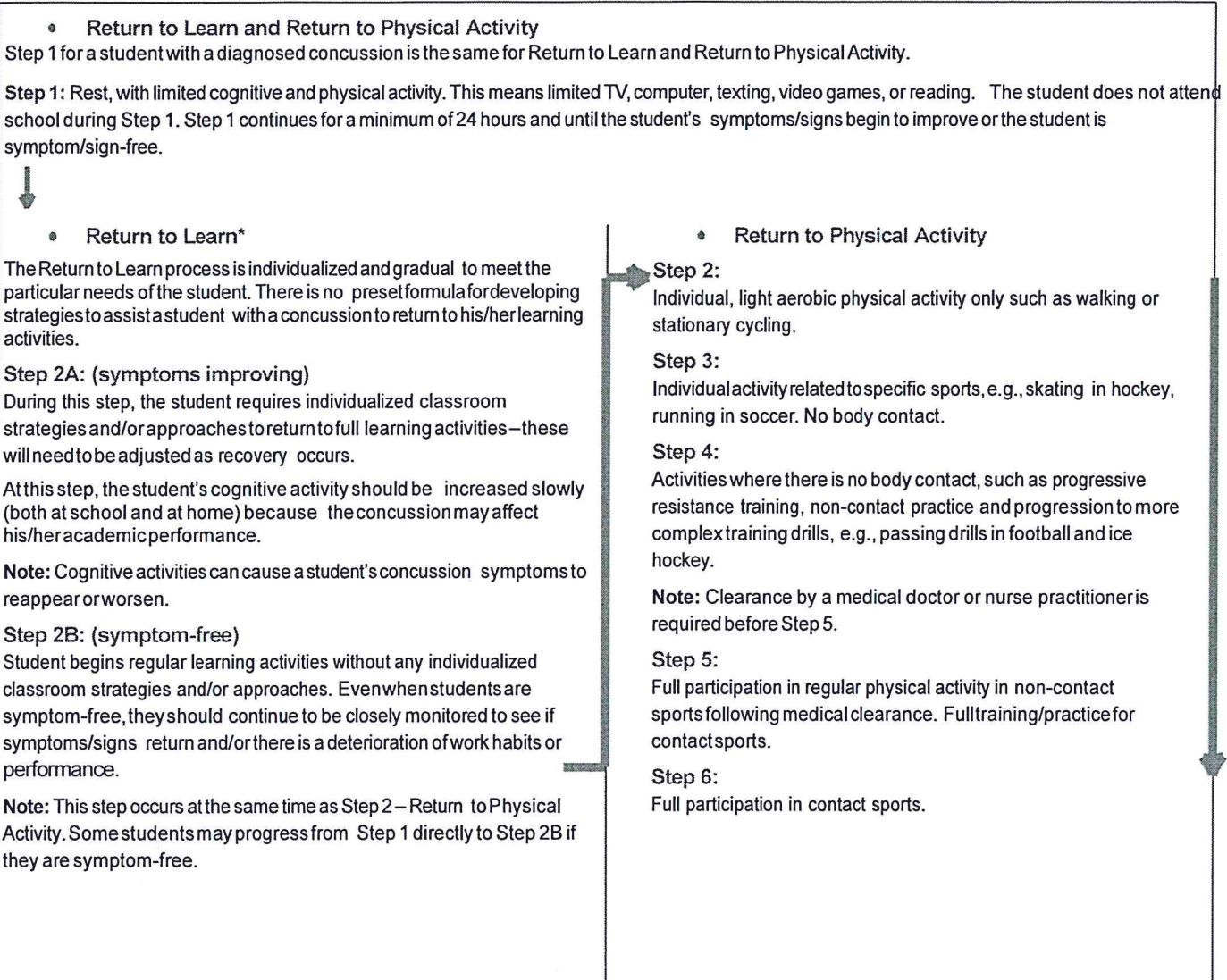
Student should try to maintain stability for 20 seconds with hands on hips and eyes closed. Count the number of times the student moves out of this position. If student stumbles out of this position, have student open his/her eyes and return to the start position and continue balancing. Start timing when student is set and has eyes closed.

Observe the student for 20 seconds. If the student makes errors (e.g. lifts hands off hips; opens eyes; lifts forefoot or heel; steps, stumbles, or falls; or remains out of the start position for more than 5 seconds), this may suggest a concussion. SCAT 2 2009



GUIDELINES FOR STUDENTS RECOVERING FROM A CONCUSSION

It is important for students to be active and play sports. However, a student with a diagnosed concussion needs to follow a medically supervised, individualized Return to Learn/Return to Physical Activity Plan.



