PISD 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 concussion 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 concussion 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.

Pearland ISD is compliant with HB 2038, 82(R).

- A student removed from an athletics practice or competition would not be permitted to practice or compete again until the student has been evaluated and cleared to play through a school-issued written statement by the treating physician (MD or DO credential).
- The student's parent or guardian and student would have to return the physician's statement and complete a consent form indicating that they had been informed and consented to the policies established under the return-to-play protocol.
- Parents and student understand the risks associated with the students' returning to play and would comply with any ongoing requirements outlined by the concussion policy.
- Parents must consent to the physician's disclosure of health information that is related to the concussion treatments.
- And parents understand the district or school's immunity from liability provisions.

The Pearland ISD Concussion Oversight Team includes:

Christina Fry, MS, LAT, ATC- Athletic Trainer
Joseph Eberhardt, M.Ed., LAT, ATC- Athletic Trainer
Thomas Patrey, MS, LAT, ATC, C-PS- Athletic Trainer
Nick Holtgrieve MS, LAT, ATC - Athletic Trainer
Jill Flowers, LAT, ATC- Athletic Trainer
Catherine Windsor, MS, LAT, ATC- Athletic Trainer
Jason Decker, MD- PISD Medical Director
Taggart T. Gauvain, MD- Team Physician
Evan Meeks, MD- Team Physician
Summer Ott, Psy.D.- Neuropsychologist
All Affiliated practicing Athletic Trainers of Pearland ISD

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 concussion are cumulative over time.

Most athletes who experience an initial concussion can recover completely if 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 or longer. 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 or death 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.

Safety Strategies

Helmets, headgear, and mouth guards help prevent skull, neck and facial fractures as well as injuries to the face and teeth.

1. All headgear must be NOCSAE certified and reviewed every 2 years
2. Make sure the headgear is properly fitted to the individual.
3. 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.
4. Make sure helmets are secured properly at all times.
5. Mouth guards should fit and be used at all times.
6. Educate parents, coaches and student athletes on recognizing signs of brain injuries and the treatment process.

Evaluation for Concussion/MTBI

1. At time of injury administer one of these assessment tests:
    a. Sports Concussion Assessment Tool (SCAT 6)
    b. Graded Symptom Checklist (GSC)
2. Observe athlete 15 to 20 minutes and re-evaluate.
3. Athlete does not return to a game or practice if he/she has any signs or symptoms of Mild Traumatic Brain Injury (Concussion).
4. Physician Referral (MD or DO credentialed provider)
5. Home Instructions given to athlete and/or guardian; ensure athlete has a ride home
6. Return to Play Guidelines for Parents are given
7. **Note - If in doubt, athlete is referred to physician** *(MD or DO credential)* **and does not return to play.**

Concussion Management

1. Recommended school modifications:
    a. Notify Nurse, Assistant Principal and Counselor of the student that he/she has a MTBI
    b. Notify Nurse, Assistant Principal and Counselor 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 athlete and the parent/guardian have signed the form acknowledging the completion of the return to play guidelines which includes the understanding of the risks associated with the student athlete's return to play.
3. The treating physician (MD or DO credential) 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.
4. Student must show minimal mild symptoms before return to play protocol begins, unless under physician guidelines for a submaximal exercise program.
5. Student will not return to full practice or competition for a minimum of 7 days.

Return to Play Guidelines

Athlete must stay in Phase I (Rest /Parent Signature Clearance) for a minimum of 48 hours before continuing return to play protocol or beginning a submaximal program.

1. Athlete activity progressions (There must be 24 hours of rest between progression phases)
    I. Rest /Parent Signature Clearance
    II. Light aerobic exercise with no resistance training *or physician prescribed submaximal program**
    III. Moderate aerobic activity with resistance training
        a. Must have Physician clearance (MD or DO credentials) prior to moving on to Phase IV. Must be symptom free
    IV. Sport specific activity and Non-contact training drills
    V. Full contact training drills can begin after minimum 7 days
    VI. Return to full participation (pending physician clearance)

    Note – Athlete activity progression continues as long as athlete symptoms do not increase. The athlete may be in a phase several days depending on if exacerbation of symptoms is perceived as greater than mild and/or brief. Mild and/or brief exacerbation of symptoms is an increase of no more than 1 point on a 0-6-point scale, for each symptom, lasting less than one hour when compared to baseline value reported prior to physical and cognitive activity. If an athlete is operating under a prescribed submaximal program, the athlete must follow doctor's orders for symptomatic exercise. An athlete may not participate in a submaximal program while experiencing moderate or severe post-concussion symptoms.
2. Athletic Trainer clearance

*In lieu of physician provided submaximal program, athletes prescribed submax exercise will perform monitored cardio activity that does not increase their symptoms for 15-20 min/day.

