



**KAWARTHA PINE RIDGE  
DISTRICT SCHOOL BOARD**

# Program Safety Guidelines for Concussions

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## List of Revisions

Every effort has been made to ensure that this document is as comprehensive as possible. We welcome your feedback, questions or concerns. Please provide and direct feedback to your Principal and to the corresponding Health and Safety representative at the Education Center.

Revision Date	Revisions
January 2015	Minor revisions to reflect OPHEA Concussion Protocols and Tools <ul style="list-style-type: none"> <li>• Updated Resources &amp; Links</li> <li>• Added Prevention Component information</li> </ul>
June 2013	Major revision in response to OPHEA revisions: <ul style="list-style-type: none"> <li>• Return to Learn considerations included</li> <li>• Documentation and forms</li> </ul>
April 2012	<p>New - Emphasis that the teacher is recommended to err on the side of caution, may use professional judgment to delay the progression through the Return to Play process.</p> <p style="padding-left: 40px;">“As a further precaution, the teacher/coach/principal may choose to delay advancement to Step 3. If concussion symptoms reoccur, the student will be instructed to rest for a minimum of 24 hours and return to the previous step.”</p> <p>Change –If a parent refuses to seek medical attention to confirm a concussion, the teacher must progress the student through Steps 1-6 of the return to play process.</p> <p style="padding-left: 40px;"><del>“Indicate to the parent that the school/coach/teacher will use his/her professional judgement and continue to progress the student through Steps 1-6 of the “Return to Play” process</del></p> <p>Addition - If a parent refuses to seek medical attention to confirm a concussion, the teacher request permission/signature prior to beginning Step 3.</p> <p style="padding-left: 40px;">“Continue to update the parent with regards of the student’s progress through the “Return to Play” process, and request a signature prior to beginning Step 3.”</p> <p>Addition – Page 11 – Communicating to occasional teachers</p> <p style="padding-left: 40px;">Administrator Responsibilities 7. Ensure that the up-to-date status of students suspected or diagnosed with a concussion is communicated to teachers, <u>occasional/on-call teachers</u>, coaches and supervisors.</p> <p style="padding-left: 40px;">Teacher Responsibilities 4. During an absence, ensure that the up-to-date status of the student and instructions for appropriate activities are communicated to the supervising (occasional/on-call) teacher.</p> <p style="padding-left: 40px;">Student and Parent Responsibilities 1. Notify teachers, <u>occasional (supply) teachers</u>, coaches, activity supervisors or the Principal of suspected or diagnosed concussions occurring outside of school-organized activities.</p> <p>Addition – Page 22 – Academic accommodations may be needed due to symptoms related to concussions (e.g. sensitivity to noise and light, problems concentrating, etc.).</p>
March 2012	New document

## Related Documents

This document and the guidelines within apply to all in and out-of-classroom programs. For additional information regarding concussions:

- **KPR Concussion Safety Guidelines**
  - [1. Program Safety Guidelines for Concussions](#)
  - [2. Tool to Identify Suspected Concussion](#)
  - [3. Suspected Concussion Letter to Parent](#)
  - [4. Return to Learn Strategies](#)
  - [5. Parent Permission for Return to Learn and Physical Activities](#)
- <https://www.parachutecanada.org/en/professional-resource/concussion-collection/.org>
- <http://safety.ophea.net/concussions>
- <http://www.health.gov.on.ca/en/pro/programs/concussions/>

For additional subject and activity-specific safety guidelines, please refer to:

- KPRDSB Physical Education Safety Guidelines
- KPRDSB safety guidelines for specific subject areas

## Rationale

Recent research has made it clear that a concussion can have a significant impact on a student's cognitive and physical abilities. In fact, research shows that activities that require concentration can actually cause a student's concussion symptoms to reappear or worsen. It is equally important to help students as they "return to learn" in the classroom as it is to help them "return to physical activity". Without identification and proper management, a concussion can result in permanent brain damage and in rare occasions, even death.

Research also 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.

Administrators, educators (including occasional teachers), school staff, students, parents school volunteers play an important role in the prevention of concussion, identification of a suspected concussion as well as the ongoing monitoring and management of a student with a concussion. 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 learning or physical activities too soon and risking further complications. Ultimately, this awareness and knowledge could help contribute to the student's long-term health and academic success.

*Ontario Physical Education Safety Guidelines, OPHEA*

With this in mind, teachers must ensure that safety requirements are known and that all safety procedures are strictly followed when students are involved in a hands-on activity. It is important that students are aware of potentially hazardous situations and that the proper use of equipment be taught and practiced.

According to Facts and Figures Health and Safety on the Job from the Ministry of Labour (August 17, 2000) "Greater awareness of workplace health and safety risks, and more systematic training and supervision, translates into lower injury and illness rates." From this same document the Legislation places a number of requirements on employers.

These include:

- Providing and maintaining a safe workplace, including equipment and protective devices;
- Articulating a health and safety policy and developing a training program to carry it out;
- Protecting workers from dangerous situations; and
- Telling workers about any known hazard and providing training to work safely with the hazard.

As prepared by the Canadian Centre for Occupational Health and Safety, general guidelines for school workers include the following performance objectives as a general guide for working safely in schools:

- Recognize workplace hazards.
- Prevent accident and injury by safe work practices and use of personal protective equipment.
- Deal with accidents and emergencies.
- Understand duties and rights as given in occupational health and safety legislation.
- Contact government departments to find additional health and safety information.

All teachers must familiarize themselves with their legal rights and duties under the Occupational Health and Safety Act 1990. Schools are required to post a copy of the Act in a prominent location, often the staff room or the school office. Contact your principal or board health and safety officer if you require clarification on the Act. The Act states that an employer (the board) has the responsibility to provide a safe workplace and that the employee (the teacher) has the duty to work in a safe manner. Students must

also be made aware of their rights and responsibilities to work in a safe manner. Students must be provided with a safe work environment but at the same time it is their responsibility to inform the teacher of any hazards that may exist.

Teacher's responsibilities with respect to safety are also addressed by a number of other pieces of legislation. Within the provisions of the Occupational Health and Safety Act, the following framework describes how to comply with the requirements. For the purpose of this application, the supervisor described below represents teaching staff, the workspace represents the classroom and the worker is the student then the responsibilities are clear.

As a supervisor in the workspace one shall:

- Ensure that a worker complies with the Act and regulations.
- Ensure that any equipment, protective devices or clothing required by the Act, a regulation or employer are used or worn by a worker.
- Advise a worker of any potential or actual danger to the health or safety of the worker of which the supervisor is aware.
- Take every precaution reasonable in the circumstances for the protection of the worker.

Within the Education Act a teacher's legal obligations regarding safety are also addressed.

"In addition to the duties assigned to the teacher under the Act and by the Board, a Teacher shall;

(g) Ensure that all reasonable safety procedures are carried out in courses and activities for which the teacher is responsible."

*Regulation 298, Section 20 (formerly Reg. 262, Section 21) - Duties of Teachers*

Teachers must according to the Education Act:

- Exemplify safe behaviour in teaching practices and procedures,
- Instruct students in general and specific safety precautions and ensure the use of personal protection equipment where it is required,
- Implement documented safety education programs in accordance with school board policies and the regulations and standards of other regulatory bodies,
- Maintain proper order and discipline in the classroom and while on duty in the school or on school grounds, and
- Report any serious accidents to the administration indicating the cause and the treatment given, together with corrective actions taken.

The Standards of Practice for Teachers published by the Ontario Teachers College states that teachers will establish a safe and supportive learning environment for students.

The Workplace Hazardous Materials Information System (WHMIS) is another piece of legislation that both teachers and students should be aware of. WHMIS is essential to the employee's right to know. It consists of warning labels that identify the nature of a hazard (e.g. flammable, poisonous, biohazardous); material safety data sheets (MSDS) that describe the nature of the material, what harmful effects it may have, and how to work safely with it; and training so that employees will understand the labels and data sheets fully. It is illegal for an employer to use or store a hazardous material without applying a WHMIS label and providing an MSDS and training so all workers can work safely with it. Check with your health and safety representative at your school and board for more information on WHMIS.

