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Subject	**STUDENT CONCUSSION PROTOCOL**
References	OPHEA- Ontario Physical and Health Education Association Safety Guidelines
Contact	School Services; Business Services

1. Purpose

1.1 To educate students, parents/guardians and staff about concussions, signs, symptoms and prevention.

1.2 To improve supports for persons suffering from concussions and to lessen the occurrence of second impact syndrome.

1.3 To enable recovery and reduce the risk of second impact syndrome.

1.4 To implement procedures for concussion management, return to learn and return to play.

2. Definitions

2.1 A concussion:

- 2.1.1 is a brain injury that causes changes in how the brain functions, leading to symptoms that 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);
- 2.1.2 may be caused either by a direct blow to the head, face or neck, or a blow to the body that transmits a force to the head that causes the brain to move rapidly within the skull;
- 2.1.3 can occur even if there has been no loss of consciousness (in fact most concussions occur without a loss of consciousness); and,
- 2.1.4 cannot normally be seen on X-rays, standard CT scans or MRIs.

2.2 **Second Impact Syndrome:** Rare, but serious, second impact syndrome occurs when an individual experiences a second concussion before the symptoms of the initial concussion have resolved. This can result in rapid potentially fatal brain swelling.

2.3 **Sign:** Outward, objective evidence of illness, injury, or disease (i.e. loss of consciousness).

2.4 **Symptom**: Subjective and unseen symptoms can only be detected or sensed by the injured party or ill party (i.e. headache)

2.5 **Return to Learn:** A four-step process to support/accommodate students, as needed, when returning to the classroom after a concussion.

2.6 **Return to Play:** A six-step process to reintroduce students to activities and/or athletics after a concussion.

2.7 **Concussion Diagnosis:** A concussion is a clinical diagnosis made by a medical doctor or nurse practitioner. It is critical that a student with a suspected concussion be examined by a medical doctor or nurse practitioner.

3. Concussions

3.1 Children and adolescents are at the greatest risk for concussions and take longer to recover than adults. Traumatic brain injuries affect up to two (2) per cent of the population each year.

3.2 The risk of concussion is highest during activities with the potential for collisions:
- 3.2.1 during physical education;
- 3.2.2 outdoor play;
- 3.2.3 inter-school sports or intramurals; and,
- 3.2.4 activities and sports occurring in the community.

3.3 Concussions can, however, occur any time a person's brain impacts with their skull. For example; when the head connects with a surface or object (i.e. desk, floor), another student, or when the head moves rapidly back and forth.

3.4 Concussions are serious because of the impact damage (primary injury) but also due to the secondary injuries that can develop after the impact. These include hemorrhage, cerebral swelling, decreased circulation, increased fatigue, mental confusion and failed memory, among other symptoms. The brain may take days, weeks, or months to be restored to normal activity.

3.5 Once an individual has had a concussion, they are at increased risk for another concussion. Repeat concussions that occur before the brain recovers from the first incident can slow recovery or increase the likelihood of long term problems. Repeat concussions may result in a second impact syndrome.

3.6 Proper recognition and response to a concussion can prevent further injury and help with recovery.

4. Response to Suspected Concussion

4.1 Seek immediate emergency medical assistance (911) if student exhibits one or more of the following signs of concussion:
- 4.1.1 neck pain or tenderness;
- 4.1.2 double vision;
- 4.1.3 weakness or tingling/burning in arms or legs;
- 4.1.4 severe or increasing headache;
- 4.1.5 seizure or convulsion;

4.1.6 loss of consciousness;
4.1.7 deteriorating conscious state;
4.1.8 vomiting; and,
4.1.9 increasingly restless, agitated or combative.

4.2 When a head injury occurs:
4.2.1 administer first aid;
4.2.2 do not leave the student alone;
4.2.3 do not administer medication;
4.2.4 be alert for signs of concussion that deteriorate or worsen over time;
4.2.5 contact parent/guardian; and,
4.2.6 provide FORM A7216 – 1 - Student Medical Clearance Following Suspected Concussion to parent/guardian.

5. Signs and Symptoms of Concussion

Signs and symptoms can appear immediately after the injury or may take hours or days to emerge. Signs and symptoms may be different for everyone. A student may be reluctant to report symptoms because of a fear that he/she will be removed from the activity, his/her status on a team or in a game could be jeopardized or academics could be impacted. It may be difficult for a student to communicate how they are feeling.

