

MHRAA
Concussion Policy and Return To Play & Learn Protocol
2016/17

Purpose

The expectation of excellence is rooted in the traditions of Most Holy Redeemer. As an elite academic and athletic institution, it is our mission to deliver a high caliber of care in order to protect and support student athlete safety and well-being. The purpose of the concussion policy and protocol is to implement precautionary measures through: concussion awareness and education, early concussion detection, and proper concussion recovery.

Definitions

Concussion: A concussion is defined as a complex patho-physiological process affecting the brain, induced by traumatic biomechanical forces. Several common features that incorporate clinical, pathologic and biomechanical injury constructs that may be utilized in defining the nature of a concussive head injury include:

- 1) Concussion may be caused either by a direct blow to the head, face or neck or a blow elsewhere on the body with an “impulsive” force transmitted to the head.
- 2) Concussion typically results in the rapid onset of short-lived impairment of neurologic function that resolves spontaneously.
- 3) Concussion may result in neuro-pathological changes but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury.
- 4) Concussion results in a graded set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course. In a small percentage of cases, however, post-concussive symptoms may be prolonged.
- 5) No abnormality on standard structural neuro-imaging studies is seen in concussion.

Second Impact Syndrome: Second impact syndrome (SIS) refers to catastrophic events which may occur when a second concussion occurs while the athlete is still symptomatic and healing from a previous concussion. The second injury may occur within days or weeks following the first injury. Loss of consciousness is not required. The second impact is more likely to cause brain swelling with other widespread damage to the brain. This can be fatal. Most often SIS occurs when an athlete returns to activity without being symptom free from the previous concussion.

The suspected diagnosis of concussion can include one or more of the following clinical domains:

- 1) Symptoms-somatic (eg, headache), cognitive (eg, feeling like in a fog) and /or emotional symptoms.
- 2) Physical signs (eg, loss of consciousness, amnesia).
- 3) Behavioral changes (eg, irritability).
- 4) Cognitive impairment (eg, slowed reaction times).
- 5) Sleep disturbance (eg, drowsiness).

If any one or more of these components is present, a concussion should be suspected and the appropriate management strategy instituted.

Education

All coaches, assistant coaches, athletic program support staff, physical education teachers, and concussion team leaders shall complete a concussion training course **annually**. An Athletic Head Injury Training program such as the National Federation of State High Schools Association “Concussion in Sports” training program or a comparable program will meet this requirement.

All athletes and parents/guardians will be required to attend a mandatory pre-season concussion education presentation. All athletes and parents/guardians will be presented the Most Holy Redeemer Concussion

Policy and Return to Play Protocol and will be required to sign the IHSA Sports Medicine Acknowledgement & Consent Form.

Concussion Committee

MHRAA will put in a place a committee to oversee this protocol and make sure it's procedures are being reviewed and followed. Committee will consist of, at least, Concussion Committee Team leader, faculty member, parent or coach, and one health care professional (doctor, nurse, etc)

Baseline Testing

Baseline testing will be conducted prior to the beginning of each sports respected season for all athletes 4th grade through 8th grade. An athlete playing multiple sports (football, basketball) will have one baseline test recorded and that baseline score will be used for the entire year for all sports. MHR will use the King-Devick Test In Association with Mayo Clinic to conduct our baseline testing. The KD test is administered on an I-Pad and records the athletes times reading a series of numbers on the screen. All baseline scores will be stored on the I-Pad and will be accessible with system administrator access

On-Site Practice/Game Evaluation Process

The on-site coach's will watch for potential head injuries during practice and games. Coaches will be responsible for evaluating and administering the proper treatment plan for athletes that may have sustained a concussion. If the Athletic Trainer from the visiting team's school is present, he/she may choose to administer the treatment plan as they deem appropriate (e.g., football game held at local high school that is providing athletic trainers.)

- 1) Sideline Evaluation-no Loss of Consciousness
 - a. Coaches will use the King-Devick Test sideline test for athletes they suspect of sustaining a concussion.
 - b. A failure of the above assessment will result in the athlete being immediately removed-from-play until medically cleared.
 - c. The coach or an assigned representative from the coach will call/text/email the players parents and deliver an oral or written report of the incident on the same day of the incident. This will be done even if the player passes the baseline test
 - d. The coach or an assigned representative from the coach will call/text/email the MHR Concussion Team Leader and deliver an oral or written report of the incident within 24 hours. This will be done even if the player passes the baseline test
 - e. Any sideline test that Athletic Trainers from other schools deem appropriate may be used when evaluating athletes.
- 2) Sideline Evaluation-Loss of Consciousness
 - a. Coaches will evaluate the athlete using appropriate sideline test and refer athlete to ER

Documentation Process

Each suspected concussion should be documented by the coach and reported to the MHR Concussion committee Team Leader.

- 1) Games/Practices – Coach should notify parents of suspected concussion based on failed or even a passed King Devick test result the same day of the incident
- 2) Coach should notify Concussion Team Leader of suspected concussion based on failed or even a passed King Devick Test result within 24 hours.
- 3) Concussion Team Leader will communicate with parents first and receive consent to discuss with coaches, teachers, and school administrators for any athletes suspected of sustaining a concussion and monitor their progress.
- 4) An athlete will only return to athletic participation with a note from their doctor clearing them for normal activity that has been submitted for review by the concussion committee.