## General Risk Management Strategies

**Avoidance:** Simply stated - if an activity does not take place, then injuries cannot occur from that activity. For instance, applying this strategy to physical activities, risk avoidance may take the form of prohibiting an activity (e.g. restricting the play of ice hockey) or removing a component from an activity (e.g. removing body contact from play).

**Risk Control:** This strategy is also known as “Loss prevention” and can involve a series of different steps that, if followed properly, will act to minimize or manage the risks of injury. Examples of this strategy are not limited to the following:

- Define general safety rules for all students to follow during an activity – have each student sign a Safety Agreement whereby they acknowledge they are aware of these rules and that they will follow them. Review periodically.
- Define safety rules for each piece of equipment, procedure or technique – e.g., use personal protective equipment, proper handling, proper operation, proper technique.
- Provide training for users (i.e. teach) about safety rules.
- Demonstrate correct procedures and techniques.
- Document student attendance for each lesson and demonstration to ensure no student has missed this aspect of the training.
- Test users and document results – issue “certificates” to validate satisfactory completion of safety training for each piece of equipment or technique.
- Review safety rules periodically.
- Post safety signs.
- Supervise students carefully at all times.
- Perform for students any difficult or unusual procedures.
- Perform monthly safety inspections of the facility and all equipment.
- Develop strategies for supporting “late-entry” students (i.e. students that may have missed initial safety training).

**Loss Reduction:** This strategy essentially translates into having an emergency procedure if, in spite of the best efforts under the Risk Control strategy, an injury still occurs. It may include, but not be limited to:

- First Aid procedures
- Emergency notification procedures
- Automatic lock-out procedures for all equipment if an emergency situation occurs.
- Request to resume activities procedures

# Safety and Teacher Liability

## ***Due Diligence***

Almost all activities present some amount of inherent risk. Teachers are not expected to guarantee 100% safety, however, they are expected to be aware of potential hazards and to take reasonable safety precautions to minimize these risks - in other words, teachers are expected to act with due diligence. In a legal context, due diligence means taking all reasonable steps to prevent accidents and injuries, thus avoiding the assumption of legal liability.

If an accident occurs which causes bodily harm to a student while the student is under the jurisdiction of a school, but where due diligence is not demonstrated, the circumstances may place the responsibility for the accident on the teacher concerned and on the Board of Education of which (s)he is an employee. In this situation, the teacher and his/her Board could be held negligent.

Principals, teachers and other staff can demonstrate a reasonable degree of due diligence by taking action in the following three key areas:

1. Ensuring awareness of potential risks and the related safety procedures.
2. Ensuring competency in meeting these procedures, thereby avoiding unnecessary risk.
3. Implementing monitoring and compliance strategies to ensure that procedures are met.

## ***Safety Topics***

Topics and lessons related to safety should be tailored for each subject, grade level and the activities in which students will ultimately participate. In most instances, it is advisable to provide students opportunities to:

1. Learn proper procedures, techniques and the safe use of materials, tools and equipment.
2. Review their understanding and refine their skills on an ongoing basis.
3. Demonstrate satisfactory knowledge of safety procedures and the ability to act safely and safely operate equipment and perform techniques.

Safety education should start at the beginning of a course, with ongoing reminders throughout the year and new safety topics introduced in a timely fashion when relevant to current activities and situations. The following list shows several strategies that may help to keep safety at the forefront of all activities.

- Clear and precise lessons and instructions related to safety.
- Descriptive and corrective feedback to students while practicing and refining knowledge and skills.
- Purposeful instructions for students after an absence or who are new to the classroom.
- Ongoing reminders of correct safety procedures.
- Safety posters around major equipment and work areas.
- Visible WHMIS and MSDS information.
- Readily available manuals for correct techniques, posture, and operation of machinery, tools and equipment.
- Clear and marked areas that contain safety items such as fire extinguishers, eye wash stations, first aid kits.



The following categories provide general areas to consider when addressing topics in safety and designing related lessons and activities.

<b>Lesson/Activity Design</b>	Consideration of the level of difficulty and risks involved in the classroom activities. Modifications to activities to avoid or reduce the risks involved.
<b>Emergency Procedures</b>	Procedures for responding to fire, security threats, and other emergencies.
<b>Operation and Technique</b>	Procedures for safely performing processes and operating tools, equipment and machinery.
<b>Material Handling</b>	Procedures for safely handling heavy loads, chemicals, potentially hazardous materials.
<b>Housekeeping and Storage</b>	Procedures and rules regarding maintaining safe facilities and proper storage of materials and equipment.
<b>Ergonomics</b>	Safe posture when using equipment, avoiding repetitive stress injuries.
<b>Personal Protective Equipment</b>	Use of eye, hearing, foot, body, respiratory protection.
<b>WHMIS (Workplace Hazardous Materials Identification System)</b>	Identification and safe use of hazardous materials.
<b>First Aid</b>	Procedures for handling breathing difficulties, bleeding, burns, allergic reactions, epileptic seizures, etc.
<b>Fire Protection</b>	Location and types of fire protection equipment, procedures to follow in the event of a fire or fire alarm.

## ***Documenting Safety Lessons, Practice and Evaluation***

When students engage in activities that have the potential for serious injury, it is important for teachers to document when students are presented with lessons focused on safety procedures and when students demonstrate a satisfactory level of understanding and ability.

Accurate records will help to ensure that all students, in particular, those who are occasionally absent from class, participate in appropriate training prior to using materials, equipment and techniques that pose safety hazards.

In addition, in the event of an incident, accurate documentation will help to demonstrate that the teacher has undertaken all appropriate and necessary activities to avoid and minimize the potential of risk of accidents.

When high risk activities are included in the classroom, documentation should include:

- A lesson plan or description of the safety guidelines taught.
- The date(s) when each student received safety instruction (be aware of absent and new students).
- The date(s) when each student demonstrated satisfactory knowledge or skill.
- The signature of the teacher and/or student.
- An acknowledgment letter signed by a parent/guardian.

**Example 1 – Teacher Safety Record by Focus:** One document for each safety lesson that describes the guidelines taught and tracks each student’s learning progression (for teacher record book).

<b>Teacher Safety Record For:</b> _____ (safety focus)						
<b>Description of lesson:</b>						
Student Name	Attended Teacher Instruction/Demo		Passed Written/Oral Testing		Demonstrated Safe Use/Technique	
	Date	Student Initial	Date	Student Initial	Date	Student Initial

**Example 2 – Teacher Safety Record by Student:** One document for each student that tracks each student’s learning progression (for teacher record book).

<b>Teacher Safety For:</b> _____ (student name)						
Safety Focus	Attended Teacher Instruction/Demo		Passed Written/Oral Testing		Demonstrated Safe Use/Technique	
	Date	Student Initial	Date	Student Initial	Date	Student Initial

**Example 3 – Safety Passport by Focus:** For each student, one document for each area of safety. Students may fill-in the document with required information as they learn about the safety guidelines, or the information can be provided by the teacher.

<b>Safety Passport For:</b> _____ (safety focus)			
<b>Personal Protective Equipment:</b>		<b>Potential Hazards:</b>	
<b>Safety Rules/Techniques:</b>			
<b>Student Name:</b>		<b>Student Signature:</b>	
<b>Teacher Signature:</b>		<b>Date:</b>	

# Responsibilities in the Classroom

## ***Administrator Responsibilities***

Administrators must:

1. Ensure that all teachers are qualified to teach/coach/supervise the subject/team/activity, and have appropriate training for any equipment, materials or procedures that they may use.
2. Ensure that teachers have access to a copy of this document and related appendices.
3. Ensure that the material contained in this document is reflected in daily practice and in response to suspected concussions.
4. Ensure regular inspection and maintenance of equipment and environment (e.g. field or room) for the health and safety of all participants and all related activities.
5. Ensure that all incidents are recorded, reported and filed as required by KPRDSB Safety Guidelines, to Occupational Health and Safety Guidelines (e.g. Response to a Critical Injury), and with an OSBIE incident report form.
6. Ensure that the up-to-date status of students suspected or diagnosed with a concussion is communicated to teachers, occasional teachers, coaches and volunteer supervisors.

