

<i><b>Rainy River District School Board</b></i>	<b>SECTION 4</b> <i>Students</i>
<b>STUDENT CONCUSSION PROTOCOL</b>	<b>4.74</b>
<b>PROCEDURE</b>	

**PURPOSE**

The Rainy River District School Board is committed to the safety of all students. In the interests of safety, the following procedure must be followed when a student is suspected of having sustained a concussion while participating in physical activities and athletic competitions as part of a Rainy River District School Board instructional or extra-curricular program, or if the student has sustained a concussion in an activity that took place outside of the school day. This procedure’s purpose is to ensure safe and consistent management of students who have sustained a concussion.

**RATIONALE**

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.

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.

Educators and school staff play a crucial role in the identification of a suspected concussion as well as the ongoing monitoring and management of a student with a concussion. Awareness of the signs and symptoms of concussion and 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.

**GUIDELINES****1.0 Causes and Risks of a Concussion**

## 1.1 Causes of a concussion are:

- a blow to the head, face or neck;
- major physical trauma to other parts of the body (e.g. sideways check to the body) that causes a whiplash effect on the head and neck.

*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.

## 1.2 Risks of a concussion are:

## a) Post-Concussion Syndrome

Without early detection, a medical examination, rest and appropriate recovery initial concussion may lead to chronic cognitive and neurobehavioral difficulties which in some cases can be permanent and disabling.

## b) Second Impact Syndrome

Second Impact Syndrome occurs when a person has two concussions in relatively short period of time. Student/athletes who are not fully recovered from an initial concussion and suffer a second blow to the head are significantly vulnerable for recurrent, cumulative and even catastrophic consequences of a second concussive injury e.g., prolonged coma or even death.

**2.0 Response and Identification**

## 2.1 Initial Response

If a student receives a 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, and as a result may have suffered a concussion, the individual (e.g., teacher/coach) responsible for that student must take immediate action as follows:

## a) Unconscious Student (or where there was any loss of consciousness):

- Stop the activity immediately – assume there is a concussion;

- Initiate Emergency Action Plan and call 911. Do not move the student;
- Assume there is a possible neck injury and, only if trained, immobilize the student before emergency medical services arrive;
- Do not remove athletic equipment (e.g., helmet) unless there is difficulty breathing;
- Stay with the student until emergency medical services arrive;
- Contact the student's parent/guardian (or emergency contact) to inform them of the incident and that emergency medical services have been contacted;
- Monitor and document any changes (i.e., physical, cognitive, emotional/behavioural) in the student;
- If the student regains consciousness, encourage him/her to remain calm and to lie still. Do not administer medication (unless the student requires medication for other conditions – e.g., insulin for a student with diabetes).

b) Conscious Student

- Stop the activity immediately;
- Initiate Emergency Action Plan;
- When the student can be safely moved, remove him/her from the current activity or game;
- Conduct an initial concussion assessment of the student using the *C-1 Tool to Identify a Suspected Concussion* form.

2.2 Post-Identification Response (if a concussion is suspected)

If sign(s) are observed and/or symptom(s) are reported and/or the student fails the Quick Memory Function Assessment (*C-1 Tool to Identify a Suspected Concussion* form), the teacher, staff member or coach should respond as follows:

- a concussion should be suspected. Do not allow the student to return to play in the activity, game or practice that day even if the student states that he/she is feeling better;
- contact the student's parent/guardian (or emergency contact) to inform them of the incident, and that they need to pick up the student, Inform the parent/guardian (or emergency contact) that the student needs to be examined by a medical doctor or nurse practitioner as soon as possible that day;
- Monitor and document any changes (i.e., physical, cognitive, emotional/behavioural) in the student. If any signs or symptoms worsen, call 911;
- Do not administer medication (unless the student requires medication for other conditions – e.g., insulin for a student with diabetes);
- 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;
- An OSBIE Incident Report must be completed by the school.

