

Guidelines for Concussion Management

To comply Texas State Legislature House Bill 2038 (Chapter 38. Sub Chapter D of the Texas Education Code (TEC)) and related UIL mandates, Lake Dallas ISD has implemented this concussion management plan.

Introduction

The Centers for Disease Control (CDC) estimates that there are approximately 300,000 cases of Mild Traumatic Brain Injury (MTBI) or concussions annually in the United States as the result of participation in sports. The Sports Concussion Institute estimates that 10 percent of athletes in contact sports suffer a concussion during a season. A 2006 report estimated that there were 92,000 cases of concussions in American high school sports annually, and that these rates seem to be increasing. Also of concern is the risk of repeated concussions and Second Impact Syndrome to our young athletes. These two problems can have long lasting, and even terminal effects, on the individual. In order to have a standard method of managing concussions to Lake Dallas ISD athletes, the following guidelines are intended to serve as a written protocol for concussion management.

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, brief loss of consciousness, headache, amnesia, nausea, dizziness, confusion, blurred vision, ringing in the ears, loss of balance, moodiness, poor concentration, lethargy, photosensitivity, sensitivity to noise, and a change in sleeping patterns. 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.

What can happen if my child keeps on playing with a concussion?

Athletes with the signs and symptoms of concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves the young athlete especially vulnerable to greater injury. There is an increased risk of significant damage from a concussion for a period of time after that concussion occurs, particularly if the athlete suffers another concussion before completely recovering from the first one. This can lead to prolonged recovery, or even to severe brain swelling (Second Impact Syndrome) with devastating and even fatal consequences. It is well known that adolescent or teenage athletes will often under-report symptoms of injuries, and concussions are no different. As a result, education of administrators, coaches, parents and students is the key for student-athletes' safety.

Prevention Strategies

1. All headgear must be NOCSAE certified.
2. Make sure the headgear fits the individual.
3. For all sports that require headgear, a coach or appropriate designee 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. They also need to be checked throughout the season to maintain their integrity and proper function.
6. Neuro-psychology testing must be performed on students that participate in contact sports prior to season to form a baseline. **(HS ONLY)**

Evaluation for Concussion/MTBI – performed by Athletic Trainer (AT)

1. At time of injury, administer one of these assessment tests:
 - a. Sports Concussion Assessment Tool 5 (SCAT5)
 - b. Graded Symptom Checklist (GSC)
 - c. Sideline Functional & Visual Assessments
 - d. On-field Cognitive Testing
2. Observe athlete 15 to 20 minutes and re-evaluate
3. **Athlete does not return to a game or practice if he/she shows any signs and/or symptoms of a concussion or if a coach, athletic trainer, parent or other health care provider suspects a concussion.**
4. 48 hours after the incident, the AT is able to administer a Post-Concussion ImPact Test to be compared with his/her baseline test. At that time, after the student is evaluated by the athletic trainer and the ImPact test results are examined a diagnosis of a concussion may be made.
5. Physician must send a note that states if/when the student can begin the return to play protocol. Parents should request that notes state specific diagnosis and modifications to RTL prior to RTP.
6. Home Instructions to be provided to parents
7. Concussion management protocol and summary given to parents and returned signed.

*** Note: If in doubt, athlete is referred to a doctor and does not return to play or start the protocol until the doctor sends a release to do so.**

Concussion Management

1. School notifications
 - a. Notify the athletic trainer (AT) immediately.
 - b. The AT will notify the school nurse, who will notify all classroom teachers, Assistant principals, & counselors of the student that the student is being monitored for a concussion/ MTBI
 - c. The nurse will notify teachers and administrators of any current symptoms along with red flag symptoms and suggested classroom modifications.
 - d. The nurse will ask teachers to contact them (nurse/AT) with concerns or observations of abnormal student behavior
 - e. Student may need special accommodations such as limited computer work, reading activities, testing, assistance to class, etc. until symptoms subside but this must be ordered by a doctor.
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- f. A doctor may order the student to attend school for half days or may need daily rest periods until symptoms subside
2. Student must be symptom-free for 24 hours before they begin RTP progression steps. This will be recorded with a symptom check list that must be filled out once a day until completion of protocol
3. Concussion Rehabilitation Progressions is noted below and on the Texas Health Concussion Rehabilitation Progression sheet.

Step 1: Light aerobic conditioning, no impact/contact activities

(Ex: 10-15 minutes of cardio)

Step 2: Moderate aerobic conditioning, low level concentration activities.

(Ex: 20-30 minutes of cardio)

Step 3: Moderate aggressive aerobic conditioning, strength exercises (80%max)

(Ex: Weight training, plyometrics, running, and introduce sport specific activities)

Step 4: Non- Contact Drills

(Ex: Non-contact practice, sport specific activities)

Step 5: Full practice

(Ex: Resume full contact practices and full exertion for sport)

*** Note – Athlete progression continues as long as athlete is asymptomatic at current level. If the athlete experiences any post-concussion symptoms with any step above, athlete will wait 24 hours and repeat that step. Athletes will not progress until they have completed a step and have gone asymptomatic for 24 hours.**

4. Athletic Trainer clearance per LDISD Return to Play Concussion Guidelines and signed UIL form from parents/guardians.

Middle School Reporting Steps and Return to Play Guidelines

Middle School guidelines will mirror the High School guidelines using the Middle School personnel (Athletic Trainer and Nurse).

References

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 9. Presbyterian Sports Network, Sports Concussion Management Protocol
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