## ***Teacher, Coach and Supervisors Responsibilities***

The teacher/coach/supervisor must:

1. Prior to all physical activity meet with students to discuss concussion related information.
2. Implement adequate concussion prevention strategies
3. Respond to suspected concussions according to the procedures and requirements as outline within.
4. During an absence, ensure that the up-to-date status of the student and instructions for appropriate activities are communicated to the supervising (occasional/on-call) teacher.

## ***Student and Parent Responsibilities***

Students and parents must:

1. Comply with school board safety and health policies and regulations.
2. Notify teachers, occasional (supply) teachers, coaches, volunteer supervisors or the Principal of suspected or concussions occurring during or outside of school-organized activities.
3. When a suspected of a concussion, follow school board procedures for resuming physical activity which includes seeking medical attention (physician visit) to confirm the presence or absence of a concussion.
4. Follow all classroom, activity and equipment safety rules and procedures.
5. Demonstrate to the satisfaction of the teacher all procedures and techniques related to safety.
6. Practice safe work/activity procedures.
7. Report all unsafe conditions, equipment, practices and injuries to the teacher.
8. Report all unsafe behaviour of others to the teacher.
9. Use equipment as they were designed.
10. Inform teachers of medical conditions, medication or other limitations which may affect the safety and well-being of themselves and others so that modifications can be made.
11. Not use equipment or attempt routines if untrained, unsure or unsupervised.
12. Clean equipment, waste and spills as created as to avoid slip hazards.
13. Adequately warm-up prior to practices and games to avoid injury.

## Concussion Diagnosis & Definitions

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.

A concussion:

- 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);
- 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;
- 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.

*Ontario Physical Education Safety Guidelines, OPHEA*

A concussion is a common form of head and brain injury, and can be caused by a direct or indirect hit to the head or body (for example, a car crash, fall or sport injury). This causes a change in brain function, which results in a variety of symptoms. With a concussion there is no visible injury to the structure of the brain, meaning that tests like MRI or CT scans usually appear normal.

When a person suffers a concussion, the brain suddenly shifts or shakes inside the skull and can knock against the skull's bony surface. A hard hit to the body can result in an acceleration-deceleration injury when the brain brushes against bony protuberances inside the skull. Such forces can also result in a rotational injury in which the brain twists, potentially causing shearing of the brain nerve fibres. It is not yet known exactly what happens to brain cells in a concussion, but the mechanism appears to involve a change in chemical function.

*Parachute, Concussion Tool Kit*

<https://www.parachutecanada.org/en/injury-topic/concussion/>

“A Concussion (or mild traumatic brain injury) is a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces secondary to direct or indirect forces to the head. Disturbance of brain function is related to neurometabolic dysfunction, rather than structural brain injury, and is typically associated with normal structural imaging findings (CT/MRI). Concussion may or may not involve a loss of consciousness. Concussion results in a constellation of physical, cognitive, emotional, and sleep-related symptoms. Recovery is a sequential process and symptoms may last from several minutes to days, weeks, months, or even longer in some cases.”

*Collins, Gioia et al; CDC Physicians Toolkit 2007*

## Concussion Common Signs and Symptoms

Following a blow to the head, face or neck, or a blow to the body that transmits a force to the head, a concussion should be suspected in the presence of any one or more of the following signs or symptoms (also see Appendix A - Tool to Identify Suspected Concussion).

<b>Possible Signs Observed</b> <i>A sign is something that will be observed by another person (e.g., parent/guardian, teacher, coach, supervisor, peer).</i>	<b>Possible Symptoms Reported</b> <i>A symptom is something the student will feel/report.</i>
<b>Physical</b> <ul style="list-style-type: none"> <li>• vomiting</li> <li>• slurred speech</li> <li>• slowed reaction time</li> <li>• poor coordination or balance</li> <li>• blank stare/glassy-eyed/dazed or vacant look</li> <li>• decreased playing ability</li> <li>• loss of consciousness or lack of responsiveness</li> <li>• lying motionless on the ground or slow to get up</li> <li>• amnesia</li> <li>• seizure or convulsion</li> <li>• grabbing or clutching of head</li> </ul>	<b>Physical</b> <ul style="list-style-type: none"> <li>• headache</li> <li>• pressure in head</li> <li>• neck pain</li> <li>• feeling off/not right</li> <li>• ringing in the ears</li> <li>• seeing double or blurry/loss of vision</li> <li>• seeing stars, flashing lights</li> <li>• pain at physical site of injury</li> <li>• nausea/stomach ache/pain</li> <li>• balance problems or dizziness</li> <li>• fatigue or feeling tired</li> <li>• sensitivity to light or noise</li> </ul>
<b>Cognitive</b> <ul style="list-style-type: none"> <li>• difficulty concentrating</li> <li>• easily distracted</li> <li>• general confusion</li> <li>• cannot remember things that happened before and after the injury</li> <li>• does not know time, date, place, class, type of activity in which he/she was participating</li> <li>• slowed reaction time (e.g., answering questions or following directions)</li> </ul>	<b>Cognitive</b> <ul style="list-style-type: none"> <li>• difficulty concentrating or remembering</li> <li>• slowed down, fatigue or low energy</li> <li>• dazed or in a fog</li> </ul>
<b>Emotional/Behavioural</b> <ul style="list-style-type: none"> <li>• strange or inappropriate emotions (e.g., laughing, crying, getting angry easily)</li> </ul>	<b>Emotional/Behavioural</b> <ul style="list-style-type: none"> <li>• irritable, sad, more emotional than usual</li> <li>• nervous, anxious, depressed</li> </ul>
<b>Sleep Disturbance</b> <ul style="list-style-type: none"> <li>• drowsiness</li> <li>• insomnia</li> </ul>	<b>Sleep Disturbance</b> <ul style="list-style-type: none"> <li>• drowsy</li> <li>• sleeping more/less than usual</li> <li>• difficulty falling asleep</li> </ul>

**Note:**

- 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 younger students (under the age of 10), students with special needs or students 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.

## Concussion Information to Share with Students

Prior to all physical activity, the teacher/coach/supervisor must meet with students to discuss:

1. The definition and causes of a concussion, signs and symptoms, seriousness of concussions, and the board's identification and management procedures.
2. The dangers of participating in an activity while experiencing the signs and symptoms of a concussion and potential long-term consequences.
3. The risks associated with the activity/sport for a concussion and how to minimize those risks.
4. The importance of immediately informing the teacher of any signs or symptoms of a concussion, and removing themselves from the activity.
5. The importance of not allowing a student suspected of a concussion to be alone.
6. The importance of notifying the parent or guardian about a suspected concussion.
7. The importance of a suspected concussion being evaluated by a medical doctor.
8. The importance of respecting the rules of the game and practising fair play
9. The importance of wearing protective equipment that is properly fitted (e.g., with chin straps done up according to the one-finger rule [only one finger should fit between the strap and chin]).
10. Where helmets are worn, inform students that there is no such thing as a concussion-proof helmet. Helmets are designed to prevent major brain injuries such as bruises to the brain, blood clots, facial injury and skull fractures. However, helmets do not prevent all concussions.

### ***“How long will it take for my child to get better?”***

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, children may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.”

*Parachute, Concussion Guidelines for Parents*

# Concussion Prevention Strategies

Concussion prevention is important, "...there is evidence that education about concussion leads to a reduction in the incidence of concussion and improved outcomes from concussion..."<sup>1</sup>

Any time a student/athlete is involved in physical activity, there is a chance of sustaining a concussion. Therefore it is important to take a preventative approach encouraging a culture of safety mindedness when students are physically active.

One approach to the prevention of any type of injury includes primary, secondary and tertiary strategies. Listed below are the three strategies for concussion injury prevention:<sup>2</sup>

- Primary – information/actions that prevent concussions from happening (e.g., rules and regulations, minimizing slips and falls by checking that classroom floor and activity environments provide for safe traction and are obstacle free);
- Secondary – expert management of a concussion that has occurred (e.g., Identification, and Management - Return to Learn and Return to Physical Activity) that is designed to prevent the worsening of a concussion;
- Tertiary – strategies help prevent long-term complications of a concussion (chronic traumatic encephalopathy) by advising the participant to permanently discontinue a physical activity/sport based on evidence-based guidelines.