Note: Steps are not days. Each step must take a minimum of 24 hours and the length of time needed to complete each step will vary based on the severity of the concussion and the child/youth.

If at any time concussion signs and/or symptoms return and/or deterioration of work habits or performance occurs, the student needs to be examined by a medical doctor or nurse practitioner.

For more information on concussions visit:

Concussions Ontario: www.concussionsontario.org

Ophea: safety.Ophea.net

Parachute: www.parachutecanada.org/active-and-safe

Ontario Government: www.ontario.ca/concussions

* Reproduced with permission from Ophea, Ontario Physical Education Safety Guidelines (updated annually)

Developed based on tools in the literature including the International Consensus Statement on Concussion in Sport (2013) and the ThinkFirst concussion tool.

This tool has been reviewed by the Parachute/ThinkFirst Canada Concussion Education and Awareness Committee and the Recognition and Awareness Working Group, part of the mTBI/Concussion Strategy, of the Ontario Neurotrauma Foundation who funded the development of this tool.

Concussion Awareness Tool

Identification of Suspected Concussion

Any blow to the head, face or neck, or a blow to the body that transmits a force to the head may cause a concussion. If a student displays **any one or more** of the signs or symptoms outlined in the chart below **and/or** the fails the Quick Memory Function Assessment, the student shall be considered to have a suspected concussion. If **student needs medical attention, call 911 immediately.**

1. Check appropriate box

An incident occurred involving _____ (student name) on _____ (date).

- The student reported symptoms of a concussion as outlined below; OR
 None of the symptoms described below were reported at the time.

Signs and Symptoms of Suspected Concussion	
Possible Symptoms Reported <i>A symptom is something the student will feel/report. Please note any symptoms reported by student.</i>	Possible Signs Observed <i>A sign is something that is observed by another person (e.g., parent/guardian, teacher, coach, supervisor, peer).</i>
Physical <input type="checkbox"/> headache <input type="checkbox"/> pressure in head <input type="checkbox"/> neck pain <input type="checkbox"/> feeling off/not right <input type="checkbox"/> ringing in the ears <input type="checkbox"/> seeing double or blurry/loss of vision <input type="checkbox"/> seeing stars, flashing lights <input type="checkbox"/> pain at physical site of injury <input type="checkbox"/> nausea/stomach ache/pain <input type="checkbox"/> balance problems or dizziness <input type="checkbox"/> fatigue or feeling tired <input type="checkbox"/> sensitivity to light or noise Cognitive <input type="checkbox"/> difficulty concentrating or remembering <input type="checkbox"/> slowed down, fatigue or low energy <input type="checkbox"/> dazed or in a fog Emotional/Behavioural <input type="checkbox"/> irritable, sad, more emotional than usual <input type="checkbox"/> nervous, anxious, depressed Other <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	Physical <input type="checkbox"/> vomiting <input type="checkbox"/> slurred speech <input type="checkbox"/> slowed reaction time <input type="checkbox"/> poor coordination or balance <input type="checkbox"/> blank stare/glassy-eyed/dazed or vacant look <input type="checkbox"/> decreased playing ability <input type="checkbox"/> loss of consciousness or lack of responsiveness <input type="checkbox"/> lying motionless on the ground or slow to get up <input type="checkbox"/> amnesia <input type="checkbox"/> seizure or convulsion <input type="checkbox"/> grabbing or clutching of head Cognitive <input type="checkbox"/> difficulty concentrating <input type="checkbox"/> easily distracted <input type="checkbox"/> general confusion <input type="checkbox"/> does not know time, date, place, class, type of activity in which he/she was participating <input type="checkbox"/> cannot remember things that happened before and after the injury (<i>see Quick Memory Function Assessment on page 2</i>) <input type="checkbox"/> slowed reaction time (e.g., answering questions or following directions) Emotional/Behavioural <input type="checkbox"/> strange or inappropriate emotions (e.g., laughing, crying, getting angry easily)
Note: Continued monitoring of the student is important as signs and symptoms of a concussion may appear hours or days later. If any signs or symptoms worsen, call 911.	

2. Perform Quick Memory Function Assessment

Quick Memory Function Assessment	
Ask the student the following questions, recording the answers below. Failure to answer any one of these questions correctly may indicate a concussion:	
QUESTIONS	ANSWER
1. What activity/sport/game are we playing now?	
2. What field are we playing on today?	
3. What part of the day is it?	
4. What is the name of your teacher/coach?	
5. What room are we in right now?	
6. What school do you go to?	

