

Protocol, Procedures, and Concussion Management Team for the Sports-Related Concussion

Brackett ISD will use the UIL-provided Concussion Management Protocol Return to Play Form as the official school form.

Following clearance and compliance with the above information, supervised progression of activities will be initiated utilizing the following 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.

At Brackett ISD, in order for an athlete to return to play after sustaining a concussion, there must be a SEVEN day period when the athlete is showing no concussion symptoms, AND is able to pass the progressive tests without recurrence of symptoms.

The concussion oversight team at Brackett ISD is comprised of a team physician and the school nurse.

Introduction

Concussions 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 a 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 Concussion Oversight Team shall include a physician and at least one of the following:

1. The School District Employed Athletic Trainer
2. Advance Practice Nurse
3. Neuropsychologist (If available); or
4. a physician assistant

Return to Play (RT P) Protocol

The concussion oversight team has established a return-to-play protocol, based on peer-reviewed scientific evidence, for a student’s return to interscholastic athletics practice or competition following the force or impact believed to have caused a concussion.

1. If at any time during a contest or event a student displays signs and symptoms of concussion the student will be held out of play

immediately.

2. The individual who removes the student from the contest shall notify the Athletic Trainer immediately. Once the Athletic Trainer is notified, the parent/guardian of the student shall be notified.
3. Parents will be instructed to very carefully monitor the student during the first 24 hours after the initial signs of the concussion. Parents will be provided specific information explaining the signs and symptoms of a worsening condition and encouraging parents to take the student to an Emergency Room should any of the signs or symptoms appear during the 24-hour period.
4. Any student who sustains a concussion will be prohibited from athletic participation for at least five days and as many as seven days as determined by the Athletic Trainer.
5. Following the participation prohibition period, the parents should have the student evaluated by their physician of choice. The physician must complete a concussion evaluation instrument which includes the protocol for the student's return to participation. Although not recommended, the evaluation may be completed by the Athletic Trainer or the school nurse at the request of the parent.
6. The student shall not return to participation until the Athletic Trainer confirms that
 - a. student has been evaluated by a treating physician selected by the student's parent;
 - b. student has completed the Return to Play protocol established by the Concussion Oversight Team;
 - c. Athletic Trainer has received a written statement from the treating physician indicating, that in the physician's professional judgement, it is safe for the student to return to play; and
 - d. Athletic Trainer has received the required Return to Play form completed and signed by the student's parent.

Responsible Individuals

At every activity which the activity involves 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 symptom 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 (TEC section 38.156)

A student shall be removed from 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 healthcare 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, the "Heads Up" 4-Step Action Plan shall be followed:

1. The student-athlete shall be immediately removed from game/practice.
2. The student-athlete shall be evaluated by an appropriate health care professional as soon as practicable.

3. The student-athlete's parent or guardian shall be informed about the possible concussion and given information on concussion.
4. 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. A coach of an athletic team shall not authorize a student's return to play.

Return to Activity/Play Following Concussion1(TEC section 38.157)

A student removed from an interscholastic athletics practice or competition under suspicion of having a concussion shall 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 to the person responsible for compliance with the return-to-play protocol and the person who has supervisory responsibilities; 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 and, if any, the return-to-play recommendations of the treating physician; and
 - iv. understands the immunity provisions under TEC Section 38.159.

	Report from Athlete	Test	Pass?	Date
Day 0=	Athlete reports no symptoms	None		
Day 1=	"Has been over 24 hours, symptom free"	SCAT 5 Test		
Day 2=	"Symptom free, and passed prior tests"	Bike 20 min		
Day 3=	"Symptom free, and passed prior tests"	Jog 20 min		
Day 4=	"Symptom free, and passed prior tests"	Jump Rope 5 X 1min		
Day 5=	"Symptom free, and passed prior tests"	Run 10 min. intervals		
Day 6=	"Symptom free, and passed prior tests"	Non-Contact Practice		
Day 7=	"Symptom free, and passed prior tests"	No Restrictions		

Return to Play

If the athlete has a recurrence of symptoms during the progression, the progression starts again from the beginning of the testing process.

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 & Accommodations Following Concussion

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, the concussion management team may:

- Require the student to check in with a member of the C.O.T. on daily basis to evaluate symptoms with a

symptom score chart (available in the appendix of this document) and then make recommendations on activity restrictions for that day. The evaluator will update the other C.O.T. members along with the US/MS administration of the student's status and symptom score. Administration will communicate changes or modifications in the student's condition with the appropriate school staff.

- Recommend a student that falls in the unusual symptom category will be recommended for home rest.
- Notify school nurse and all classroom teachers regarding the student-athlete's condition.
- Advise teachers of post-concussion symptoms.
- Advise teachers and administrators that the 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.
- Advise teachers and administrators that the 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.

Evaluation Domains

When evaluating an individual who has sustained concussion, the person responsible for the evaluation should always keep in mind that he or she is 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 is cross-over/dual function in some areas). Evaluation should focus on each domain separately; the evaluator should 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

Use of the Post-Concussion Symptom Scale: The athlete should fill out the form, on his or her own, in order to give a subjective value for each symptom. This form can be used with each encounter to track the athlete's progress towards the resolution of symptoms. Many athletes may have some of these reported symptoms at a baseline, such as concentration difficulties in the patient with attention-deficit disorder or sadness in an athlete with underlying depression, and must be taken into consideration when interpreting the score. Athletes do not have to be at a total score of zero to return to play if they already have had some symptoms prior to their concussion.

Name: _____ Age/DOB: _____ Date of Injury: _____

Post Concussion Symptom Scale
No symptoms "0"-----Moderate "3"-----Severe "6"
Time after Concussion

<u>SYMPTOMS</u>	Days/Hrs _____	Days/Hrs _____	Days/Hrs _____
Headache	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Nausea	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Vomiting	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Balance problems	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Dizziness	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Fatigue	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Trouble falling to sleep	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Excessive sleep	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Loss of sleep	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Drowsiness	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Light sensitivity	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Noise sensitivity	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Irritability	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Sadness	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Nervousness	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
More emotional	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Numbness	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Feeling "slow"	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Feeling "foggy"	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Difficulty concentrating	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Difficulty remembering	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
Visual problems	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6
TOTAL SCORE	_____	_____	_____

Concussion Grading Scale

Post-Concussion Scale - Quick Reference Tables

Step 1: Look up the Classification range.

Step 2: Consider that the athlete's true score falls in the range of +/- 8 points surrounding the obtained score.

Step 3: Retest the athlete in a few days. If his/her score drops by 10 or more points, this is probably real

improvement. If his/her score gets worse by 2 or more points, this should be taken seriously because athletes rarely get worse over time. In fact, of the 82 players tested twice, only 5% got worse by 5 or more points over the retest interval.

Step 4: Keep in mind that improvement doesn't mean recovery. The tables can be used to determine when an athlete's score falls in the broadly normal range. In our view, athletes who continue to report symptoms outside the broadly normal range, under most circumstances, should continue to rest.

Regular education high school boys

Classification	Raw Scores	Percentile Ranks
Low- Normal	0	40.5
Normal	1-6	49-76
Unusual	7-13	79-90
High	14-21	91-95
Very High	22+	> 95

Regular education high school girls

Classification	Raw Scores	Percentile Ranks
Low-Normal	0	29.4
Normal	1-8	40-75
Unusual	9-17	76-90
High	18-39	91-95
Very High	40+	> 95