The prevention strategies have been organized into two main sections according to when they should be implemented:

- those strategies that should be used prior to physical activity (at the beginning of the school year) and/or prior to the sport season (e.g., interschool teams, intramural/house league activities);
- those strategies that should be used during a unit of physical activity, and/or sport season or intramural activities.

## **1. Prior to the sport season/beginning of the school year**

a) Teachers/coaches/supervisors should:

- be knowledgeable of school board's concussion policy and procedures for prevention, identification, and management (return to learn and return to physical activity);
- be knowledgeable about safe practices in the sport/activity e.g., the rules and regulations and the specific sport/activity pages in the Ontario Physical Education Safety Guidelines;
- be familiar with the risks of a concussion or other potential injuries associated with the activity/sport and how to minimize those risks;
- be up to date and enforce school board/Athletic Association/Referee rule changes associated with minimizing the risks of concussion.
- be up to date with current body contact skills and techniques (e.g., safe tackling in tackle football), when coaching/supervising contact activities;
- be knowledgeable (when applicable) with the requirements for wearing helmets. (To date there is no evidence that helmets protect against concussions.)

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<sup>1</sup> Journal of Clinical Sport Psychology, 2012, 6, 293-301; Charles H. Tator, Professor of Neurosurgery, Toronto Western Hospital, Toronto, On Can.

<sup>2</sup> Journal of Clinical Sport Psychology, 2012, 6, 293-301; Charles H. Tator, Professor of Neurosurgery, Toronto Western Hospital, Toronto, On Can.

- determine that protective equipment is approved by a recognized equipment standards association (e.g., CSA, NOCSAE), is well maintained, and is visually inspected prior to activity; and
- determine (where applicable) that protective equipment is inspected within approved timelines, by a certified re-conditioner as required by manufacturer (e.g., football helmet)

b) Boards, Athletic Associations and Referee Associations should:

- Consider rule changes to the activity, to reduce the head injury incidence or severity, where a clear-cut mechanism is implicated in a particular sport.
- Consider rule enforcement to minimize the risk of head injuries.

It is important for students/athletes and their parents/guardians to be provided information about the prevention of concussions. This concussion information must be as activity/sport specific as possible.

If students/athletes are permitted to bring their own protective equipment (e.g., helmets), student/athletes and parents/guardians must be informed of the importance of determining that the equipment is properly fitted and in good working order and suitable for personal use.

c) Parents/guardians to be informed of the:

- risks and possible mitigations of the activity/sport;
- dangers of participating with a concussion;
- signs and symptoms of a concussion;
- board's identification, diagnosis and management procedures; and
- importance of encouraging the ethical values of fair play and respect for opponents.

d) Student/athletes to be informed about:

- concussions;
  - o definition
  - o seriousness of concussions
  - o causes,
  - o signs and symptoms, and
  - o the board's Identification and management procedure
- the risks of a concussion associated with the activity/sport and how to minimize those risks;
- the importance of respecting the rules of the game and practising Fair Play (e.g., to follow the rules and ethics of play, to practice good sportsmanship at all times and to respect their opponents and officials);
- the dangers of participating in an activity while experiencing the signs and symptoms of a concussion and potential long-term consequences.
- the importance of:
  - o immediately informing the teacher/coach of any signs or symptoms of a concussion, and removing themselves from the activity;
  - o encouraging a teammate with signs or symptoms to remove themselves from the activity and to inform the teacher/coach; and
  - o informing the teacher/coach when a classmate/teammate has signs or symptoms of a concussion.
- the use of helmet when they are required for a sport/activity:
  - o helmets do not prevent concussions. They are designed to protect against skull fractures, major brain injuries (including bleeding into or around the brain), brain contusions and lacerations;
  - o helmets are to be properly fitted and worn correctly (e.g., only one finger should fit between the strap and the chin when strap is done up).



Sample strategies/tools to educate students/athletes about concussion prevention information:

- hold a preseason/activity group/team meeting on concussion education;
- develop and distribute an information checklist for students/athletes about prevention strategies;
- post concussion information to inform/reinforce symptoms and signs and what to do if a concussion is suspected;
- post information posters on prevention of concussions (e.g., encouraging students to report concussion symptoms) in high traffic student areas (e.g., change room/locker area/classroom/gymnasium);
- implement concussion classroom learning modules aligned with the curriculum expectations;
- distribute concussion fact sheets (prevention, signs and symptoms) for each student/athlete on school teams;
- Distribute and collect completed student concussion contract or pledge (signed by student/athlete and parents/guardians).

## **2. During the physical activity unit/sport season/intramural activity**

a) teachers/coaches /supervisors should:

- teach skills and techniques in the proper progression;
- provide activity/sport-specific concussion information when possible;
- teach and enforce the rules and regulations of the sport/activity during practices and games/competition (particularly those that limit or eliminate body contact, or equipment on body contact);
- reinforce the principles of head-injury prevention (e.g., keeping the head up and avoiding collision);
- teach students/athletes involved in body contact activities:
  - sport-specific rules and regulations of body contact e.g., no hits to the head.
  - body contact skills and techniques and require the successful demonstration of these skills in practice prior to competition.
- discourage others from pressuring injured students/athletes to play/participate;
- demonstrate and role model the ethical values of fair play and respect for opponents;
- encourage students/athletes to follow the rules of play, and to practice fair play;
- use game/match officials in higher-risk interschool sports that are knowledgeable, certified and/or experienced in officiating the sport; and
- inform students about the importance of protective equipment fitting correctly (e.g., helmets, padding, guards).

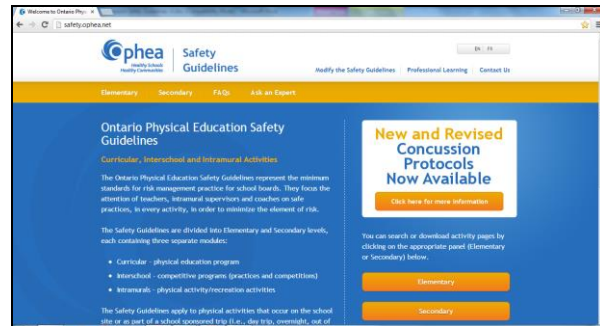
b) During the physical activity unit/sport season/intramural activity students/athletes should:

- attend safety clinics/information sessions on concussions for the activity/sport;
- be familiar with the seriousness of concussion and the signs and symptoms of concussion;
- demonstrate safe contact skills during controlled practice sessions prior to competition;
- demonstrate respect for the mutual safety of fellow athletes e.g., no hits to the head, follow the rules and regulations of the activity;
- wear properly fitted protective equipment;
- report any sign or symptom of a concussion immediately to teacher/coach from a hit, fall or collision;
- encourage team mates/fellow students to report sign(s) or symptom(s) of a concussion and to refrain from pressuring injured students/athletes to play.

# Concussion Resources

The following websites provide excellent concussion-related resources to education and raise awareness with parents, students, athletes.

Ontario Physical and Health Education Association  
(<http://safety.ophea.net/>)



Ministry of Health and Long Term Care  
<https://www.ontario.ca/page/rowan-law-concussion-safety>



## General Procedures to Use in the Event of an Accident

The following outlines general procedures to use in the event of an accident. The procedures are different for critical and non-critical injuries as defined by the Ministry of Labour.

***Refer to the next section for specific procedures to use in the event of a suspected concussion.***

### Definition of Critical Injuries

- places life in jeopardy;
- produces unconsciousness;
- results in a substantial loss of blood;
- involves the fracture of a leg or an arm but not a finger or a toe;
- involves the amputation of a leg, arm, hand or foot but not a finger or a toe;
- consists of burns to a major portion of the body; or
- causes the loss of sight in an eye

### General Procedure for Critical Injuries

1. Call the main office for assistance.
2. Administer first aid treatment by the designated, trained individual(s).
3. Obtain or recommend medical help.
4. Cordon off the area.
5. Place the machinery involved 'out of use' (tag-out/lock-out) until such time as permitted by the School Board or Ministry of Labour.
6. If possible, take photos that capture the scene of the incident.
7. Do not alter the accident scene until the accident investigation is completed (except for the purposes of saving life, relieving human suffering or preventing unnecessary damage to equipment or other property).
8. Report both staff and students injuries within 24 hours of the incident by:
  - Contacting your Principal.
  - Contacting Mary Jane Smith (ext. 2219)
  - Contacting Human Resources on the Injury Reporting Hot Line (ext. 3333).
  - Complete an OSBIE accident form and submitted to Risk Management at the Education Centre.

