

## **School of the Holy Child Concussion Guidelines and Procedures**

### **Definition**

A concussion is a brain injury and is defined as a complex pathophysiological process affecting the brain, induced by biomechanical forces. Several common features include:

1. Concussion 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.
2. Concussion typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, symptoms and signs may evolve over a number of minutes to hours.
3. Concussion may result in neuropathological changes, but the symptoms primarily reflect a functional disturbance, rather than a structural injury. As such, no abnormality is seen on standard structural neuroimaging studies.
4. Concussion results in symptoms that may or may not involve a loss of consciousness. Resolution of the symptoms typically follows a sequential course. However, it is important to note that in some cases symptoms may be prolonged.

Second Impact Syndrome refers to catastrophic events which may happen when a second concussion occurs while an athlete is still symptomatic and healing from a previous concussion. The second injury may occur within days or weeks following the initial 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 play without being symptom-free from the previous concussion.

### **Concussion Education**

Specific concussion education is provided for members of the Holy Child Community.

*Students and Parents* are provided with a Concussion Fact Sheet during preseason. Before being allowed to participate, students and parents must read and sign the Concussion Awareness Statement. The Concussion Fact Sheet is available online throughout the year, along with this policy and the Concussion Home Care Instructions. Additional information on head injuries and concussions may be found:

- On the CDC website <https://www.cdc.gov/headsup/>
- On the NY State Department of Health Website:  
[https://www.health.ny.gov/prevention/injury\\_prevention/concussion.htm](https://www.health.ny.gov/prevention/injury_prevention/concussion.htm)

*Coaches* must complete a NYS Department of Education approved online training course every two years.

- The preferred course is the Concussion In Sports-V2.0 from the National Federation of State High School Associations training. This course may be accessed at the following website: <https://nfhslearn.com/courses/61064/concussion-in-sports>

- Alternately, Coaches may complete the CDC Heads Up to Youth Sports online concussion training course. This course may be accessed at the following website: <https://www.cdc.gov/headsup/youthsports/training/index.html>

The certification for each coach is kept on file by the Athletic Trainer.

*The School Nurse and Athletic Trainer* complete the CDC Heads Up to Clinician training online every two years. This course may be accessed at the following website:

<https://www.cdc.gov/concussion/headsup/clinicians/>

This certificate is kept on file by the Athletic Director.

*Administrators and Teachers* attend a concussion information session during an All School Meeting once per year. This session is led by the Athletic Trainer.

Content of concussion education will include, but is not limited to:

- Concussion definition
- Signs and symptoms
- How these injuries may occur
- Prevention methods
- Guidelines for returning to school and activity

### **Concussion Management Team**

The concussion management team is comprised of:

- Director of Athletics
- Athletic Trainer
- School Nurse
- School Neuropsychologist

Direct communication will occur between the members of the concussion management team, student, and parent regarding the injury and the recovery process.

Additional school personnel may be notified in the event of a concussion, including:

- Head of School
- Head of Upper School
- Head of Middle School
- School Counselor
- Learning Specialist
- Class Deans
- Teachers

School personnel will be notified on a case by case basis. Communication between the Concussion Management Team and School Personnel is often necessary, as students may require accommodations in class or work load throughout their recovery.

## **Baseline Testing**

All students (student-athletes and those who are in PE classes) are required to complete baseline testing; School of the Holy Child uses the ImPACT test to measure a baseline test for every girl.

- In Grades 5-8, the baseline is administered every year; testing is administered by the PE teachers during PE class the first week of school.
- In Grades 9-12, the baseline is administered every other year. The athletics department may elect to test some students more frequently, particularly those with complicated or multiple concussion history.
  - Athletes complete baseline testing during preseason and the test is administered by the Athletic Trainer.
  - All other upper school students complete the baseline in PE class under supervision of the PE Teacher.

If a student experiences a head injury, she will take a post-injury ImPACT test after she is symptom free. She may also be asked, at the discretion of the athletic trainer, to take a post-injury test during her recovery. The baseline and post-injury test results will be used as part of a larger assessment to determine the athlete's readiness to return to activity. It is important to note that test results are not a stand alone tool to diagnose a concussion and test results alone are not sufficient to clear an athlete. Baseline and post-injury test results are reviewed by the School Neuropsychologist and a recommendation is provided to the Athletic Trainer regarding readiness to return to play. Test results may be provided to the student's physician on a case by case basis.

## **Concussion Identification and Evaluation**

Any student suspected of having a concussion, either based on the disclosure of a head injury, observed or reported symptoms, or by sustaining a significant blow to the head or body, must be immediately removed from athletic activity and physical activities. The student must be monitored and supervised until evaluated by a medical professional, or until she is released to her parents or guardian for supervision. If a concussion is suspected, an attempt to contact her parents will be made as soon as possible. No athlete will be allowed to return to play the day of injury.