2.3 The parent/guardian must be:

- provided with a copy of the Concussion Protocol - Parent Information booklet, which will include the form – *C-1 Tool to Identify a Suspected Concussion*, which should be signed by the teacher, if possible;

- informed that the student needs to be examined by a medical doctor or nurse practitioner as soon as possible that day; and,
- informed that they need to communicate to the school principal 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 the *C-2 Documentation of Medical Examination* form included in the Parent Information booklet).

*Note:* If no concussion is diagnosed, the student may resume regular learning and physical activity. If a concussion is diagnosed, the student follows a medically supervised, individualized and gradual Return to Learn/Return to Physical Activity Plan.

#### 2.4 Post-Identification Response (if concussion is not suspected)

If signs are not observed, symptoms are not reported, and the student passes the Quick Memory Function Assessment using the form – *C-1 Tool to Identify a Suspected Concussion*, the teacher, staff member or coach should respond as follows:

- a concussion is not suspected - the student may return to physical activity;
- the student's parent/guardian (or emergency contact) must be contacted and informed of the incident.

#### 2.5 The parent/guardian must be:

- provided with a copy of the form – *C-1 Tool to Identify a Suspected Concussion*, signed by the teacher; and,
- informed that signs and symptoms may not appear immediately and may take hours or days to emerge, and the student should be monitored for 24-48 hours following the incident;
- informed that 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.

### 3.0 Responsibilities (if a suspected concussion)

#### 3.1 School Principal

At the beginning of the school year, the school principal must:

- review with teaching, educational assistant, and coaching staff, Student Concussion Protocol Procedure, 4.74;
- provide all teachers and coaches with a copy of the Fact Sheet for Parents, Students and Coaches;
- ensure that a copy of the chart, Steps & Responsibilities in Suspected Concussions (OPHEA), is posted in the gymnasium and staff room;
- provide all teachers and coaches with a copy of *Tool to Identify a Suspected Concussion (C-1)*;
- provide all teachers with a copy of *Documentation of Medical Examination (C-2)*;
- provide all teachers and coaches with a copy of *Return to Learn/Return to Physical Activity Plan (C-3)*.

- 3.2 Once a student has been identified as having a suspected concussion, the principal must:
- inform all school staff (e.g., classroom teachers, physical education teachers, intramural supervisors, coaches) and volunteers who work with the student of the suspected concussion;
  - indicate that the student shall not participate in any learning or physical activities until the parent/guardian communicates the results of the medical examination (i.e., the student does not have a diagnosed concussion or the student has a diagnosed concussion) to the principal (e.g., by completing the form, *C-2 Documentation of Medical Examination*, or by returning a note signed and dated by the parent/guardian).
  - ensure that an OSBIE Incident Report is completed.
- 3.3 Prior to a student with a suspected concussion returning to school, the principal must inform the parent/guardian that the results of the medical examination (i.e., student does not have a diagnosed concussion or the student has a diagnosed concussion) is required (see the reporting form, *C-2 Documentation of Medical Examination*).
- 3.4 If no concussion is diagnosed, the principal will determine whether the student may resume regular learning and physical activities.
- 3.5 If a concussion is diagnosed, the principal will ensure that the student follows a medically supervised, individualized and gradual Return to Learn/Return to Physical Activity Plan (see guideline 4.0 on Management Procedures for a Diagnosed Concussion).
- 3.6 Once the parent/guardian has informed the principal of the results of the medical examination, the principal must:
- inform all school staff and volunteers who work with the student (e.g., classroom teachers, physical education teachers, intramural supervisors, coaches), of the diagnosis; and,
  - file written documentation of the results of the medical examination in the student's OSR (e.g., *C-2 Documentation of Medical Examination* form, parent/guardian note)
- 3.7 Teachers are to
- stay informed of the causes and risks of concussions;
  - complete and submit to the principal, an OSBIE Incident Report form, when a student is injured while at school or during a school-related event/activity;
  - provide the school principal and parent a copy of *C-1 Tool to Identify a Suspected Concussion*;
  - support and accommodate students with their *C-3 Return to Learn/Return to Physical Activity Plan*.
- 3.8 Parents/Caregivers
- following up on a suspected concussion;

- informing the principal of the medical examination results with either the *C-2 Documentation of Medical Examination*, or a signed and dated note by the parent/caregiver;
- participating in the collaborative development and implementation of the Return to Learn/Return to Physical Activity Plan;
- advising the principal of any changes (positive and negative) to successful recovery.