### General Procedure for Non-Critical Injuries

1. Call the main office for assistance.
2. Administer first aid treatment by the designated, trained individual(s).
3. Obtain or recommend medical help.
4. If possible, take photos that capture the scene of the incident.
5. Report both staff and students injuries within 24 hours of the incident by:
  - Contacting your Principal.
  - Contacting Human Resources on the Injury Reporting Hot Line (ext. 3333).
  - Complete an OSBIE accident form and submitted to Risk Management at the Education Centre.

## Initial Response for Suspected Concussion

<b>Critical Injury</b> Any Loss of Consciousness	<b>Not Critical Injury</b> No Loss of Consciousness
<ol style="list-style-type: none"> <li>1. Stop activity assume concussion</li> <li>2. Call the main office and 911</li> <li>3. Administer first aid treatment by the designated, trained individual(s)</li> <li>4. Assume possible neck injury and, only if trained, immobilize athlete before ambulance transportation. Otherwise, do NOT move athlete or remove athletic equipment (e.g. helmet)</li> <li>5. Stay with student until EMS arrive</li> <li>6. Contact and inform the parent/guardian</li> <li>7. Monitor signs and symptoms (see Tool to Identify Suspected Concussion)</li> <li>8. If student regains consciousness, encourage him/her to remain calm and to lie still</li> <li>9. Do not administer medication (unless the student requires medication for other conditions – e.g. insulin for diabetes).</li> </ol> <ol style="list-style-type: none"> <li>1. Cordon off the area</li> <li>2. Place any equipment or machinery involved 'out of use' (tag-out/lock-out) until such time as permitted by the School Board or Ministry of Labour</li> <li>3. If possible, take photos that capture the scene of the incident</li> <li>4. Do not alter the accident scene until the accident investigation is completed (except for the purposes of saving life, relieving human suffering or preventing unnecessary damage to equipment or other property).</li> <li>5. Report both staff and students injuries within 24 hours:                         <ul style="list-style-type: none"> <li>- Contact your Principal.</li> <li>- Contact Mary Jane Smith (ext. 2219)</li> <li>- Contact Human Resources on the Injury Reporting Hot Line (ext. 3333)</li> <li>- Complete an OSBIE accident form</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Stop activity immediately</li> <li>2. Call the main office for assistance</li> <li>3. Administer first aid treatment by the designated, trained individual(s)</li> <li>4. When safely moved, remove student from current activity or game</li> <li>5. Conduct initial concussion assessment (see Tool for Identifying Suspected Concussion)</li> </ol> <p><b>A. If signs are not observed or symptoms are not reported:</b></p> <ol style="list-style-type: none"> <li>6. No concussion suspected; student may return to physical activity</li> <li>7. Contact and informed parent/guardian (or emergency contact) of incident</li> </ol> <p><b>B. If signs are observed or symptoms are reported by student:</b></p> <ol style="list-style-type: none"> <li>8. Do not allow the student to return to the activity/play/game/practice that day even if the student states that he/she is feeling better.</li> <li>9. Contact and inform the parent/guardian (or emergency contact) of the incident; that they need to come and pick up the student; and, that the student needs to be examined by a medical doctor or nurse practitioner as soon as possible that day</li> <li>10. Monitor signs and symptoms</li> <li>11. If any signs or symptoms worsen, call 911</li> <li>12. Do not administer medication (unless the student requires medication for other conditions – e.g. insulin for diabetes)</li> <li>13. Do not leave the student alone. Stay with the student until her/his parent/guardian (or emergency contact) arrives. The student must not leave the premises without parent/guardian (or emergency contact) supervision</li> <li>14. If possible, take photos that capture the scene of the incident</li> <li>15. Report both staff and students injuries within 24 hours:                         <ul style="list-style-type: none"> <li>- Contact your Principal.</li> <li>- Contacting Human Resources on the Injury Reporting Hot Line (ext. 3333).</li> <li>- Complete an OSBIE accident form</li> </ul> </li> </ol>

## Information to Provide to the Parent/Guardian

<b>Suspected Concussion</b>	<b>Concussion Not Suspected</b>
<p>Parent/Guardian must be informed that:</p> <ul style="list-style-type: none"> <li>- the student needs to be examined by a medical doctor or nurse practitioner as soon as possible that day; and,</li> <li>- they need to inform the school principal of the results of the medical examination (i.e., the student does not have a diagnosed concussion or the student has a diagnosed concussion) prior to the student returning to school (see Appendix B – Letter to Parent/Guardian for Suspected Concussion).               <ul style="list-style-type: none"> <li>o If no concussion is diagnosed: the student may resume regular learning and physical activities.</li> <li>o If a concussion is diagnosed: the student follows a medically supervised, individualized and gradual Return to Learn/Return to Physical Activity Plan.</li> </ul> </li> </ul>	<p>Parent/Guardian must be:</p> <ul style="list-style-type: none"> <li>- provided Appendix A - Tool to Identify Suspected Concussion, and informed that:               <ul style="list-style-type: none"> <li>o signs and symptoms may not appear immediately and may take hours or days to emerge;</li> <li>o the student should be monitored for 24-48 hours following the incident; and,</li> <li>o 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.</li> </ul> </li> </ul>

## Management Procedures for a Diagnosed Concussion

“Given that children and adolescents spend a significant amount of their time in the classroom, and that school attendance is vital for them to learn and socialise, full return to school should be a priority following a concussion.”<sup>3</sup>

A student with a diagnosed concussion needs to follow a medically supervised, individualized and gradual Return to Learn/Return to Physical Activity Plan. While return to learn and return to physical activity processes are combined within the Plan, a student with a diagnosed concussion must be symptom free prior to returning to regular learning activities (i.e., Step 2b – Return to Learn) and beginning Step 2 – Return to Physical Activity.

In developing the Plan, the return to learn process is individualized to meet the particular needs of the student. There is no preset formula for developing strategies to assist a student with a concussion to return to his/her learning activities. In contrast, the return to physical activity process follows an internationally recognized graduated stepwise approach.

### **Collaborative Team Approach:**

It is critical to a student’s recovery that the Return to Learn/Return to Physical Activity Plan be developed through a collaborative team approach. Led by the school principal, the team should include:

- the concussed student;
- her/his parents/guardians;
- school staff and volunteers who work with the student; and,
- the medical doctor or nurse practitioner.

Ongoing communication and monitoring by all members of the team is essential for the successful recovery of the student.

### **Communicating the Ongoing Progress of a Recovering Student**

The “*Return to Learn / Return to Physical Activity*” process outlines progressive steps, checkpoints and limitations for a student recovering from a concussion. Clear, accessible and timely communication between the student, parent and all teachers, coaches, supervisors is critical to ensure that the student is appropriately supported and monitored through the six steps.

Scheduling a “case conference” with teachers, and in consultation with the student and the parent, is one way to communicate and align academic accommodations.

The following lists other strategies and considerations when designing a method for communication:

- Student privacy and sensitivity (e.g. harassment)
- Access and communication to all academic teachers, occasional teachers, on-call teachers, coaches, volunteers and supervisors
- Use of electronic conference
- Email distribution list of all coaches, intramural supervisors and physical –education teachers
- Posting in the staff room with other medical conditions (e.g. allergies)
- (for younger children) A clearly marked sticker placed on student’s shirt to indicate that they are recovering from a concussion and appropriate measures must be taken

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<sup>3</sup> Davis GA, Purcell LK, The evaluation and management of acute concussion differs in young children. Br J Sports Med. Published Online First 23 April doi:10.1136/bjsports-2012-092132 (p.3)

**Completion of the Steps within the Plan:**

The steps of the Return to Learn/Return to Physical Activity Plan may occur at home or at school. The members of the collaborative team must factor in special circumstances which may affect the setting in which the steps may occur (i.e., at home and/or school), for example:

- the student has a diagnosed concussion just prior to winter break, spring break or summer vacation; or,
- the student is neither enrolled in Health and Physical Education class nor participating on a school team.

