

Blum ISD Concussion Management Plan 2022-23

BISD 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, parents, school nurse, 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.

Blum ISD is in compliance with HB 2038, 82(R). A student removed from an athletics practice or competition will not be permitted to practice or compete again until the student has been evaluated and cleared to play through a written statement by the family's physician.

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; understood the risks associated with the student's returning to play and would 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 understood the district or school's immunity from liability provisions. The Blum ISD Concussion Oversight Team includes:

Randall Henderson, DO, Board Certified Family Medicine Clayton Pickering, DO, Board Certified Family Medicine Heather Clinton, RN, FNP-C Sean Campbell, PA-C

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 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.

UIL Definition of Concussion

There are numerous definitions of concussion available in medical literature as well as In... "guidelines" developed by the various state organizations. The feature universally expressed across definitions is that concussion 1) is the result of a physical, traumatic force to the head and 2) that force is sufficient to produce altered brain function which may last for a variable duration of time. For the purpose of this program the definition presented in Chapter 38, Sub Chapter D of the Texas Education Code is considered appropriate:

"Concussion" means a complex pathophysiological process affecting the brain caused by a traumatic physical force or impact to the head or body, which may:

- (A) include temporary or prolonged altered brain function resulting in physical, cognitive, or emotional symptoms or altered sleep patterns; and
- (B) involve loss of consciousness.

Additional Clarification

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.

Manifestation/Symptoms

Concussion can produce a wide variety of symptoms that should be familiar to those having responsibility for the well being of student-athletes engaged in competitive sports in Texas. Symptoms reported by athletes may include: headache; nausea; balance

problems or dizziness; double or fuzzy vision; sensitivity to light or noise; feeling sluggish; feeling foggy or groggy; concentration or memory problems; confusion. Signs observed by parents, friends, teachers or coaches may include: appears dazed or stunned; is confused about what to do; forgets plays; is unsure of game, score or opponent; moves clumsily; answers questions slowly; loses consciousness; shows behavior or personality changes; can't recall events prior to hit; can't recall events after hit.

Any one or group of symptoms may appear immediately and be temporary, or delayed and long lasting. The appearance of any one of these symptoms should alert the responsible personnel to the possibility of concussion.

It used to be believed that a player had to lose consciousness or be "knocked out" to have a concussion. This is not true, as the vast majority of concussions do not involve a loss of consciousness. In fact, less than 10% of players actually lose consciousness with a concussion.

Response to Suspected Concussion

A student athlete shall be removed from a practice or competition **immediately** if a coach, a physician, a licensed health care professional, or the student's parent or guardian or another person who has authority to make legal decision for the student believes the student athlete might have sustained a concussion. Coach means the coach of the student's team.

Coaches are encouraged to use the utmost caution regarding a suspected concussion, including calling the student athlete over to the sideline so that the coach can form a belief that the student may have suffered a concussion. The act of calling a player over to the sideline does not by itself constitute a belief that the student athlete might have sustained a concussion.

Immediate Emergency Referral

Although rare, there are some situations where you will need to call 911 and activate Emergency Medical Systems (EMS). The following circumstances are medical emergencies:

- **1.** Any time an athlete has a loss of consciousness of any duration. While loss of consciousness is not required for a concussion to occur, it may indicate more serious brain injury.
- **2.** If an athlete exhibits any of the following: decreasing level of consciousness, looks very drowsy or cannot be awakened, if there is difficulty getting his or her attention, irregularity in breathing, severe or worsening headaches, persistent vomiting or any seizures.

Evaluation for Concussion/MTBI

- 1. At time of injury administer the Sport Concussion Assessment Tool –SCAT 2
- **2.** Observe athlete; if there are any changes 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. Doctor Referral

If in doubt, athlete is referred to physician and does not return to play until released by physician selected by the student, parent or other person with legal authority to make decisions for that student.

Return to Activity/Play Following Concussion

According to TEC section 38.157:

A student removed from an interscholastic athletics practice or competition under TEC Section 38.156 (believed that they might have sustained a concussion) may not be permitted to practice or compete again following the force or impact believed to have caused the concussion until:

