



Concussion Guidelines

Introduction

Concussion received by participants in sports activities are an ongoing concern at all levels. Recent interest and research in this area has prompted reevaluations of treatment and management recommendations from the high school to the professional level.

Numerous state agencies throughout the U.S. responsible for developing guidelines addressing the management of concussion in high school student-athletes have developed or revised their guidelines for concussion management. The present document will update the UIL requirements for concussion management in student athletes participating in activities under the jurisdiction of the UIL and will also provide information on compliance with Chapter 38, Sub Chapter D of the Texas Education Code (TEC).

Definition of Concussion

There are numerous definitions of concussion available in medical literature as well as in the previously noted “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.

Concussion Oversight Team (COT):

According to TEC Section 38.153:

'The governing body of each school district and open-enrollment charter school with students enrolled who participate in an interscholastic athletic activity shall appoint or approve a concussion oversight team.

The Katy ISD Concussion Oversight Team

A doctor from the Medical Colleagues of Texas
Assistant Athletic Director- KatyISD
All high school head athletic trainers

Responsible Individuals:

At every activity under the jurisdiction of the UIL in which the activity involved carries a potential risk for concussion in the participants, there should be a designated individual who is responsible for identifying student-athletes with symptoms of concussion injuries. That individual should be a physician or an advanced practice nurse, athletic trainer, neuropsychologist, or physician assistant, as defined in TEC section 38.151, with appropriate training in the recognition and management of concussion in athletes. In the event that such an individual is not available, a supervising adult approved by the school district with appropriate training in the recognition of the signs and symptoms of a concussion in athletes could serve in that capacity. When a licensed athletic trainer is available such an individual would be the appropriate designated person to assume this role. The individual responsible for determining the presence of the symptoms of a concussion is also responsible for creating the appropriate documentation related to the injury event.

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.

Response to Suspected Concussion

According to TEC section 38.156, a student 'shall be removed from an interscholastic athletics practice or competition immediately if one of the following persons believes the student might have sustained a concussion during the practice or competition:

- (1) a coach;
- (2) a physician;
- (3) a licensed health care professional; or
- (4) the student's parent or guardian or another person with legal authority to make medical decisions for the student.'

If a student-athlete demonstrates signs or symptoms consistent with concussion, follow the “Heads Up” 4-Step Action Plan:

- The student-athlete shall be immediately removed from game/practice as noted above.
- Have the student-athlete evaluated by an appropriate health care professional as soon as practicable.
- Inform the student-athletes parent or guardian about the possible concussion and give them information on concussion.
- If it is determined that a concussion has occurred, the student-athlete shall not be allowed to return to participation that day regardless of how quickly the signs or symptoms of the concussion resolve and shall be kept from activity until a physician indicates they are symptom free and gives clearance to return to activity as described below. A coach of an interscholastic athletics team may not authorize a student’s return to play.

Return to Activity/Play Following concussion₁

According to TEC section 38.157:

‘A student removed from an interscholastic athletics practice or competition under TEC Section 38.156 (suspected of having 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 recommendations of the treating physician; and

(iv) understands the immunity provisions under TEC Section 38.159.'

The UIL will provide standardized forms for the Return to Play procedure.

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.

Step 4. Full contact practice or training.

Step 5. Full game play.

Subsequent concussion

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 concussion to have both cognitive and physical rest in order to achieve maximum recovery in 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 studentathlete'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 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

Physical/Motor Cognitive Behavior/Emotional

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

References:

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