

## **HEALTH FOR STUDENT ATHLETES**

Although there are numerous benefits to participating in school sponsored sports, student athletes may also experience adverse health consequences of such participation. The board of education recognizes that these conditions can have serious consequences if not properly evaluated and treated. Therefore, consistent with state law, the district will inform and educate student athletes and their parents/guardians of the nature and risk of sudden cardiac arrest and concussions or head injuries, including information on the dangers associated with continuing to play after collapsing without a head injury or after receiving a head injury.

Specifically, on an annual basis, and prior to a student athlete's participation in any athletic practices or competitions, information sheets shall be distributed to the student and his or her parent/guardian. Attached to the information sheet shall be an acknowledgement form which the student and his or her parent/guardian must sign to verify that they have read the information sheets and understand the content and warnings. The completed acknowledgement forms shall be returned to the principal's office prior to the student athlete's participation in practice or competition during that school year. The student-athlete may not practice or compete until the form has been received.

If the district's coaching personnel suspect that a student athlete has sustained a concussion or head injury during a practice or game, or if the student collapses or faints without a head injury, the coach shall immediately remove that student from participation and direct the student to obtain an appropriate examination by a licensed health care provider selected by the student's parent or legal guardian. Examples of health care providers as defined by the board of education includes but is not limited to the following:

- M.D. - Medical Doctor,
- D.O. - Doctor of Osteopathy,
- A.R.N.P. – Advanced Registered Nurse Practitioner, and
- P.A. – Physician's Assistant.

If the student has sustained a head injury, this licensed health care provider must be trained in the evaluation and management of concussions. The district shall not be financially responsible for any health care bills associated with the examination.

After suffering a concussion, a student's physical and cognitive activities should be carefully managed and monitored by the licensed health care professional. Pursuant to OKLA. STAT. tit. 70, § 24-155, any student athlete removed from participation shall not be allowed to participate in practices or games until he or she is evaluated by a licensed health care provider and receives the provider's written clearance to return to participation, a copy of which shall be provided to the district.

On an annual basis, district athletic staff will undergo concussion training provided by the CDC, NFHS, or a comparable program or resource. A record of completion of the training course shall be maintained by the district Athletic Director.

#### Protocol and Procedures for Management of Sports-Related Concussion

Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion, or balance problems) shall be immediately removed from the contest and shall not return to play until cleared by an appropriate health care professional.

No athlete should return to play or practice on the same day as a concussion.

Any athlete suspected of having a concussion should be evaluated by an appropriate healthcare professional that day.

Any athlete with a concussion should be medically cleared by an appropriate healthcare professional prior to resuming participation in any practice or competition.

After medical clearance, return to play should follow a step-wise protocol with provisions for delayed return to play based upon return of any signs or symptoms.

All athletes held out of a practice or competition because they are suspected to have sustained a concussion should be referred to a health care professional.

The Sperry Athletic Department will also follow each of these guidelines:

1. All concussions that involve loss of consciousness, no matter how brief that loss of consciousness may have been, will be referred to the emergency department.
2. Along with loss of consciousness the following will also require immediate transportation for emergency treatment:
  - a. Deterioration of neurological function;
  - b. Decreasing level of consciousness;
  - c. Decreasing or irregularity in respirations;
  - d. Decrease or irregularity in pulse;
  - e. Unequal, dilated or unreactive pupils;
  - f. Any signs or symptoms of associated, spine or skull fracture or bleeding;
  - g. Mental status changes—lethargy, confusion, agitation, or difficulty maintaining arousal;
  - h. Seizure activity; and
  - i. Cranial nerve deficits.

3. In an acute concussion scenario, no notes from emergency rooms or urgent care facilities that clear an athlete to return to activity will be accepted.

After sustaining a head injury the student-athlete may exhibit some or all of the following signs and symptoms. Student-athletes, parents/guardians, and coaches should be familiar with these:

Signs (observed by others)

Athlete appears dazed or stunned  
Confusion (about assignment, plays, etc.)  
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)

Symptoms (reported by athlete)

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

Diagnosis

All student-athletes sustaining a head injury or concussion will be evaluated by a staff athletic trainer, if the district has an athletic trainer, and/or licensed health care professional trained in head injury management. The student-athlete should never be denied access to a physician. All athletes will need written consent before returning to play.