- (1) the student has been evaluated; using established medical protocols based on peer reviewed scientific evidence, by a treating physician chosen by the student or the student's parent or guardian or another person with legal authority to make medical decisions for the student;
- (2) the student has successfully completed each requirement of the return-to-play protocol established under TEC Section 38.153 necessary for the student to return to play;
- (3) the treating physician has provided a written statement indicating that, in the physician's professional judgment, it is safe for the student to return to play; and
- (4) the student and the student's parent or guardian or another person with legal authority to make medical decisions for the student:
 - (A) have acknowledged that the student has completed the requirements of the return-to-play protocol necessary for the student to return to play;
 - (B) have provided the treating physician's written statement under Subdivision (3) to the person responsible for compliance with the return-to-play protocol under Subsection (c) and the person who has supervisory responsibilities under Subsection (c); and
 - (C) have signed a consent form indicating that the person signing:
 - (i) has been informed concerning and consents to the student participating in returning to play in accordance with the return-to-play protocol;
 - (ii) understands the risks associated with the student returning to play and will comply with any ongoing requirements in the return-to-play protocol;
 - (iii) 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 recommendation of the treating physician; and
 - (iv) understands the immunity provisions under TEC Section 38.159.

Return to Play Guidelines

A student athlete, if it is believed that they might have sustained a concussion, shall not return to practice or competition until the student athlete has been **evaluated and cleared in writing by his or her treating physician** and all other notice and consent requirements have been met.

According to the UIL Concussion Management Protocol, following clearance and compliance with the above information, supervised progression of activities should be initiated utilizing the now standardized protocol:

• Student-athlete shall be symptom free for 24 hours prior to initiating the return to play progression.

 Progress continues at 24-hour intervals as long as student-athlete is symptom free at each level. • If the student-athlete experiences any post concussion symptoms during the return to activity progression, activity is discontinued and the student-athlete must be re-evaluated by a licensed health care professional. Phase 1: ☐ No exertional physical activity until student-athlete is symptom free for 24 hours and receives written clearance from a physician and submission of the required documentation following the concussion injury. Phase 2: ☐ Step 1. When the athlete completes Phase 1, begin light aerobic exercise -5 - 10 minutes on an exercise bike, or light jog; no weight lifting, resistance training, or any other exercise. ☐ Step 2. Moderate aerobic exercise - 15 to 20 minutes of running at moderate intensity in the gym or on the field without a helmet or other equipment. ☐ Step 3. Non-contact training drills in full uniform. May begin weight lifting, resistance training, and other exercises. (Verify that UIL Concussion Management Protocol **Return to Play Form** has been completed and signed.) ☐ Step 4. Full contact practice or training.

Subsequent Concussion

☐ Step 5. Full game play.

Any subsequent concussion requires further medical evaluation, which may include a physical examination prior to return to participation. Written clearance from a physician is required as outlined in TEC Section 38.157 before any participation in UIL practices, games or matches.

Potential Need for School/Academic Adjustments & Modification Following Concussion (Return to Learn)

It may be necessary for individuals with a concussion to have both cognitive and physical rest in order to achieve maximum recovery in the shortest period of time. In addition to the physical management noted above, it is recommended that the following be considered:

- Notify school nurse and all classroom teachers regarding the student athlete's condition.
- Advise teachers of post concussion symptoms.
- Student **may** need (only until asymptomatic) special accommodations regarding academic requirements (such as limited computer work, reading activities, testing, assistance to class, etc.) until concussion symptoms resolve.
- Student may only be able to attend school for half days or may need daily rest periods until symptoms subside. In special circumstances the student may require homebound status for a brief period.

Addendum:

When evaluating an individual who has sustained a concussion, always keep in mind that you are evaluating three separate domains of brain function: Physical/Motor, Cognitive, and Behavioral/Emotional. These represent functions of widely different anatomical regions in the brain (although there are cross over/dual function in some areas). Evaluation should focus on each domain separately; never assume that if one domain is symptom free the others will also be without symptoms. Separate evaluation protocols/instruments are employed to assess each domain. Documentation of the method of assessment is always helpful to have for subsequent examiners.

EVALUATION DOMAINS

Dazed/stunned	Cognitive	Behavior/Emotional
Balance difficulties	Amnesia	Irritable
Weakness	Confused/Disoriented	Emotionally
		Unstable/Explosive
Excessive Fatigue	Slowed Verbal Responses	Depressed
Slowed Reactions	Forgets easily	Sleep disturbances
Lack of facial expressions	Difficulty Concentrating	Anxious
	Short Attention Span	Lack of Interest

References:

National Federation of State High School Associations, Suggested Guidelines for the Management of Concussion in Sports; January 2011

University Interscholastic League Implementation Information for Chapter 38, Sub Chapter D of the Texas Education Code, *When In Doubt, Sit Them Out!*; 2012

University Interscholastic League Implementation Guide for NFHS Suggested Guidelines for Concussions and Chapter 38, Sub Chapter D of the Texas Education Code, *When In Doubt, Sit Them Out!*; 2011