



Management of Sports-Related Concussions

Model Local Education Agency Concussion and Head Injury Policy

Medical management of sports-related concussions continues to evolve. Recently, there has been a significant amount of new research regarding sports-related concussions in high school athletes. Model Local Education Agency (hereafter "LEA") has established this protocol to provide education about concussions for coaches, school personnel, parents, and students. LEAs include local boards of education, local charter boards, as well as miscellaneous special programs. This protocol outlines procedures for staff to follow in managing concussions as well as school policy pertaining to return to play and return to learn following a concussion.

LEA seeks to provide a safe return to activity for all students following any injury, but particularly after a concussion. In order to effectively and consistently manage these injuries, procedures have been developed to ensure concussed students are identified, treated and referred appropriately, receive appropriate follow-up medical care during the school day, and are fully recovered prior to returning to activity.

LEA leadership shall review this protocol annually. Any changes or modifications will be reviewed and given to athletic department staff, coaches, and other appropriate school personnel in writing.

All appropriate staff shall attend a yearly in-service meeting in which procedures for managing sports-related concussions are discussed.

LEAs should note that the Utah State Board of Education passed an updated R277-614 in May 2018. The Rule directs LEAs to develop a policy using the USBE/Risk Management's model policy to provide training for appropriate personnel, to provide notice to parents of the LEA's policy, to post a copy of the LEA's policy, and to use model parent acknowledgement and permission forms.

Recognition of Concussion

A concussion is a type of traumatic brain injury that interferes with normal brain function and is clinically referred to as mild Traumatic Brain Injury (mild TBI). It occurs when the brain is rocked back and forth or twisted inside the skull as a result of a blow to the head or body. What may appear to be only a mild jolt or blow to the head or body can result in a concussion. A concussion can occur even if a student does not lose consciousness from the head injury. (NFHS "Suggested Guidelines for Management of Concussion in Sports.")

Common signs and symptoms of a concussion

Signs (observed by others):

- Student appears dazed or stunned
- Confusion
- Forgets plays
- Unsure about game, score, opponent
- Moves clumsily (altered coordination)
- Balance problems
- Personality change
- Responds slowly to questions
- Forgets events prior to hit
- Forgets events after the hit
- Loss of consciousness (any duration)
- Vomiting

Symptoms (reported by student):

- Headache
- Fatigue
- Nausea or vomiting
- Double vision, blurry vision
- Sensitive to light or noise
- Feels sluggish
- Feels “foggy”
- Problems concentrating
- Problems remembering

These signs and symptoms following a witnessed or suspected blow to the head or body are indicative of a probable concussion. The student may have one or many of these signs/symptoms to have suffered from a mild TBI. Any student who exhibits signs, symptoms, or behaviors consistent with a concussion shall be immediately removed from the contest, game, practice, or activity and shall not return to play until cleared by an appropriate health care professional (as defined in Utah Code 26-53-301).

Management and Referral Guidelines for All Staff

1. The following situations indicate a medical emergency and require **activation** of the **Emergency Medical System (EMS)**:
 - a. Any student with a **witnessed loss of consciousness (LOC)** of any duration shall be transported immediately to nearest emergency department via emergency vehicle. Staff shall remain in contact with 911 and stabilize the student while waiting for EMS to arrive.
 - b. Any student who has symptoms of a concussion, and who is **not stable** (i.e., condition is worsening), is to be transported immediately to the emergency department via emergency vehicle.
 - c. A student who exhibits any of the following symptoms should be transported immediately to the emergency department, via emergency vehicle.

- Deterioration of neurological function
 - Decreasing level of consciousness
 - Decrease or irregularity in respirations
 - Any signs or symptoms of associated injuries, spine or skull fracture, or bleeding
 - Mental status changes: lethargy, difficulty maintaining arousal, confusion or agitation
 - Seizure activity
2. A student who is symptomatic but stable, may be transported by his or her parent. The parent should be advised to contact the student's health care provider, or seek care at the nearest emergency department, on the day of the injury.