6. Reducing the Risk/Prevention

6.1 Regardless of the steps taken to reduce injuries, some students will continue to be injured. The severity of the injury can be mitigated by the following:
6.1.1 Education of coaches, staff, parents/guardians and students to:
6.1.1.1 recognize the signs and symptoms of concussions;
6.1.1.2 remove students from activity; and,
6.1.1.3 refer students to a physician/nurse practitioner.
6.1.2 Wearing the proper protective equipment, appropriate to the sport. Equipment should:
6.1.2.1 fit properly;
6.1.2.2 be well maintained and visually inspected prior to use;
6.1.2.3 be worn consistently and correctly; and,
6.1.2.4 be current and not past the expiry date.
6.1.3 Students should follow, and teachers should enforce, rules for safety, the rules of the sport, and fair play practices.
6.1.4 Educate stakeholders about how risks can be minimized by:
6.1.4.1 teaching proper sport techniques in proper progression;
6.1.4.2 documenting safety lessons (date, time, brief content and list of students in attendance) so that absent students can be taught safety skills prior to the next activity session;
6.1.4.3 reducing impact that could lead to concussion;
6.1.4.4 teaching students about the dangers/potential consequences of continuing to play with a head injury. Avoid telling injured players they are fine and discourage others from pressuring the student to continue play; and,
6.1.4.5 teaching that return to learn accommodations are equally important to concussion recovery

7. Responsibilities

7.1 **The board** is responsible for:
- 7.1.1 establishing procedures for dealing with head injuries and concussions.

7.2 **Principals or designates** are responsible for:
- 7.2.1 ensuring first aid is provided to a student experiencing a head injury;
- 7.2.2. ensuring staff is aware of the signs and symptoms of concussions and have access to the Concussion Recognition Tool (APPENDIX A) and the Student Medical Clearance form (FORM A7216 – 1);
- 7.2.3 enforcing the procedure that excludes concussed students from athletics and physical education until cleared by a physician/nurse practitioner; (FORM A7216 – 1) however, students should not be prohibited from attending school;
- 7.2.4 ensuring an appropriate Return to Learn plan is developed and implemented to meet the students' academic needs by:
  - 7.2.4.1 appointing staff members to monitor and ensure adequate communication to meet students' needs;
  - 7.2.4.2 if necessary, initiating the writing of an Individual Education Plan (IEP) to support adjustments to students' schedules;
  - 7.2.4.3 considering the option of home instruction, in consultation with the superintendent;
  - 7.2.4.4 updating medical information in PowerSchool; and,
  - 7.2.4.5 initiating the Simcoe County Student Transportation Consortium form, TF022 – Individual Student Transportation Plan (ISTP) if necessary, to support learning, in consultation with the superintendent.

7.3 **Teachers, Coaches and other board staff** are responsible for:
- 7.3.1 following **Response to Suspected Concussion** (section 4);
- 7.3.2 accommodating student learning needs, refer to IEP if one is developed;
- 7.3.3 observing student for changes, including worsening signs and notifying parents/guardians and principal or designate of observed changes;
- 7.3.4 interacting with the student's parent/guardian to obtain and share information about progress and challenges, when possible.

7.4 **Physicians/Nurse Practitioners** are responsible for:
- 7.4.1 providing an individualized plan for returning to learning to assist in managing cognitive and physical exertion following a concussion; and,
- 7.4.2 guiding the gradual removal of adjustments or supports that may have been instituted as part of the recovery process.

7.5 **Parents/guardians** are responsible for:
- 7.5.1 informing the school administration of concussions sustained by students on and off school property;
- 7.5.2 monitoring their child's progress through return to play and return to learn processes;
- 7.5.3 interacting with school staff to obtain and share information about progress and challenges; and,
- 7.5.4 providing initial diagnosis/accommodations and final physician clearance to school for return to learn and play.

7.6 **Students** are responsible for:

7.6.1 sharing information about their progress with respect to ongoing or worsening symptoms of concussion.

8. Return to Learn

8.1 Concussion symptoms can create a variety of challenges to learning that can affect overall school performance including the following:

8.1.1 cognitive symptoms may lead to difficulty with learning, including lack of attention and distractibility;

8.1.2 physical symptoms such as headache, light and/or noise sensitivity may impair the effectiveness of learning; and,

8.1.3 emotional control issues may lead to irritation, agitation or feeling overwhelmed.

8.2 Identify the symptoms the student is experiencing. Try to identify specific factors that may worsen student's symptoms so steps can be taken to modify those factors. Talk to the student about options, offering support and encouragement.

8.3 In consultation with the student's health care professionals, and as a student's symptoms decrease, extra help or support can be decreased and/or removed gradually.

8.4 Graduated Return to Learn – **Students should be symptom-free for 24 hours to move to the next stage.** Symptom free means NO lingering headaches, sensitivity to light/noise, fogginess, drowsiness, etc**.** (APPENDIX B).