The emergency action plan will be activated in the following situations:

- Prolonged loss of consciousness
- Focal neurological deficit suggesting intracranial trauma (e.g. weakness in extremity, paralysis)
- Repetitive emesis
- Persistently diminished/worsening mental status or other neurological signs/symptoms
- Spine Injury

In non-emergency situations, the athletic trainer will use the SCAT 3 evaluation to assess athletes. The school nurse will be notified regarding any suspected concussions. In the case of visiting athletes, the athletic trainer from the visiting school will be notified.

A student evaluated for a concussion by the nurse or athletic trainer must be evaluated by a physician. No student will return to athletic activity until she has been symptom free for at least 24 hours and has been evaluated by a physician. Students must turn in a written and signed note from the physician to the School Nurse and/or Athletic Trainer. Students diagnosed with a concussion should regularly report to the School Nurse and/or Athletic Trainer for assessment of symptoms.

### **Post-Concussion Management and Return to Play**

Students who have been diagnosed with a concussion are required to have both physical and cognitive rest.

#### *Cognitive Rest*

No classroom activity should be completed the same day as the concussion. Students should avoid activities that require concentration or mental stimulation following the concussion. Students should gradually return to classroom activity and/or studying as tolerated. Additional school accommodations may be necessary while a student is recovering; these are determined on a case-by-case basis and the concussion management team will work with physicians, teachers, and administrators to communicate necessary accommodations.

Examples of cognitive rest include, but are not limited to:

- Modified school day
- Testing accommodations (extended time, oral exams, etc.)
- Limited screen time
- Working for short periods of time and taking breaks as needed
- Avoiding over-stimulating environments (concerts, sporting events, etc.)

#### *Physical Rest*

Students diagnosed with a concussion will not be permitted to participate in PE, athletics, or other physical activity at school (e.g. Powder Puff, Gryphon Day) until they have met all the requirements for clearance and completed the Return to Play Protocol.

The requirements for clearance are as follows:

- Student must be symptom-free for a minimum of 24 hours.
- Student must turn in a clearance note from a physician to the School Nurse or Athletic Trainer.
- Student must take the post-injury ImPACT test; the score must be on par with her baseline (or appropriate norms if no baseline is available). Test results are reviewed and approved by the School Neuropsychologist. In the instance that the test results are not

on par with her baseline, she must wait a minimum of 24 hours before taking the test again.

Once these conditions have been met, students must complete a supervised, gradual Return to Play Protocol. Each step is completed in a school-supervised setting. The Athletic Trainer works individually with each student to guide her through the Return to Play Protocol. Coaches, PE Teachers and other appropriate school personnel may assist the Athletic Trainer with supervision throughout the progression. It is imperative that students check in daily with the Athletic Trainer throughout the Return to Play Protocol. The Athletic Trainer will communicate with parents regarding the progress of their daughter.

Each step has a 24-hour time frame. If any post-concussion symptoms occur during the stepwise program, the student will drop back to the previous asymptomatic level and try to progress again after 24 hours of rest have passed.

The steps of Return to Play are as follows:

- Step 1 – Low impact, non-strenuous activity, such as walking or riding a stationary bike.
- Step 2 – Higher impact, higher exertion, and moderate aerobic activity, such as running or jumping rope.
- Step 3 – Sport specific non-contact activity. Low resistance weight training with a spotter can be completed.
- Step 4 – Sport specific activity, non-contact drills.
- Step 5 – Full contact training drills and intense aerobic activity.
- Step 6 – Return to full activities without restrictions.

Students may not take medications to treat symptoms (e.g. tylenol, acetaminophen, advil, ibuprofen) during the clearance or return to play.

### **Persistent Symptoms**

Some students (10-15%) will experience prolonged concussion symptoms. Cases of concussion in sports where clinical recovery falls outside the expected 7-10 day recovery should be managed in a multidisciplinary manner by healthcare providers with experience in sports-related concussions. The student may need to see a neurologist with concussion experience, instead of her primary care physician.

### **Safety and Prevention**

Coaches and athletics staff are committed to the safety of athletes. Every effort will be made to reduce occurrences of head trauma by the following measures:

- Reducing gratuitous contact during practice
- Taking a safety-first approach to sport
- Taking the head out of contact
- Coach and student-athlete education regarding safe play and proper technique

**Administrative**

This plan, and corresponding documents (e.g. Concussion Home Care Instructions, educational materials) will be reviewed annually by the concussion management team.