

Washington International School Concussion Management Program

Policy

The goal of the concussion management program at WIS is to ensure the health and safety of all WIS students. The program aims to provide information to prevent, recognize and respond to possible head injuries. The program aims to effectively manage a concussion that occurs either at school or during a non-school event. This includes ensuring proper diagnosis, allowing adequate time to heal and providing supportive services until the student is symptom-free and eligible to return to academic, recreational, and athletic activities.

General Concussion Information

A concussion, also known as a mild traumatic brain injury, is defined as: “a traumatic injury to the brain causing a change in mental status at the time of the injury, such as feeling dazed, disoriented or confused, which may or may not involve a loss of consciousness resulting from

- A fall
- A blow or jolt to the head or body
- The shaking or spinning of the head or body
- The acceleration and deceleration of the head” (1)

Concussions can occur in any sport, recreational activity, or as the result of an accident. All head injuries are considered serious and any WIS student who sustains a head injury will be removed from the activity and evaluated. Student athletes will immediately be removed from athletic play and assessed for signs and symptoms of a concussion. A concussion is considered serious at any severity and most will occur without loss of consciousness. (2) The severity of a concussion is determined by several factors: the nature of the head injury, the burden on the student, and the duration of the clinical post-injury symptoms. (3)

Parents, students, and coaches should become familiar with the signs and symptoms of a concussion and how to respond if a concussion occurs. Student athletes will often minimize symptoms or underreport injuries; this is often the case with concussions. Recognition and appropriate response to a head injury at its onset, regardless of the circumstances causing the injury, can prevent further injury.

Most students who experience a concussion can recover completely as long as they do not return to all activities prematurely. The conservative management of all concussions is critical to the developing brain. There is a period of time following a concussion when the brain is particularly vulnerable to further injury. A secondary head injury to a student who has not fully healed can have significant, cumulative, and possibly catastrophic consequences. Any WIS student sustaining a second head injury within a short period after having been diagnosed with a concussion will be removed from the activity. The parents will be notified of the need for an immediate evaluation by the student’s Physician and the need for a school plan for the student. (4)

Signs and symptoms of concussion vary depending on the individual student, the most common signs and symptoms that may be present at or after the time of injury are listed below:

Concussion Signs and Symptoms

Signs Observed by Others

Appears dazed or stunned
Is confused about assignment
Forgets instruction
Is unsure of game, score, or opponent
Moves clumsily
Answers questions slowly
Loss of consciousness (even briefly)
Exhibits personality changes
Unable to recall events prior to hit or fall
Unable to recall events *after* hit or fall

Symptoms Reported by Individual

Headache or “pressure” in head
Nausea or vomiting
Balance problems or dizziness
Double or blurry vision
Sensitivity to light or noise
Feeling sluggish, hazy, foggy, or groggy
Concentration or memory issues
Confusion
Change in sleep patterns
Expresses that he/she is just “not feeling right” or is “feeling down” (5)

Recognition and Evaluation of Head Injuries

All students suspected of having sustained a concussion, including those incurred during a non-school event, are required to be evaluated by a health care provider trained in assessing concussions. If a physician has diagnosed a concussion, all instructions and/or restrictions must be provided to the School Nurse in writing from the physician. These instructions must be provided to the School Nurse at the time the student returns to school.

If a physician has evaluated a student and the evaluation has ruled out a concussion, this information must be provided to the School Nurse in writing from the physician. The medical guidance must be provided to the School Nurse at the time the student returns to school.

Any student who is suspected of sustaining a concussion during a school-based activity, free play, or an interscholastic game or practice shall be immediately removed from the activity by her/his Coach, the Athletic Trainer, School Nurse, or Teacher/Staff Member. All students removed from play will immediately be evaluated by the School Nurse or Athletic Trainer. Components of the SAC (Standardized Assessment of Concussion) tool (6) will be utilized during the assessment. This assessment will occur in the Health Office or at the sidelines and if the results of the evaluation indicate signs of a concussion, the student will not be allowed to return to play on that day. Parents will immediately be contacted and will be responsible for having the child seen by a healthcare provider as soon as possible.

In cases of severe concussions that occur during school hours and activities, 911 will be called for immediate transport to the hospital. If the student’s parent/guardian is not present at the time of this call, a School Administrator or designee will accompany the student to the hospital until her/his family members arrives.

Prevention and Education

On an annual basis, prior to participating in any extracurricular athletic activity or PE class, each student athlete in Grades 6 - 12 and the student's parent or guardian is required to thoroughly review the WIS Concussion Management Program document. Every parent or guardian is required to acknowledge that he or she has received, reviewed and understood the information by providing an electronic signature on the Concussion Program component of the Magnus Health File. Student athletes will also be required to provide a signature attesting to the fact that they have received and reviewed the WIS Concussion Management Program. In order to participate, a student signature will be required at the time the student begins interscholastic sports practices.

On an annual basis, parents of students in PreSchool – Grade 5 are required to thoroughly review the WIS Concussion Management Program document and acknowledge that they have done so by providing an electronic signature in their child's Magnus Health Record.

All Grade 6 students receive a concussion education session at the beginning of the academic year. This session is provided by the PE Department in collaboration with the Athletic Trainer and the School Nurse.

All student athletes receive an annual concussion review session at the beginning of the athletic season. These reviews are conducted by the Athletic Trainer in collaboration with the Coaches.

Training

All coaches and PE Department faculty are required to successfully complete the National Federation of State High School Associations (NFHS) **Concussion in Sports** online training and certification program. This CDC (Centers for Disease Control) endorsed program provides coaches with information and tools to utilize as they work with students athletes.