3. Action to be Taken

If there are any signs observed or symptoms reported, or if the student fails to answer any of the above questions correctly:

- a concussion should be suspected;
- the student must be immediately removed from play and must not be allowed to return to play that day even if the student states that he/she is feeling better; and
- the student must not leave the premises without parent/guardian (or emergency contact) supervision.

In all cases of a suspected concussion, the student must be examined by a medical doctor or nurse practitioner for diagnosis.

4. Continued Monitoring by Parent/Guardian

- Students should be monitored for 24 – 48 hours following the incident as signs and symptoms can appear immediately after the injury or may take hours or days to emerge.
- **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.

School Contact Name: _____

Date: _____

This completed form must be copied and provided to the parent/guardian; the original should be filed as per school board policy.

Freedom of Information Notice

The information provided on this form is collected pursuant to the Board's education responsibilities as set out in the Education Act and its regulations. This information is protected under the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) and will be utilized only for the purpose of managing student learning and well-being. Access to this information will be limited to those who have an administrative need, to the student to whom the information relates and the parent(s)/guardian(s) of a student who is under 18 years of age. Any questions with respect to this information should be directed to the school principal.

Documentation of Medical Examination

This form to be provided to all students suspected of having a concussion.

_____ (student name) sustained a suspected concussion on _____ (date). As a result, this student must be seen by a medical doctor or nurse practitioner. Prior to returning to school, the parent/guardian must inform the school principal of the results of the medical examination by completing the following:

Results of Medical Examination

- My child has been examined and **no concussion** has been diagnosed and therefore may resume full participation in learning and physical activity with no restrictions.
- My child has been examined and **a concussion has been diagnosed** and therefore must begin a medically supervised, individualized and gradual Return to Learn/Return to Physical Activity Plan.
- I understand that the Ottawa-Carleton District School Board recommends that my child receive medical authorization before returning to school. I have chosen not to obtain such medical authorization and give permission for my child to assume full participation in the learning and physical activity with no restrictions during the core instructional day. I understand that this does not include extra-curricular activities where there may be requirement for medical authorization, dependent on the nature of the extra-curricular activity.

Parent/Guardian signature: _____

Date: _____

Comments:

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Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan

The Return to Learn/Return to Physical Activity Plan is a combined approach. Step 2a - Return to Learn must be completed prior to the student returning to physical activity. Each step must take a minimum of 24 hours (Note: Step 2b – Return to Learn and Step 2 – Return to Physical Activity occur concurrently).

Step 1 – Return to Learn/Return to Physical Activity

- *Completed at home.*
- *Cognitive Rest – includes limiting activities that require concentration and attention (e.g., reading, texting, television, computer, video/electronic games).*
- *Physical Rest – includes restricting recreational/leisure and competitive physical activities.*

My child has completed Step 1 of the Return to Learn/Return to Physical Activity Plan (cognitive and physical rest at home) and his/her **symptoms have shown improvement**. My child will proceed to Step 2a – Return to Learn.

My child has completed Step 1 of the Return to Learn/Return to Physical Activity Plan (cognitive and physical rest at home) and is **symptom free**. My child will proceed directly to Step 2b – Return to Learn and Step 2 – Return to Physical Activity.

Parent/Guardian signature: _____

Date: _____

Comments:

If at any time during the following steps symptoms return, please refer to the “Return of Symptoms” section on page 3 of this form.

Step 2a – Return to Learn

- *Student returns to school.*
- *Requires individualized classroom strategies and/or approaches which gradually increase cognitive activity.*
- *Physical rest– includes restricting recreational/leisure and competitive physical activities.*

My child has been receiving individualized classroom strategies and/or approaches and is **symptom free**. My child will proceed to Step 2b – Return to Learn and Step 2 – Return to Physical Activity.

Parent/Guardian signature: _____

Date: _____

Comments:

Step 2b – Return to Learn

- *Student returns to regular learning activities at school.*

Step 2 – Return to Physical Activity

- *Student can participate in individual light aerobic physical activity only.*
- *Student continues with regular learning activities.*

My child is symptom free after participating in light aerobic physical activity. My child will proceed to Step 3 – Return to Physical Activity.

Appendix E will be returned to the teacher to record progress through Steps 3 and 4.

Parent/Guardian signature: _____

Date: _____

Comments:

Step 3 – Return to Physical Activity

- *Student may begin individual sport-specific physical activity only.*

Step 4 – Return to Physical Activity

- *Student may begin activities where there is no body contact (e.g., dance, badminton); light resistance/weight training; non-contact practice; and non-contact sport-specific drills.*

- Student has successfully completed Steps 3 and 4 and is symptom free.
- Appendix E will be returned to parent/guardian to obtain medical doctor/nurse practitioner diagnosis and signature.

