New Concussion Guidelines for Athletes

What Texas Parents Need to Know

By Dave Burton, MS, LAT, ATC

The Texas Legislature passed a new law this past session that took effect on September 1, which is designed to protect athletes from suffering from Second Impact Syndrome. Second Impact Syndrome is a condition that can develop from multiple blows to the head. This syndrome can develop whether the individual has been diagnosed with a concussion or not. It occurs when there is another blow to the brain before the previous injury has had the opportunity to heal completely. There are between 1.6 and 3.8 million traumatic brain injuries a year in the United States, with less than half of these from athletics, and most are not treated in a hospital emergency room. One of the two highest risk groups for these injuries is 15 to 19 year olds. This group has experienced double the number of emergency room visits since the late 1990's with team sport athlete visits being triple the previous numbers. This 15 to 19 age group has greater risk of injury because the brain is not fully developed and it takes longer to heal after insult.

A concussion is a brain injury that is caused by a bump or blow to the head. Even a "ding", "getting your bell rung" or what seems to be a mild bump or blow to the head can be serious. And all concussions are serious and should be evaluated by appropriately trained allied health and/or medical professionals to prevent further injury or even death. This injury changes the way your brain works. It can occur in any sport, practice or game, with or without being "knocked out" or losing consciousness. There are even cases where the CT scan or MRI is negative, but the athlete is still having symptoms. You can't see this injury, which makes it harder to evaluate or understand why someone needs to sit out. "Out of sight, out of mind" philosophy in this scenario gets the athlete in trouble quickly. If any doubt, it is best to sit the individual out of activity. The signs and symptoms can show up immediately, hours later, days later or even weeks later.

As a parent, you may notice that your child:

- Appears dazed or stunned
- Is confused about assignments or tasks
- Forgets an instruction
- Is unsure of game, score or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Can't recall events before or after the fall or hit

Your athletic child may report any of the following symptoms:

- Headaches or "pressure" in the head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurred vision
- Sensitivity to light
- Sensitivity to sound or noise
- Feeling sluggish, hazy, foggy or groggy
- Concentration or memory problems
 - (Can't stay of task: household job, homework, computer work, watching TV, listening to music, driving, carrying on a conversation, etc.)
- Confusion
- Just doesn't feel right

If you think that your child might have a concussion, please seek medical attention right away.

These are the major points of the new concussion law that parents need to be aware of:

- Each school will have a Concussion Oversight Team that will establish a return-to-play protocol.
- At every activity that carries a potential risk for concussion, there should be a
 designated individual who is responsible for identifying athletes with symptoms of
 concussion.
- Student shall be removed from practice or competition immediately if one of the following persons believes the student might have sustained a concussion: athletic trainer, coach, physician, medical professional or parent/legal guardian.
- Athlete will be evaluated by an appropriate health care professional as soon as practicable.
- Parent/guardian will be informed about the possible concussion and given information on concussion management.
- Athlete will not be allowed to return to participation that day regardless of how quickly
 the concussion signs/symptoms resolve and shall be kept from activity until a physician
 indicates they are symptom free and safe to return to play. A coach of an interscholastic
 athletics team may not authorize a student's return to play.
- Athlete must successfully complete each requirement of the school's return-to-play protocol.
- Treating physician must provide a written statement indicating that, in the physician's professional judgment; it is safe for the student to return to play.

- Athlete's parent/guardian acknowledges that the student has completed the requirements of the return-to-play protocol.
- A signed written statement from the physician <u>and</u> the parent/guardian is on file with the designated school official consenting for the return to play of the athlete <u>before</u> the athlete resumes activity.
- Following the Concussion Management Protocol, after 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 athlete is symptom free at each level.
 - If the athlete experiences any post-concussion symptoms during the return to activity progression, activity is discontinued and the athlete must be re-evaluated by a licensed health care professional.

Phase 1:

 No exertional physical activity until 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 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.
- There is a possibility the athlete may need academic modifications following a
 concussion. 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 teachers regarding the athlete's condition.
 - Advise teachers of post-concussion symptoms.
 - Student <u>may</u> need 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.

Parents can find more information regarding concussions from:

- Centers for Disease Control and Prevention
 <u>www.cdc.gov/injury</u> <u>www.cdc.gov/concussioninyouthsports</u>
- National Athletic Trainers Association <u>www.nata.org</u>
- National Federation of State High School Athletic Associations <u>www.nfhs.org</u>
- Texas Legislature Online (HB 2038) <u>www.legis.state.tx.us</u>

Dave Burton is an athletic trainer and the Practice Liaison for Lakewood Orthopaedics & Sports Medicine located in Dallas, TX.