Guidelines and Procedures for Coaches and Teachers Supervising Contests and Games:

Recognize concussion

1. All educators and agents of the LEA should become familiar with the signs and symptoms of concussion that are described above.
2. Educators and agents of LEAs shall have appropriate training about recognizing and responding to traumatic head injuries, consistent with the employees' responsibilities for supervising students and athletes.

Remove from activity

Any student who exhibits signs, symptoms, or behaviors consistent with a concussion (as described above) shall be immediately removed from the activity and shall not return to play until cleared by an appropriate health care provider.

Refer the athlete/student for medical evaluation

1. The agent of the LEA is responsible for notifying the student's parent(s) of the injury.
 - a. Contact the parent(s) to inform them of the injury. Depending on the injury, transport can be provided by either an emergency vehicle or parent(s).
 - b. A medical evaluation by an appropriate health care provider is required before returning to play.
2. In the event that a student's parent(s) cannot be reached, and the student is able to be sent home (rather than directly to a health care provider):
 - a. The LEA's agent should ensure that the student will be with a responsible individual capable of monitoring and understanding the home care instructions before allowing the student to go home.
 - b. The LEA agent should continue efforts to reach a parent.
 - c. If there is any question about the status of the student, or if the student cannot be monitored appropriately, the student should be referred to an Emergency Department for evaluation. An LEA's agent should accompany the student and remain with the student until a parent arrives.

- d. The LEA's agent shall provide supervision of the other students for whom he or she is responsible when accompanying the injured student.
 - e. Students with a suspected concussion should not be permitted to drive home.
3. LEA agents should seek assistance from the host site's certified athletic trainer (ATC) or team physician (if available).

Return to Play (RTP) Procedures After Concussion

1. Return to activity and play is a medical decision. The student must meet all of the following criteria in order to progress to activity:
 - a. Asymptomatic at rest and with exertion (including mental exertion in school) AND
 - b. Have written clearance from an appropriate health care provider.
2. Once the above criteria are met, the student will be progressed to full activity while following the step-wise process detailed below. (This progression must be closely supervised by an LEA agent. If your school does not have an athletic trainer, then the coach must have a very specific plan to follow as directed by the appropriate health care provider).
3. Progression is individualized, and will be determined on a case-by-case basis. Factors that may affect the rate of progression include: previous history of concussion, duration and type of symptoms, age of the student, and sport/activity in which the student participates. An athlete/student with a prior history of concussion, one who has had an extended duration of symptoms, or one who is participating in a collision or contact sport may be progressed more slowly.
4. Stepwise progression as described below. The student should spend 1 to 2 days at each step before advancing to the next. If post -concussion symptoms occur at any step, the student must stop the activity, and the treating health care provider must be contacted.

Step 1. Complete cognitive rest. This may include staying home from school or limiting school hours (and studying) for several days. Activities requiring concentration and attention may worsen symptoms and delay recovery.

Step 2. Return to school. LEA will follow health care provider's protocol on return to learn.

Step 3. Light exercise. At this point the athlete may begin brisk walking, riding an exercise bike or other light exertional activities with supervision. No weight lifting.

Step 4. Running in the gym or on the field. No helmet or other equipment.

Step 5. Non-contact training drills in full equipment or weight training can begin.

Step 6. Full contact practice or training.

Step 7. Play in game. Must be cleared by an appropriate health care provider before returning to play.

Additional Considerations

While current Utah law designates that a student may be returned to play by "an appropriate health care provider" it is the prerogative of each LEA to designate the credentials of the providers from whom they will accept clearance. This is a very important decision and should be made after careful consideration by the athletic director, principal, superintendent, school medical personnel (if applicable), teacher (elementary), and parent(s). The school district's or charter school's liability carrier may also be consulted.

For students injured during formal competitions, serious consideration must also be given as to what the school will do in the case where an athlete is clearly still having concussion symptoms but has been given return to play clearance by a health care provider. A formal policy should be developed which designates a specific individual (preferably an expert in the field of concussion management- typically a licensed athletic trainer, physician or neuropsychologist) who shall evaluate the athlete and make the final decision regarding return to play.