Teacher signature: _____

Medical Examination

- I, _____ (medical doctor/nurse practitioner name) have examined _____ (student name) and confirm he/she continues to be symptom free and is able to return to regular physical education class/intramural activities/interschool activities in non-contact sports and full training/practices for contact sports.

Medical Doctor/Nurse Practitioner Signature: _____

Date: _____

Comments:

Step 5 – Return to Physical Activity

- *Student may resume regular physical education/intramural activities/interschool activities in non-contact sports and full training/practices for contact sports.*

Step 6 – Return to Physical Activity

- *Student may resume full participation in contact sports with no restrictions.*

Return of Symptoms

- My child has experienced a return of concussion signs and/or symptoms and has been examined by a medical doctor/nurse practitioner, who has advised a return to:

- Step _____ of the Return to Learn/Return to Physical Activity Plan

Parent/Guardian signature: _____

Date: _____

Comments:

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POSSIBLE ACCOMMODATIONS FOR RETURN TO SCHOOL

COGNITIVE DIFFICULTIES		
Post Concussion Symptoms	Impact on Student's Learning	Potential Strategies and/or Approaches
Headache and Fatigue	Difficulty concentrating, paying attention or multitasking	<ul style="list-style-type: none"> ensure instructions are clear (e.g., simplify directions, have the student repeat directions back to the teacher) allow the student to have frequent breaks, or return to school gradually (e.g., 1-2 hours, half-days, late starts) keep distractions to a minimum (e.g., move the student away from bright lights or noisy areas) limit materials on the student's desk or in their work area to avoid distractions provide alternative assessment opportunities (e.g., give tests orally, allow the student to dictate responses to tests or assignments, provide access to technology)
Difficulty remembering or processing speed	Difficulty retaining new information, remembering instructions, accessing learned information	<ul style="list-style-type: none"> provide a daily organizer and prioritize tasks provide visual aids/cues and/or advance organizers (e.g., non-verbal signs) divide larger assignments/assessments into smaller tasks provide the student with a copy of class notes provide access to technology repeat instructions provide alternative methods for the student to demonstrate mastery
Difficulty paying attention/concentrating	<p>Limited/short-term focus on schoolwork</p> <p>Difficulty maintaining a regular academic workload or keeping pace with work demands</p>	<ul style="list-style-type: none"> coordinate assignments and projects among all teachers use a planner/organizer to manage and record daily/weekly homework and assignments reduce and/or prioritize homework, assignments and projects extend deadlines or break down tasks facilitate the use of a peer note taker provide alternate assignments and/or tests check frequently for comprehension consider limiting tests to one per day and student may need extra time or a quiet environment

EMOTIONAL/BEHAVIOURAL DIFFICULTIES		
Post Concussion Symptoms	Impact on Student's Learning	Potential Strategies and/or Approaches
Anxiety	Decreased attention/concentration Overexertion to avoid falling behind	<ul style="list-style-type: none"> inform the student of any changes in the daily timetable/schedule adjust the student's timetable/schedule as needed to avoid fatigue (e.g., 1-2 hours, half-days, full-days) build in more frequent breaks during the school day provide the student with preparation time to respond to questions
Irritable or Frustrated	Inappropriate or impulsive behaviour during class	<ul style="list-style-type: none"> encourage teachers to use consistent strategies and approaches acknowledge and empathize with the student's frustration, anger or emotional outbursts if and as they occur reinforce positive behaviour provide structure and consistency on a daily basis prepare the student for change and transitions set reasonable expectations anticipate and remove the student from a problem situation (without characterizing it as punishment)
Light/Noise Sensitivity	Difficulties working in classroom environment (e.g., lights, noise, etc.)	<ul style="list-style-type: none"> arrange strategic seating (e.g., move the student away from window or talkative peers, proximity to the teacher or peer support, quiet setting) where possible provide access to special lighting (e.g., task lighting, darker room) minimize background noise provide alternative settings (e.g., alternative work space, study carrel) avoid noisy crowded environments such as assemblies and hallways during high traffic times allow the student to eat lunch in a quiet area with a few friends where possible provide ear plugs/headphones, sunglasses
Depression/Withdrawal	Withdrawal from participation in school activities or friends	<ul style="list-style-type: none"> build time into class/school day for socialization with peers partner student with a "buddy" for assignments or activities