9. Return to Play

With each stage the student can continue to the next stage if asymptomatic at the current level. **Each stage should take approximately 24 hours** or more, so the full return to play should take no less than one (1) week. If symptoms arise during the stages of the protocol, the student should move back to the last asymptomatic level and try to progress again after a **24-hour rest period** (APPENDIX B).

CONCUSSION RECOGNITION TOOL 5 ©

To help identify concussion in children, adolescents and adults

Supported by

RECOGNISE & REMOVE

Head impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 (CRT5) is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

STEP 1: RED FLAGS — CALL AN AMBULANCE

If there is concern after an injury including whether ANY of the following signs are observed or complaints are reported then the player should be safely and immediately removed from play/game/activity. If no licensed healthcare professional is available, call an ambulance for urgent medical assessment:

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

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Assessment for a spinal cord injury is critical.
- Do not attempt to move the player (other than required for airway support) unless trained to so do.
- Do not remove a helmet or any other equipment unless trained to do so safely.

If there are no Red Flags, identification of possible concussion should proceed to the following steps:

STEP 2: OBSERVABLE SIGNS

Visual clues that suggest possible concussion include:

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

STEP 3: SYMPTOMS

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

STEP 4: MEMORY ASSESSMENT

(IN ATHLETES OLDER THAN 12 YEARS)

Failure to answer any of these questions (modified appropriately for each sport) correctly may suggest a concussion:

- "What venue are we at today?"
- "Which half is it now?"
- "Who scored last in this game?"
- "What team did you play last week/game?"
- "Did your team win the last game?"

Athletes with suspected concussion should:

- Not be left alone initially (at least for the first 1-2 hours).
- Not drink alcohol.
- Not use recreational/ prescription drugs.
- Not be sent home by themselves. They need to be with a responsible adult.
- Not drive a motor vehicle until cleared to do so by a healthcare professional.

ANY ATHLETE WITH A SUSPECTED CONCUSSION SHOULD BE IMMEDIATELY REMOVED FROM PRACTICE OR PLAY AND SHOULD NOT RETURN TO ACTIVITY UNTIL ASSESSED MEDICALLY, EVEN IF THE SYMPTOMS RESOLVE

RETURN TO LEARN PROTOCOL			
	Mental Activity	**Activity at each step**	**Goal of each step**
1.	Daily activities that do not give the athlete symptoms	Typical activities that the athlete does during the day as long as they do not increase symptoms (e.g. reading, texting, screen time). Start with 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 school-work. 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 school activities until a full day can be tolerated.	Return to full academic activities and catch up on missed work.
RETURN TO PLAY PROTOCOL			
	Exercise step	**Functional exercise at each step**	**Goal of each step**
1.	Symptom-limited activity	Daily activities that do not provoke symptoms.	Gradual reintroduction of work/school activities.
2.	Light aerobic exercise	Walking or stationary cycling at slow to medium pace. No resistance training.	Increase heart rate.
3.	Sport-specific exercise	Running or skating drills. No head impact activities.	Add movement.
4.	Non-contact training drills.	Harder training drills, e.g., passing drills. May start progressive resistance training.	Exercise, coordination, and increased thinking.
5.	Full contact practice	Following medical clearance, participate in normal training activities.	Restore confidence and assess functional skills by coaching staff.
6.	Return to play/sport	Normal game play.	

STUDENT MEDICAL CLEARANCE FOLLOWING SUSPECTED CONCUSSION

_____ has demonstrated signs of a concussion and according to the
(Student Name)
Simcoe County District School Board Concussion Protocol (Administrative Procedures Memorandum A7216), must be seen by a physician/nurse practitioner prior to returning to play and to establish the need for return to learn accommodations.

RESULT OF INITIAL MEDICAL EXAMINATION

☐ No concussion has been diagnosed.

☐ Concussion has been diagnosed and therefore, student must immediately begin a medically supervised, individualized and gradual Return to Play/Return to Learn protocol (below).

_____
(Physician/Nurse Practitioner Name – please print)

_____ _____
Physician/Nurse Practitioner Signature *(Date)*

Comments: (Return to Play/Return to Learn Accommodations)

_____

_____

Stage 5 Clearance

I, _____ have examined _____
(Physician/Nurse Practitioner Name (please print) *(Student Name)*

and confirm that he/she continues to be symptom free and is able to transition to Stage 5, Full Contact Practice, followed by Stage 6, Normal Game Play, provided he/she remains symptom free.

_____ _____
(Physician/Nurse Practitioner Signature) *(Date)*

Comments: (Return to Play/Return to Learn Accommodations)