PEARLAND ISD HEAD INJURY RETURN TO PLAY FORM

Name of Student: _____ Sport: _____ School: _____ Date of Injury: _____

This form must be completed and submitted to the athletic trainer or other person (who is not a coach) responsible for compliance with the Return to Play protocol established by the school district Concussion Oversight Team, as determined by the superintendent or their designee (see Section 38.157 (c) of the Texas Education Code).

Parent/Guardian signs and certifies that he/she:
Has been informed concerning and consents to the student participating in returning to play in accordance with the return to play protocol established by the Concussion Oversight Team. Understands the risks associated with the student returning to play and will comply with any ongoing requirements in the return to play protocol. Consents to the disclosure to appropriate persons, consistent with the Health Insurance Portability and Accountability Act of 1996 (Pub. L. No. 104-191), of the treating physician's written statement under Subdivision (3) and, if any, the return to play recommendations of the treating physician. Understands the immunity provisions under Section 38.159 of the Texas Education Code.

_____ _____ _____
Parent/Guardian Printed Name | Parent/Guardian Signature | Date

Athletic Trainer verifies:
The student has been evaluated by a treating physician selected by the student, their parent or other person with legal authority to make medical decisions for the student. The student has completed the Return to Play protocol established by the school district Concussion Oversight Team. The school has received a written statement from the treating physician indicating, that in the physician's professional judgment, it is safe for the student to return to play.

_____ _____ _____
Athletic Trainer Printed Name | Athletic Trainer Signature | Date

RETURN TO PLAY GUIDELINES

Athletes must complete the following stepwise process prior to return to play following a concussion: Show minimal mild symptoms before return to play protocol begins, unless under a prescribed submaximal program. There must be 24 hours between each phase.

PHASE 1 - Rest/ Parent signature clearance (Minimum 48 hours post injury)

PHASE 2 - Light aerobic exercise *or physician prescribed submaximal program*

PHASE 3 - Moderate aerobic exercise with resistance training ***Date Completed:*** _____

- Obtain Physician clearance (MD or DO credentials) prior to Phase 4. Must be symptom free.

PHASE 4 - Sport-specific training / Noncontact drills

PHASE 5 - Full-contact drills (minimum 7 days post-injury)

PHASE 6 - Game play

Note – Athlete activity progression continues as long as athlete symptoms do not increase. The athlete may be in a phase several days depending on if exacerbation of symptoms is perceived as greater than mild and/or brief. Mild and/or brief exacerbation of symptoms is an increase of no more than 1 point on a 0-6-point scale, for each symptom, lasting less than one hour when compared to baseline value reported prior to physical and cognitive activity. If an athlete is operating under a prescribed submaximal program, the athlete must follow doctor's orders for symptomatic exercise. An athlete may not participate in a submaximal program while experiencing moderate or severe post-concussion symptoms.

PHYSICIAN RECOMMENDATIONS *(MD or DO credentialed provider)*

Returning to School- Classroom Modifications

____ No restrictions (classroom only)
____ Full Days as tolerated
____ Half days as tolerated until _____
____ No school- return: *HALF* days on ____/____/_____; *FULL* days on ____/____/_____
____ Homebound instruction ____ hours per week
____ Postpone exams
____ No more than ____ exams/week
____ Reduced workload (i.e. assign ½ homework problems)
____ Allow frequent breaks. May require quiet area separate from others
____ Make up missed assignments gradually
____ Provide preprinted class notes / allow to obtain notes from peers
____ Tutoring as needed

Returning to Activity/Sport

____ Begin submaximal exercise after 48 hours of rest.
____ Begin Return to Play Protocol (see Guidelines on the left)
____ Begin Return to Play Protocol on ____/____/_____
____ Begin Return to Play Protocol after ____ days symptom free.
____ No activity until follow up on ____/____/_____

Physician's Signature: _____ ***Date:*** _____

Physician's Printed Name: _____

Physician Office Name: _____

Physician's Address*:** _____ ***Phone: _____