ImPACT Testing (7)

WIS utilizes the ImPACT baseline neurocognitive testing program in Grades 6 – 12. This is not a tool for diagnosing a concussion. This component of the concussion management program provides a non-invasive, computerized, pre-concussion baseline test to assess specific functions that can be affected by a head injury. The pre-test provides baseline indicators against which a comparison can be made after a concussion.

Post-concussion testing is conducted at least 24 hours after the initial injury, but is most frequently utilized after all symptoms have resolved. This program is one tool that assists in individualizing the recovery program for each student. Other assessment tools include balance tests or BESS tests.

Return to Academics

Each concussed student's response to the injury and the recovery is individualized. Post-concussion symptoms may interfere with the student's ability to do academic work. The goal is to support the recovery of the student by establishing a balance between the need for rest and the academic workload. An individualized plan allows for appropriate, temporary, evolving accommodations to be put into place.

This plan is developed collaboratively between the student, the student's parents, the school nurse, the student's Physician(s), the student's Advisor, Teachers, and division Principal. Specific accommodations will be gradually removed in consultation with the student's Physician or concussion specialist.

Return to Play Grades 6 - 12

Student-athletes who have been diagnosed with a concussion by their Physician must adhere to the WIS Return to Play protocol in order to safely return to sports participation, whether it be participating in PE class or on an athletic team. Even with written clearance from a licensed health care provider, the protocol must be completed before a student may return to PE and/or interscholastic athletics.

The Return to Play protocol will be conducted and supervised by the Athletic Trainer in collaboration with the PE Department, Athletic Director and the School Nurse. All students will begin the process when they have been symptom-free for a minimum of 72-hours post-diagnosis of a concussive episode. The following steps shall be met by a student in order complete a return to athletic program:

- 1) The student shall be symptom-free at rest and in activities of daily living
- 2) The student must be symptom-free with cognitive exertion and must have fully returned to academics.
- 3) The ImPACT test will be administered and the score with equal or exceed the baseline test results.
- 4) The student will have a physical assessment regarding balance and a VOMS test (8)
- 5) If the student remains symptom-free with progressive physical exertion, she/he will move to the next stage. If the students become symptomatic, the activity will cease and the same stage of activity will resume in 24 hours. Any concerns that arise shall be shared with the parents and immediate follow-up by the student's healthcare provider will be recommended.

All stages utilize controlled, monitored light cardiovascular activity and weight training and the process is based on the principle of "expose and recover" to exercise without incident.

The program is composed of stages, with one stage per day. Some stages may last longer.

- Stage 1 – No activity
- Stage 2 – Light aerobic exercise
- Stage 3 – Moderate aerobic activity
- Stage 4 – Non-contact, sport specific drills
- Stage 5 – Full contact practices or full return to PE activities
- Stage 6 – Normal game play

Once the student has successfully completed the Return to Play protocol, all normal athletic activities may resume.

Return to Play – Primary School

The Primary School adheres to the recovery stages outlined in the Children's National Medical Center

Safe Concussion Outcome Recovery & Education SCORE Program, which is specifically designed to manage the recovery from concussion in children ages 4-12. (9) Successful advancement through the return to school and the return to play protocol will be individually determined by the child's physical presentation at home and at school as assessed by the child's parents, treating Physician and School Nurse, with feedback from classroom and PE teachers.

As the Primary School student advances through each of the stages, any return of active headache or other signs of activity intolerance will require a regression to the prior stage at which the student was symptom free.

- Stage 1 - Home recovery until headache free at rest.
- Stage 2 - Return to classroom, but no physical activity (may need to limit screen time and testing).
- Stage 3 - Light activity: modified recess allowing for walking and light running, but no ball sports such as soccer, basketball or football. No climbing.
- Stage 4 - Return to PE , recess play and Auxiliary Programs activities with prohibition from ball sports and climbing only.
- Stage 5 - Return to full PE, and non-restricted recess play and Auxiliary Program sports.

FOOTNOTES

- (1) DC Athletic Concussion Protection Act, Oct. 20, 2011, D.C. Law 19-22, § 2, 58 DCR 6506
- (2) **Heads Up Toolkit**. Centers for Disease Control, n.d. Web.
- (3) Sady, Maegan, Christopher Vaughan, and Gerald Gioia. "School and the Concussed Youth." **Physical Medicine Rehabilitation Journal** 22.4 (2011): 701-19. Web. 17 Apr. 2017.
- (4) McCrory, Paul, Willem Meeuwisse, Jiri Dvorak, Mark Aubrey, Mick Molloy, and Robert Cantu. "Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport Held in Zurich." **Journal of Athletic Training** 44.4 (n.d.): 434-48. Web. July-Aug. 2009.
- (5) **tbi_factsheet_nurse**. Centers for Disease Control, n.d. Web.
- (6) McCrea, M., J. Kelly, and C Assessment of Randolph. **Standardized Assessment of Concussions (SAC): Manual for Administration, Scoring and Interpretation**. Waukesha: CNS, 1996. N. pag. Print.
- (7) "Concussion Baseline Testing."
www.upmc.com/services/sports-medicine/services/concussion/baseline-testing/pages/baseline-testing.aspx?utm_source=vanity+url&utm_medium=offline&utm_content=baseline+training&utm_campaign=sports+medicine. University of Pittsburg, n.d. Web.
- (8) "VOMS Exam." **ImPACT Test**. N.p., n.d. Web. 17 Apr. 2017.
- (9) **Ace_care_plan_school**. Centers for Disease Control, n.d. Web