Given these special circumstances, the collaborative team must ensure that steps 1-4 of the Return to Learn/Return to Physical Activity Plan are completed. As such, written documentation from a medical doctor or nurse practitioner that indicates the student is symptom free and able to return to full participation in physical activity must be provided by the student's parent/guardian to the school principal and kept on file, e.g., in the student's OSR. (see Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities)

It is important to note:

- Cognitive or physical activities can cause a student's symptoms to reappear.
- 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 student.
- The signs and symptoms of a concussion often last for 7 – 10 days, but may last longer in children and adolescents<sup>4</sup>

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<sup>4</sup> McCrory P., Johnston K., Meeuwisse W., et al. (2005). Summary and agreement statement of the 2nd International Conference on Concussion in Sport, Prague 2004. *British Journal of Sports Medicine*. 39(4), 196-204, as cited in McCrory P. et al. (2013). Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport held in Zurich, November 2012. *British Journal of Sports Medicine*, 47(5), 250-258.

## Step 1 – Complete rest at home

The student does not attend school during Step 1.

The most important treatment for concussion is rest (i.e., cognitive and physical).

- 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.

Step 1 continues for a minimum of 24 hours and until:

- the student's symptoms begin to improve; OR,
- the student is symptom free;

as determined by the parents/guardians and the concussed student.

### **Parent/Guardian:**

Before the student can return to school, the parent/guardian must communicate to the school principal either that:

- the student's symptoms are improving (and the student will proceed to Step 2a – Return to Learn); OR,
- the student is symptom free (and the student will proceed directly to Step 2b – Return to Learn and Step 2 – Return to Physical Activity).

(See Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities)

### **Return to Learn – Designated School Staff Lead:**

Once the student has completed Step 1 (as communicated to the school principal by the parent/guardian) and is therefore able to return to school (and begins either Step 2a – Return to Learn or Step 2b – Return to Learn, as appropriate), one school staff (i.e. a member of the collaborative team, either the school principal or another staff person designated by the school principal) needs to serve as the main point of contact for the student, the parents/guardians, other school staff and volunteers who work with the student, and the medical doctor or nurse practitioner.

The designated school staff lead will monitor the student's progress through the Return to Learn/Return to Physical Activity Plan. This may include identification of the student's symptoms and how he/she responds to various activities in order to develop and/or modify appropriate strategies and approaches that meet the changing needs of the student.



## Step 2a – Symptoms are improving, but not yet symptom free

*Requirements:* Documented parent permission that the student is either symptom free or symptoms are improving, as well as communication regarding the need to modify the learning environment and activities to support in the recovery (e.g., Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities)

A student with symptoms that are improving, but who is not yet symptom free, may return to school and begin Step 2a – Return to Learn.

During this step, the student requires individualized classroom strategies and/or approaches to return to learning activities - these will need to be adjusted as recovery occurs. At this step, the student's cognitive activity should be increased slowly (both at school and at home), since the concussion may still affect his/her academic performance. Cognitive activities can cause a student's concussion symptoms to reappear or worsen.

It is important for the designated school staff lead, in consultation with other members of the collaborative team, to identify the student's symptoms and how he/she responds to various learning activities in order to develop appropriate strategies and/or approaches that meet the needs of the student. School staff and volunteers who work with the student need to be aware of the possible difficulties (i.e., cognitive, emotional/behavioural) a student may encounter when returning to learning activities following a concussion. These difficulties may be subtle and temporary, but may significantly impact a student's performance.

### **Return to Learn Strategies**

A student with symptoms that are improving, but who is not yet symptom free, may return to school and begin Step 2a – Return to Learn.

During this step, the student requires individualized classroom strategies and/or approaches to return to learning activities - these will need to be adjusted as recovery occurs (see Return to Learn Strategies). At this step, the student's cognitive activity should be increased slowly (both at school and at home), since the concussion may still affect his/her academic performance. Cognitive activities can cause a student's concussion symptoms to reappear or worsen.

It is important for the designated school staff lead, in consultation with other members of the collaborative team, to identify the student's symptoms and how he/she responds to various learning activities in order to develop appropriate strategies and/or approaches that meet the needs of the student. School staff and volunteers who work with the student need to be aware of the possible difficulties (i.e., cognitive, emotional/behavioural) a student may encounter when returning to learning activities following a concussion. These difficulties may be subtle and temporary, but may significantly impact a student's performance.

Note: "Compared to older students, elementary school children are more likely to complain of physical problems or misbehave in response to cognitive overload, fatigue, and other concussion symptoms."

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

Adapted by Ontario Physical and Health Education Association (OPHEA), from Davis GA, Purcell LK. The evaluation and management of acute concussion differs in young children. Br J Sports Med. Published Online First 23 April 2013 doi:10.1136/bjsports-2012-092132

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

Adapted by Ontario Physical and Health Education Association (OPHEA), from Davis GA, Purcell LK. The evaluation and management of acute concussion differs in young children. Br J Sports Med. Published Online First 23 April 2013  
doi:10.1136/bjsports-2012-092132

## Step 2b – Symptom free

The following processes are current.

*Requirements:* Documented parent permission for child to participate the activities that correspond to this step and that the student is symptom free (e.g., Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities)

### **2b. Return to Learn**

A student who:

- has progressed through Step 2a – Return to Learn and is now symptom free may proceed to Step 2b – Return to Learn; or,
- becomes symptom free soon after the concussion may begin at Step 2b – Return to Learn (and may return to school if previously at Step 1).

At this step, the student begins regular learning activities without any individualized classroom strategies and/or approaches.

Note: Since concussion symptoms can reoccur during cognitive and physical activities, students at Step 2b – Return to Learn or any of the following return to physical activity steps must continue to be closely monitored by the designated school staff lead and collaborative team for the return of any concussion symptoms and/or a deterioration of work habits and performance.

- If, at any time, concussion symptoms return and/or deterioration of work habits or performance occur, the student must be examined by a medical doctor or nurse practitioner.

### **2b. Return to Physical Activity**

*Activity:* Individual light aerobic physical activity only (e.g., walking, swimming or stationary cycling keeping intensity below 70% of maximum permitted heart rate)

*Restrictions:* No resistance or weight training. No competition (including practices, scrimmages). No participation with equipment or with other students. No drills. No body contact.

*Objective:* To increase heart rate

*Parent/Guardian:* Must report back to the school principal that the student continues to be symptom free in order for the student to proceed to step 3.

### Step 3 – Sport-specific aerobic activity

*Requirements:* Documented parent permission for child to participate the activities that correspond to this step (e.g., Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities)

*Activity:* Individual sport-specific physical activity only (e.g., running drills in soccer, skating drills in hockey, shooting drills in basketball)

*Restrictions:* No resistance/weight training. No competition (including practices, scrimmages). No body contact, no head impact activities (e.g., heading a ball in soccer) or other jarring motions (e.g., high speed stops, hitting a baseball with a bat).

*Objective:* To add movement.

## Step 4 – Sport-specific non-contact training

*Requirements:*

- Documented parent permission for child to participate the activities that correspond to this step
- Ongoing teacher communication with parents/guardians indicating the presences or absence of signs and symptoms

(See Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities)

*Activity:* Activities where there is no body contact (e.g., dance, badminton). Progressive resistance training may be started. Non-contact practice and progression to more complex training drills (e.g., passing drills in football and ice hockey).

*Restrictions:* No activities that involve body contact, head impact (e.g., heading the ball in soccer) or other jarring motions (e.g., high speed stops, hitting a baseball with a bat)

*Objective:* To increase exercise, coordination and cognitive load

*Note:* Medical documentation is required for progression to next step

*Teacher:* Communicates with parents/guardians that the student has successfully completed Steps 3 and 4 .

*Parent/Guardian:* Must provide the school principal with written documentation from a medical doctor or nurse practitioner that indicates the student is symptom free and able to return to full participation in physical activity in order for the student to proceed to step 5.