Return to Play Protocol (Criteria)

The return to play protocol follows a stepwise progression of activity until full return. Generally each step takes 24 hours to complete. **If at any point the athlete has symptoms of a concussion return during the progression, he/she must return to Day One of the protocol.**

****A written release must be provided to the Coach from the treating physician before the Return to Play Protocol can begin.****

- 1) Concussion with no Loss of Consciousness
 - a. Release from treating physician.
 - b. *Day one* -Asymptomatic for 24 continuous hours AND a return to baseline normal range.
 - c. *Day two* -Light aerobic exercise (e.g., stationary bike for 10-15 minutes).
 - d. *Day three*-Sport specific conditioning. Goal is to have athlete sweat and increase heart rate.
 - e. *Day four*-Non-contact training drills. Practice with no contact (e.g., no pads in football).
 - f. *Day five* -Full contact practice.
 - g. *Day Six*- Return to full play.
- 2) Multiple Concussions (Second concussion within 6 month period) or Concussion with Loss of Consciousness
 - a. Out of all activity for a minimum of one week (7 continuous days).
 - b. Physician (recommended concussion specialist) visit, King-Devick Test assessment and neuro-cognitive testing (Either ImPACT or any physician approved exam).
 - i. Once these three criteria have been met and the athlete has been cleared by the treating physician he/she may begin the return to play protocol.
 - c. *Day one* -Asymptomatic for 24 continuous hours AND a return to baseline normal range.
 - d. *Day two* -Light aerobic exercise (e.g., stationary bike for 10-15 minutes).
 - e. *Day three*-Sport specific conditioning. Goal is to have athlete sweat and increase heart rate.
 - f. *Day four*-Non-contact training drills. Practice with no contact (e.g., no pads in football).
 - g. *Day five* -Full contact practice.
 - h. *Day Six*- Return to full play.

Return to Learn Protocol (Criteria)

When is a student ready to return to school after a concussion?

A student with a concussion should be seen by a health care professional experienced in evaluating for concussion. A health care professional can make decisions about a student's readiness to return to school based on the number, type and severity of symptoms experienced by the student. The health care professional should also offer guidance about when it is safe for a student to return to school and appropriate levels of cognitive and physical activity. Once a health care professional has given permission for the student to return to the classroom, school professionals can help monitor him/ her closely. With proper permission, school professionals can confer on their observations and share those observations with the family and other professionals involved in the student's recovery

Providing appropriate support for a student returning to school after a concussion requires a collaborative team approach.

1) The team should include:

- A) The student: The affected student should be "in the loop," and encouraged to share his/ her thoughts about how things are going, and symptoms he or she is experiencing. The student should receive feedback from the rest of the team that is appropriate to his/her age, level of understanding, and emotional status.
- B) Parents/Guardians: Parents and guardians need to understand what a concussion is, that medical attention is required, that most students will get better, the potential effects on school learning and performance, and the importance of following guidance from their student's health care provider in order to ensure the most rapid and complete recovery possible.

- C) Other caregivers (i.e., sports coaches, after-school or day care providers): People who care for or are responsible for a student after school hours can play an important role in monitoring participation in after-school activities and observing any changes in symptoms.
- D) Physician and/or other health care professional: Health care professionals involved in the student's diagnosis and recovery should provide an individualized plan for a student returning to school to help manage cognitive and physical exertion following a concussion. As a student recovers, health care professionals can help guide the gradual removal of academic adjustments or supports that may be instituted as part of the recovery process.
- E) All teachers interacting with the student (including the physical education teacher): Teachers can often help observe changes in a student, including symptoms that may be worsening. Teachers are also in a position to interact regularly with the student's parents, thereby providing a channel to obtain and share information with them about the student's progress and challenges.
- F) School principal or other school administrator: The school principal or administrator should appoint the internal members of the team as well as a "case manager" to ensure adequate communication and coordination within the team. The administrator will also be responsible for approving any adjustments to the student's schedule and communicating policies on responding to students who have had a concussion (e.g., return to play policy).

2) When students return to school after a concussion, school professionals should watch for:

- a) Increased problems paying attention or concentrating
- b) Increased problems remembering or learning new information
- c) Longer time needed to complete tasks or assignments
- d) Difficulty organizing tasks or shifting between tasks
- e) Inappropriate or impulsive behavior during class
- f) Greater irritability
- g) Less ability to cope with stress
- h) More emotional than usual
- I) Fatigue
- j) Difficulties handling a stimulating school environment (lights, noise, etc.)
- k) Physical symptoms (headache, nausea, dizziness)

Remember, a student with a concussion should NEVER return to sports, PE class, or other physical activity until a health care professional with experience in evaluating for concussion says the student is no longer experiencing symptoms and it is OK to return to play. Comprehensive information and training modules for athletic coaches and health care professionals are available.

For more information visit www.mhraa.com