#### **4.0 Management Process for a Diagnosed Concussion**

4.1 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., Stage 1 – Return to Learn) and beginning Stage 2 – Return to Physical Activity);

4.2 In developing the Activity 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.

4.3 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 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.

4.4 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 each step of the Return to Learn/Return to Physical Activity Plan are completed. As such, written documentation from a medical doctor or nurse practitioner (Completed after Step 4 of the “*Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3*”) 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).

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 to 10 days, but may last longer in children and adolescents.

#### 4.5 Return to Learn/Return to Physical Activity Plan

The Return to Learn/Return to Physical Activity Plan has two stages.

##### **STAGE 1:**

##### **Step 1 – Return to Learn/Total Cognitive and Physical Rest**

- 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.
- Before the student can return to school, the parent/guardian must communicate to the principal (see Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3) 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 the second stage of this plan – Return to Physical Activity).
- Once the student has completed Step 1 (as communicated to the principal by the parent/guardian), and is therefore able to return to school (and begins either Step 2a – or Step 2b – Return to Learn, as appropriate), one school staff (i.e. a member of the collaborative team, either the principal or designated staff, 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. In elementary schools, this will normally be the classroom teacher. In secondary schools it should be someone who has regular daily contact with the student.
- 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 2(a) – Return to Learn – with Accommodations**

- 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 – with Accommodations.
- 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. Information on possible Approaches/Strategies are available at the Ontario Physical Education Association website (<http://safety.ophea.net>). 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.” (Ontario Physical Education Safety Guidelines – 2013)

- The parent/guardian must communicate to the principal (see Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3) that the student is symptom free before the student can proceed to Step 2b – Return to Learn and Stage 2 – Return to Physical Activity.

**Step 2(b) – Return to Learn (Step 2(b) occurs concurrently with Stage 2 / Step 1 – Return to Physical)**

- 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. This step occurs concurrently with Stage 2 – Return to Physical Activity.

*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 signs and/or symptoms return and/or deterioration of work habits or performance occur, the student must be examined by a medical doctor or nurse practitioner.
- The parent/guardian must communicate the results and the appropriate step to resume the Return to Learn/Return to Physical Activity Plan to the school principal (e.g., see “Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3”) before the student can return to school

## **STAGE 2:**

### **Step 1 – Return to Physical Activity – Light 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 principal (e.g., see Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3) that the student continues to be symptom free in order for the student to proceed to Step 2.

### **Step 2 – Return to Physical Activity**

- 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 3 – Return to Physical Activity – Individual Sport Specific Physical Activity**

- 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.

### **Step 4 – Medical Examination**

- Parent/guardian must provide the school principal with written documentation from a medical doctor or nurse practitioner (e.g., completed Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3) 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 – Return to Physical Activity.
- Written documentation (e.g., Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3) is filed (e.g., in the student’s OSR) by the principal.
  - Teacher or staff lead communicates with parent/guardian that the student has successfully completed Steps 2 and 3 (see Documentation for a Diagnosed Concussion – Return to Learn/Return to Physical Activity Plan – C-3).

### **Step 5 – Return to Physical Activity – with Limited Contact**

- Activity – Full participation in regular physical education/intramural/interschool activities in non-contact sports. Full training/practices for contact sports.
- 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 – Return to Physical Activity - Competition**

- Activity – Full participation in contact sports.
- Restrictions – None.

### **Definitions:**

**Concussion** (as per the *2013 Ontario Physical Education Safety Guidelines*)

- 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.

**Concussion Diagnosis** – 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.

<u>CROSS REFERENCE</u>	<u>DATE REVIEWED</u>	<u>LEGAL/MINISTRY OF EDUCATION REFERENCE</u>
RRDSB Concussion Protocol-Parent Information Booklet  Fact Sheet for Parents Fact Sheet for Students Fact Sheet for Coaches  Ontario Physical and Health Education Association (OPHEA)	April, 2015	