*School Principal:* Written documentation is then filed (eg. In the student's OSR) by the school principal.

## Step 5 – Full participation in non-contact activities and sports

*Requirements:* Parent permission and medical documentation (i.e. Doctor's Note) that confirms that the child is symptom free and is able to return to regular physical activities

*Activity:*

- Full participation in regular physical education, intramural and interschool activities in non-contact sports
- Full training and practices for contact sports (i.e. practice may include contact)

*Restrictions:* No competition (e.g., games, meets, events) that involve body contact

*Objective:* To restore confidence and assess functional skills by teacher/coach

## Step 6 – Full participation in contact activities and sports

*Requirements:*

- Parent permission and medical documentation (i.e. Doctor's Note) that confirms that the child is symptom free and is able to return to regular physical activities (required prior to Step 5)
- Completion of Step 5 – Full training and practices which may include contact)

*Activity:* Full participation in contact sports

*Restrictions:* None



# Appendix A - Tool to Identify Suspected Concussion

Please download the Letter to Parent/Guardian for Suspected Concussions at:

<https://kprschools.ca/en/learning-and-programs/resources/Tool-to-Identify-Suspected-Concussion.pdf>

## TOOL TO IDENTIFY SUSPECTED CONCUSSION

Program Safety Guidelines for Concussions

### KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD

If a student experiences **one or more** of the following signs or symptoms, then a concussion should be suspected and the **student must be examined by a medical doctor or nurse practitioner**. If a concussion is suspected, then the student must be immediately removed from physical activity and must not be allowed to return to physical activity that day even if he/she indicates that they are feeling better. Students suspected of having a concussion should not be left alone and must not leave the premises without parent, guardian or emergency contact supervision.

Student's Name: \_\_\_\_\_ Date/Time of Injury: \_\_\_\_\_

#### Description of Injury:

*(Include cause and force of the blow to the head/body, about any loss of consciousness, for how long, memory loss, or seizures following the injury, or previous concussions, if any)*

#### Call 911 if:

- Loss of consciousness
- One pupil larger than the other
- Drowsiness or cannot be awakened
- Weakness, numbness, or decreased coordination
- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Difficulty recognizing people or places
- A headache that gets worse
- Increasing confusion, restlessness, or agitation
- Unusual behavior

#### Call 911 if:

- Any signs or symptoms worsen

#### Memory Function

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

*"I am going to ask you a few questions, please listen carefully and give your best effort."*

- What room are we in now?
- What field / school are we at now?
- What activity are we doing now?
- What part of the day is it?
- What subject did you have last lesson/class?
- What is your coach's name?
- What is your teacher's name?
- What school do you go to?

#### Continued Monitoring

Monitoring should continue for 24-48 hours following the incident because it may take hours or days for signs and symptoms to emerge. If any delayed signs or symptoms emerge, the student needs to be examined by a medical professional.

	0 Minutes	15 Minutes	30 Minutes	<input type="checkbox"/> Minutes (just prior to leaving)
<b>OBSERVED PHYSICAL SIGNS</b>				
vomiting				
slurred speech				
slowed reaction time				
poor coordination or balance				
blank stare/glassy-eyed/dazed/vacant look				
decreased playing ability				
loss of consciousness/responsiveness				
motionless on ground or slow to get up				
amnesia				
seizure or convulsion				
grabbing or clutching of head				
<b>OBSERVED COGNITIVE SIGNS</b>				
difficult concentrating / easily distracted				
general confusion				
cannot remember things before / after injury				
does not know time / date / place / class				
slowed response to questions / directions				
<b>OBSERVED EMOTIONAL / BEHAVIOURAL SIGNS</b>				
strange behavior (laughing, crying, angry)				
<b>STUDENT REPORTED PHYSICAL SYMPTOMS</b>				
headache / "pressure" in head / neck pain				
feeling off / not right				
ringing in ears				
seeing double / blurry or loss of vision				
seeing stars or flashing lights				
nausea / stomach ache / pain				
balance problems or dizziness				
fatigue or feeling tired				
sensitivity to light or noise				
<b>STUDENT REPORTED COGNITIVE SYMPTOMS</b>				
difficulty concentrating or remembering				
slowed down, fatigued or low energy				
dazed or in a fog				
<b>STUDENT REPORTED EMOTIONAL / BEHAVIOURAL SYMPTOMS</b>				
irritable, sad, more emotional than usual				
nervous, anxious, depressed				
Other:				



# Appendix B – Letter to Parent/Guardian for Suspected Concussion

Please download the Letter to Parent/Guardian for Suspected Concussions at:

<https://kprschools.ca/en/learning-and-programs/resources/Suspected-Concussion-Letter-to-Parent.pdf>

**LETTER TO PARENT/GUARDIAN FOR SUSPECTED CONCUSSION**  
Program Safety Guidelines for Concussions

**KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD**

Date: \_\_\_\_\_

Dear Parent/Guardian:

\_\_\_\_\_ (NAME OF STUDENT) sustained a head injury on \_\_\_\_\_ (DATE OF INJURY).

Based on the signs and symptoms observed, we believe that s/he may have sustained a concussion from this event.

Kawartha Pine Ridge District School Board understands that head injuries have the potential to have significant immediate and long term consequences. We are requesting that you seek a medical examination for your child/ward as soon as possible by a medical doctor or nurse practitioner.

In the event that a concussion is diagnosed, our school hopes to work collaboratively with you to support your child's medically supervised recovery. To assist you at the medical examination we have included an outline of our "Return to Learn" and "Return to Physical Activity" process. Sharing this information at the examination and obtaining specific instructions for recovery from the medical professional will clarify for school staff how we can support in your child/ward's return to health.

**Please complete and return to school**

**Results of Medical Examination**

My child/ward 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/ward 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.

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

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"Return to Learn / Return to Physical Activity" Process	
Parent communicates result back to school	When a child is suspected of having a concussion: <ul style="list-style-type: none"> <li>• Child undergoes medical examination by physician or nurse practitioner</li> </ul>
Parent consents to continue to Step 2a	<p><b>Step 1 – Complete rest at home, including:</b></p> <ul style="list-style-type: none"> <li>• <b>Cognitive Rest:</b> limit reading, texting, television, computer, electronic games, etc.</li> <li>• <b>Physical Rest:</b> restrict recreational/leisure and competitive physical activities</li> <li>• <b>Duration:</b> minimum of 24 hours and until (as determined by the parent &amp; student)               <ul style="list-style-type: none"> <li>○ the student's symptoms begin to improve; or</li> <li>○ the student is symptom free.</li> </ul> </li> </ul>
Parent consents to continue to Step 2b	<p><b>Step 2a – Symptoms are improving, but not yet symptom free</b></p> <ul style="list-style-type: none"> <li>• <b>Return to Learn:</b> classroom strategies that include physical rest &amp; gradually increase cognitive activity.</li> </ul> <p><b>Step 2b – Student is symptom free</b></p> <ul style="list-style-type: none"> <li>• <b>Return to Learn:</b> student returns to regular learning activities.</li> <li>• <b>Return to Physical Activity:</b> <ul style="list-style-type: none"> <li>○ <b>Activity:</b> Individual light aerobic (e.g., walking, swimming or stationary bike).</li> <li>○ <b>Restrictions:</b> No resistance or weight training. No competition/practices/scrimmages. No participation with equipment or with other students. No drills. No body contact.</li> <li>○ <b>Objective:</b> To increase heart rate.</li> </ul> </li> </ul>
Parent consents to continue to Step 3	<p><b>School monitors absence of symptoms</b></p> <p><b>Step 3 – Sport specific, aerobic activity</b></p> <ul style="list-style-type: none"> <li>• <b>Activity:</b> Individual sport-specific physical activity (e.g., running, skating, shooting drills)</li> <li>• <b>Restrictions:</b> No resistance/weight training. No competition/practices/scrimmages. No body contact, no head impact activities (e.g., heading a ball in soccer) or other jarring motions (e.g., high speed stops, hitting a baseball with a bat).</li> <li>• <b>Objective:</b> To add movement.</li> </ul> <p><b>Step 4 – Sport specific, non-contact training</b></p> <ul style="list-style-type: none"> <li>• <b>Activity:</b> Activities with no body contact (e.g., dance, badminton). Progressive resistance training may be started. Non-contact practice and progression to more complex training drills (e.g., passing drills in football and ice hockey).</li> <li>• <b>Restrictions:</b> No activities with body contact, head impact (e.g., heading the ball in soccer) or other jarring motions (e.g., high speed stops, hitting a baseball with a bat).</li> <li>• <b>Objective:</b> To increase exercise, coordination and cognitive load.</li> </ul>
Medical note required	<p><b>Step 5 – Full participation in non-contact activities and sports</b></p> <ul style="list-style-type: none"> <li>• <b>Activity:</b> Full participation in regular physical education/intramural/interscholar activities in non-contact sports. Full training/practices for contact sports.</li> <li>• <b>Restrictions:</b> No competition (e.g., games, meets, events) that involve body contact.</li> <li>• <b>Objective:</b> To restore confidence and assess functional skills by teacher/coach.</li> </ul> <p><b>Step 6 – Full participation in contact activities and sports</b></p> <ul style="list-style-type: none"> <li>• <b>Activity:</b> Full participation in contact sports</li> <li>• <b>Restrictions:</b> None.</li> </ul>

