



## **Bishop's College School Concussion Protocol**

The Bishop's College School (BCS) concussion protocol was developed to help manage and support the recovery of our students who have a suspected or who have been diagnosed with a concussion. This protocol follows the recommendations from the Canadian Guideline on Concussion in Sport (Parachute Canada, 2017) and Consensus Statement on Concussion in Sport (McCrory et al., 2017).

The BCS Concussion Protocol is reviewed annually by our "Concussion Team" and updated as new research becomes available. Our "Concussion Team" is comprised of representatives from our athletics, health services, academic, and student life departments.

The goal of this protocol is to ensure the safety of our students and to coordinate rehabilitation following a concussion among the different aspects of student life (i.e. class work, homework, athletics, and extracurricular activities). We aim to provide efficient management in a safe environment.

### **What is a concussion?**

A sports-related concussion (SRC) is defined by 2017 Concussion in Sport Group as a *traumatic brain injury induced by biomechanical forces. Several common features that may be utilized in clinically defining the nature of a concussive head injury include:*

- *SRC may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head.*
- *SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.*
- *SRC may result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.*
- *SRC results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged.*

*The clinical signs and symptoms cannot be explained by drug, alcohol, or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction, etc.) or other comorbidities (e.g., psychological factors or coexisting medical conditions).*

McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847.

Education is a major component to the prevention, recognition and management of concussions. Our concussion protocol and the Concussion Recognition Tool 5 is reviewed annually at our school opening for teachers and coaches. High risk students have pre-season education sessions and are provided pre-season concussion education sheets. Parents/guardians are provided additional resources at their request. Health care professionals are provided the opportunity to pursue continued education as new research becomes available.

## **Recognition**

If a health care professional is not present at the event, the student should be referred to a health care professional immediately. Teachers and coaches should refer to the Concussion Recognition Tool to help assist in decision making. If any red flags, spinal injury or more serious traumatic brain injuries are suspected, 911 should be immediately contacted.

If a student self-reports concussion-like symptoms, regardless of the moment of impact being noticed by coach or health care team member, the student will be evaluated by a member of the health care team.

If a health care professional is present, the student is identified, removed from play and a Sports Concussion Assessment Tool 5<sup>th</sup> Edition (SCAT5) or Child SCAT5 is completed. If a student is suspected of having a concussion the process of reporting a concussion, as seen below, will take place.

If a student is suspected or diagnosed with a concussion happens off campus or outside of BCS activities, parents/guardians are expected to contact a member of the health care team.

## **Reporting A Concussion**

Once the health care team is notified or has identified a suspected/diagnosed concussion they will inform the following:

- Director of Academics – Marie-France Labelle 819-570-7542 x252
- Enrichment Centre – Shelley Gardner-Bray 819-566-0238 x213
- Houseparent
- Teachers
- Coaches
- Advisor

Parents/guardians will be contacted by student directly. In specific cases where additional medical evaluation is indicated, parents/guardians will be notified on a case by case basis.

## **Return-to-Learn (RTL) Strategy**

The Return-to-Learn (RTL) Strategy is used to guide a student through a gradual return to full school participation. An initial period of 24-48 hours of rest is recommended before starting the Return-to-Learn. We recognise that concussions have different levels of severity and types of symptoms, resulting in a different rate of progression for each student. If the student experiences new or worsening symptoms at any stage, they should return to the previous stage.

### **Return-to-School Strategy: Graduated Approach**

Stage	Aim	Activity	Goal of each step
1	Daily activities at home that do not give the student athlete symptoms	Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.	Gradual return to typical activities
2	School activities	Homework, reading or other cognitive activities outside of the classroom.	Increase tolerance to cognitive work.
3	Return to school part-time	Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.	Increase academic activities.
4	Return to school full-time	Gradually progress	Return to full academic activities and catch up on missed school work.

McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847.

In recognizing the clinical differences in each case the return to learn strategy is individually coordinated by the health care team, Enrichment Center and Director of Academics.

Students: communicate directly with the health care team on a daily basis

Health care team: reports changes in students' progression and/or limitations to the Enrichment Center and is a point of contact for parents and houseparents

Houseparents: support and remain in contact with health care team as necessary

Enrichment Center: communicates with student's teachers and Director of Academics regarding any required accommodations

If the student is a day student, their parents/guardians will update the health care team as the situation requires.

## **Return-to-Play (RTP) Strategy**

The following RTP Strategy is used to guide athletes, coaches, and health care professionals to make a gradual return to their sport. An initial period of 24-48 hours of rest is recommended before starting the RTP. There must be a minimum of 24 hours without symptom exacerbation before progressing to the next stage. If the student begins to experience new or worsening symptoms at any stage, they must return to the previous stage. The student must have successfully completed the Return-to-Learn strategy and been cleared to return to sports prior to progressing to stage 5 and 6. Depending on the student's symptom severity and previous concussion history the student may be cleared by a physiotherapist. If the student does not fit the criteria to be cleared by a physiotherapist, they must be cleared to return to contact by a medical doctor or nurse practitioner.

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms.	Gradual re-introduction of work/school activities.
2	Light aerobic activity	Walking or stationary cycling at slow to medium pace. No resistance training	Increase heart rate.
3	Sport-specific exercise	Running or skating drills. No head impact activities.	Add movement.
4	Non-contact training drills	Harder training drills, i.e. passing drills. May start progressive resistance training.	Exercise, coordination, and increased thinking.
5	Full contact practice	Following medical clearance	Restore confidence and assess functional skills by coaching staff.
6	Return to sport	Normal game play	

McCroly et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847.

Students are required to report to a health care team member daily to guide a safe and effective RTP. A medical clearance letter will be completed prior to returning to a full contact practice (stage 5 of RTP). If the student will be absent from campus for a prolonged period during their recovery (i.e. school breaks) a line of communication will be established by health care team. In the case where the student will not be returning to campus before the completion of a RTL or RTP the health care team will ensure proper follow up plan is communicated.

If a student experiences persistent symptoms (beyond 4 weeks), an appropriate referral will be arranged with the coordination of the student's parents/guardians.