

Houston ISD Athletic Department Guidelines for Concussion Management

Introduction

Approximately 10 percent of all athletes involved in contact sports suffer a Mild Traumatic Brain Injury (concussion) each season; some estimates are as high as 19 percent. Because many mild concussions can go undiagnosed and unreported, it is difficult to estimate precisely the rate of concussion in any sport. Symptoms are not always definite, and knowing when it is safe for an athlete to return to play is not always clear.

The recognition and management of concussions in athletes can be difficult for a number of reasons:

Athletes who have experienced a concussion can display a wide variety of symptoms. Although the classic symptoms of loss of consciousness, confusion, memory loss, and/or balance problems may be present in some athletes with mild traumatic brain injury, there may or may not be obvious signs that a concussion has occurred.

Post-concussion symptoms can be quite subtle and may go unnoticed by the athlete, team medical staff, or coaches. Many coaches and other team personnel may have limited training in recognizing signs of concussions and therefore may not accurately diagnose the injury when it has occurred. Players may be reluctant to report concussive symptoms for fear that they will be removed from the game, and this may jeopardize their status on the team, or their athletic careers.

Houston ISD is in compliance with HB 2038, 82(R). A student that is removed from an athletics practice or competition will not be permitted to practice or compete again until the student had been evaluated and cleared to play through a written statement by a physician. The student's parent or guardian and student will have to return the physician's statement and complete a consent form indicating that they have been informed and consent to the policies established under the return-to-play Concussion protocol; understands the risks associated with the student's returning to play and will comply with any ongoing requirements outlined by the concussion policy; consented to the physician's disclosure of health information that was related to the concussion treatments; and understands the district or school's immunity from liability provisions. The Houston ISD Concussion Oversight Team consists of:

Louis Ray - LAT Head Athletic Trainer
Stephanie Polydore - Athletic Trainer
Theresa Ripperger - Athletic Trainer
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Recovery and safe return-to-play

It is crucial to allow enough healing and recovery time following a concussion to prevent further damage. Research suggests that the effects of repeated concussions are cumulative over time.

Most athletes who experience an initial concussion can recover completely as long as they do not return to contact sports too soon. Following a concussion, there is a period of change in brain function that may last anywhere from 24 hours to 10 days. During this time, the brain may be vulnerable to more severe or permanent injury. If the athlete sustains a second concussion during this time period, the risk of permanent brain injury increases.

Definitions

Concussion or Mild Traumatic Brain Injury (MTBI) - A concussion or MTBI is the common result of a blow to the head or body which causes the brain to move rapidly within the skull. This injury causes brain function to change which results in an altered mental state (either temporary or prolonged). Physiologic and/or anatomic disruptions of connections between some nerve cells in the brain occur. Concussions can have serious and long-term health effects, even from a mild bump on the head. Symptoms include, but are not limited to, headache, amnesia, nausea, dizziness, confusion, blurred vision, ringing in the ears, loss of balance, moodiness, poor concentration or mentally slow, lethargy, photosensitivity, sensitivity to noise, and a change in sleeping patterns. Symptoms can also include a loss of consciousness but many do not. These symptoms may be temporary or long lasting.

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.

Prevention Strategies

Helmets, headgear, and mouth guards do not prevent concussions, but are recommended to prevent skull and facial fractures as well as dental injuries.

1. Insist that safety comes first.
2. Teach athletes the dangers of playing with a concussion.
3. All headgear must be NOCSAE certified.
4. Make sure the headgear fits the individual.
5. For all sports that require headgear, a coach or appropriate designate should check headgear before use to make sure air bladders work and are appropriately filled. Padding should be checked to make sure they are in proper working condition.
6. Make sure athletes wear the right protective equipment for their activity (such as helmets, padding and mouth guards).

Evaluation for Concussion/MTBI

1. At time of injury administer one of these assessment tests:
 - a. Sports Concussion Assessment Tool (SCAT5)
 - b. Graded Symptom Checklist (GSC)
 - c. Sideline Functional and Visual Assessments
 - d. On-Field Cognitive Testing
2. Athlete does not return to a game or practice if he/she has any signs or symptoms of Mild Traumatic Brain Injury (Concussion)
3. Observe athlete for status changes every 15 to 20 minutes.
4. Coach will bring helmet of concussed player to athletic trainer.
5. Doctor Referral
6. Home Instructions
7. Return to Play Guidelines for Parents
8. **Note - If in doubt, athlete is referred to physician and does not return to play.**

Concussion Management

1. Recommended school modifications
 - a. Coach will notify school administrators of the student that he/she has MTBI
 - b. Coach will notify school administrators of post concussion symptoms
 - c. Student may need special accommodations such as limited computer work, reading activities, testing, assistance to class, etc. until symptoms subside
 - d. Student may only be able to attend school for half days or may need daily rest periods until symptoms subside with physician authorization
2. Student must show no signs of post-concussion symptoms before return to play protocol begins.
3. Student will not return to full practice or competition for minimum of 7 days.
4. The treating physician must provide a written statement to the parent and athletic trainer indicating that, in the physician's professional judgment, it is safe for the student to return to play.
5. Student athlete and the parent/guardian have signed the form acknowledging the completion of the return to play guidelines which includes understanding the risks associated with the student athlete's return to play.
6. Athletes that have a history of multiple concussions or that have persistent symptoms or indicating cognitive difficulties following concussion will be referred to neurocognitive assessment with a concussion specialist.

Return to Play Guidelines

Athlete must show no signs of post-concussion symptoms before return to play protocol begins.

1. Athlete activity progressions
 - a. No activity for at least 48-72 hours after injury & athlete is symptom free
 - b. Physician clearance to begin activity
 - c. Light aerobic exercise with no resistance training 10-15 minutes (e.g., walking, stationary bike)
 - d. Moderate aerobic activity with resistance training 20-25 minutes (e.g., running, light weights – No squat, dead lift or bench press)
 - e. Sport specific activity and non-contact training drills. Heavy exertion, at least 30 minutes (e.g., non-contact training or non-contact practice)
 - f. Full practice including light contact activities (e.g., head balls in soccer, sleds in football)
 - g. Full practice – Full contact
 - h. Return to full participation (pending physician clearance)
Note – Athlete activity progression continues as long as athlete is asymptomatic at current level. If the athlete experiences any post concussion symptoms, stop physical activity until symptom free for 24-48 hours. Resume with phase or level in which they were previously asymptomatic.
2. Physician clearance
3. Parent clearance
4. Athletic Trainer clearance