**It is important to note:**


- Cognitive or physical activities can cause a student's symptoms to reappear
- 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 student
- The signs and symptoms of a concussion often last for 7 – 10 days, but may last longer in children and adolescents
- If symptoms reappear, then the student needs to be re-examined by a medical doctor or nurse practitioner.


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# Appendix C – Parent/Guardian Permission for Return to Learn & Physical Activities

Please download the Letter to Parent/Guardian for Suspected Concussions at:

<https://kprschools.ca/en/learning-and-programs/resources/Parent-Permission-for-Return-to-Learn-and-Physical-Activities.pdf>

<b>PARENT/GUARDIAN PERMISSION FOR RETURN TO LEARN &amp; PHYSICAL ACTIVITIES</b> Program Safety Guidelines for Concussions	
<b>KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD</b>	
Date: _____	
Dear Parent/Guardian:	
<p>Recently your child/ward was diagnosed as having suffered a concussion. Kawartha Pine Ridge District School Board understands that head injuries have the potential to have significant immediate and long term consequences. We encourage you to seek the on-going advice of a medical doctor or nurse practitioner for developing a medically supervised recovery plan. Furthermore, our school and staff hope to work collaboratively with you to support your child's return to health.</p> <p>The purpose of this letter is to obtain from you, instructions and informed consent for supporting the next steps in your child's medically supervised recovery process. To assist you in conversations with medical professionals, we have included an outline of our "Return to Learn" and "Return to Physical Activity" process. Sharing this information with the doctor or nurse, and obtaining specific instructions for recovery will clarify for school staff how we can support in your child/ward's return to health.</p> <p>The school has not observed, nor has your child/ward communicated any concussion-related signs or symptoms while engaging recent activities. After receiving your permission, the school will allow your child/ward to participate in activities that correspond to step indicated below.</p>	
<p>Check <b>one box</b> to indicate which step in the recovery process the student is beginning:</p> <p><input type="checkbox"/> Step 1: Complete rest at home</p> <p><input type="checkbox"/> Step 2a: Modified learning activities / No physical activity</p> <p><input type="checkbox"/> Step 2b: Regular learning activities / Light aerobic activity</p> <p><input type="checkbox"/> Step 3: Sport-specific aerobic activity</p> <p><input type="checkbox"/> Step 4: Sport-specific non-contact training</p> <p><input type="checkbox"/> Step 5: Full participation in non-contact activities and sport (<i>requires Doctor's Note</i>)</p> <p><input type="checkbox"/> Step 6: Full participation in contact activities and sport</p>	
<b>Please complete and return to school</b>	
<p>As part of my child/ward's medically supervised recovery process, I give permission for my child/ward to participate in activities that corresponds to the step indicated above.</p> <p><b>Step 5 only:</b> I have attached a <b>Doctor's Note</b> that confirms that my child/ward is symptom free and is able to return to regular physical education class/intramurals/interscholar activities in non-contact sports and full training/practices for contact sports _____ (initial of Parent/Guardian)</p> <p>Parent/Guardian Signature _____ Date: _____</p> <p>Comments: _____</p> <p>_____</p> <p>_____</p>	
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"Return to Learn / Return to Physical Activity" Process	
Parent communicates result back to school	When a child is suspected of having a concussion: <ul style="list-style-type: none"> <li>Child undergoes medical examination by physician or nurse practitioner</li> </ul>
Parent consents to continue to Step 2a	<b>Step 1 – Complete rest at home, including:</b> <ul style="list-style-type: none"> <li><b>Cognitive Rest:</b> limit reading, texting, television, computer, electronic games, etc.</li> <li><b>Physical Rest:</b> restrict recreational/leisure and competitive physical activities</li> <li><b>Duration:</b> minimum of 24 hours and until (as determined by the parent &amp; student)               <ul style="list-style-type: none"> <li>the student's symptoms begin to improve; or</li> <li>the student is symptom free;</li> </ul> </li> </ul>
Parent consents to continue to Step 2b	<b>Step 2a – Symptoms are improving, but not yet symptom free</b> <ul style="list-style-type: none"> <li><b>Return to Learn:</b> classroom strategies that include physical rest &amp; gradually increase cognitive activity.</li> </ul> <b>Step 2b – Student is symptom free</b> <ul style="list-style-type: none"> <li><b>Return to Learn:</b> student returns to regular learning activities.</li> <li><b>Return to Physical Activity:</b> <ul style="list-style-type: none"> <li><b>Activity:</b> Individual light aerobic (e.g., walking, swimming or stationary bike).</li> <li><b>Restrictions:</b> No resistance or weight training. No competition/practices/scrimmages. No participation with equipment or with other students. No drills. No body contact.</li> <li><b>Objective:</b> To increase heart rate.</li> </ul> </li> </ul>
Parent consents to continue to Step 3	<b>Step 3 – Sport specific, aerobic activity</b> <ul style="list-style-type: none"> <li><b>Activity:</b> Individual sport-specific physical activity (e.g., running, skating, shooting drills)</li> <li><b>Restrictions:</b> No resistance/weight training. No competition/practices/scrimmages. No body contact, no head impact activities (e.g., heading a ball in soccer) or other jarring motions (e.g., high speed stops, hitting a baseball with a bat).</li> <li><b>Objective:</b> To add movement.</li> </ul>
School monitors absence of symptoms	<b>Step 4 – Sport specific, non-contact training</b> <ul style="list-style-type: none"> <li><b>Activity:</b> Activities with no body contact (e.g., dance, badminton). Progressive resistance training may be started. Non-contact practice and progression to more complex training drills (e.g., passing drills in football and ice hockey).</li> <li><b>Restrictions:</b> No activities with body contact, head impact (e.g., heading the ball in soccer) or other jarring motions (e.g., high speed stops, hitting a baseball with a bat).</li> <li><b>Objective:</b> To increase exercise, coordination and cognitive load.</li> </ul>
Medical note required	<b>Step 5 – Full participation in non-contact activities and sports</b> <ul style="list-style-type: none"> <li><b>Activity:</b> Full participation in regular physical education/intramural/interscholar activities in non-contact sports. Full training/practices for contact sports.</li> <li><b>Restrictions:</b> No competition (e.g., games, meets, events) that involve body contact.</li> <li><b>Objective:</b> To restore confidence and assess functional skills by teacher/coach.</li> </ul>
	<b>Step 6 – Full participation in contact activities and sports</b> <ul style="list-style-type: none"> <li><b>Activity:</b> Full participation in contact sports.</li> <li><b>Restrictions:</b> None.</li> </ul>
It is important to note: <ul style="list-style-type: none"> <li>Cognitive or physical activities can cause a student's symptoms to reappear</li> <li>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 student</li> <li>The signs and symptoms of a concussion often last for 7 – 10 days, but may last longer in children and adolescents</li> <li>If symptoms reappear, then the student needs to be re-examined by a medical doctor or nurse practitioner.</li> </ul>	
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