The athletic trainer, if the district has an athletic trainer, will assess the injury and determine if immediate care is necessary and, if so, whether it is to the emergency room or to a physician.

During the initial evaluation the athletic trainer may use one or a combination of assessments; which can include SAC testing, SCAT testing, SCAT 3 testing, BESS testing, SWAY balance, King-Devick and ImPACT testing.

Neurocognitive computerized tests and sideline assessments may be used to assist in determining the severity of a student-athlete’s symptoms. They are not a replacement for a medical evaluation to diagnose a concussion.

Post-Concussion Management

*Step 1: Cognitive rest*

A concussion can interfere with school, work, sleep, and social interactions. Many athletes who have a concussion will have difficulty in school with short-term and long-term memory, concentration, and organization. These problems typically last no longer than 2-3 weeks, but for some these difficulties may last for months. It is best to lessen the student’s class load early on after the injury. Most students with concussions recover fully. However, returning to sports and other regular activities too quickly can prolong the recovery.

The first step in recovering from a concussion is rest. Rest is essential to help the brain heal. Students with a concussion need rest from physical and mental activities that require concentration and attention as these activities may worsen symptoms and delay recovery.

Cognitive rest requires that the student avoid participation in, or exposure to, activities that require concentration or mental stimulation including, but not limited to, the following:

- Computers and video games,
- Television viewing,
- Texting,
- Reading or writing,
- Studying or homework,
- Taking a test or completing significant projects,
- Loud music, and
- Bright lights.

*Step 2: Physical rest*

Physical rest includes getting adequate sleep, taking frequent rest periods or naps, and avoiding physical activity that requires exertion. Some activities that should be avoided include, but are not limited to, the following:

- Ones that result in contact and collision and are high risk for re-injury,
- High speed and/or intense exercise and/or sports, and
- Any activity that results in an increased heart rate or increased head pressure.

Students may feel sad or angry about having to limit activities, or having difficulties keeping up in school. Students should be reassured that the situation is temporary, that the goal is to help the student get back to full activity as soon as it is safe, and to avoid activities which will delay their recovery. Students should be informed that the concussion will resolve more quickly when they follow their medical provider's orders as supported by various studies. Students will need encouragement and support at home and school until symptoms fully resolve.

*Return to Learn*

Knowledge about the potential effects of concussions on learning, and appropriate management of the return-to-learn process, is critical for helping students recover from a concussion. Concussions are both a medical and educational concern. Assessing problems with learning and school performance, and then making appropriate and necessary changes to a student's learning plan is a collaborative effort among family, medical, academic, and physical activity team members.

A student-athlete's best chance for a full recovery from a concussion depends on timely implementation of two critical components: cognitive rest and physical rest. There is increasing evidence that using a concussed brain to learn may worsen concussion symptoms

and prolong recovery. The goal during concussion recovery is to avoid overexerting the brain to the level of triggering or worsening symptoms. Determining the appropriate balance between the amount of cognitive exertion and rest is the hallmark of the management plan and crucial for facilitating recovery. This balance is different for each concussion. Therefore, an individualized plan for accommodations is required, and should be frequently monitored and updated to allow for the student to progress academically as concussion symptoms improve.

A concussion can affect school performance in one or more of the following ways:

- Slower processing speed;
- Lapses in short-term memory;
- Reduced/impaired concentration;
- Slower to learn new concepts;
- Shorter attention span;
- More difficulty planning, organizing, and completing assignments;
- Slower reading; and
- Difficulty with reading comprehension.

Returning a student to his/her full academic and activity level following a concussion requires a four phase process which the district will follow:

*Phase 1: No School/Complete Cognitive Rest*

- **Symptom Severity:** In this phase, the student-athlete may experience high levels of symptoms that at best prohibit the student to benefit from school attendance and may cause symptoms to increase in intensity. During this stage, physical symptoms tend to be the most prominent and may interfere with even basic tasks. Many students are unable to tolerate being in the school environment due to severe headache, dizziness, or sensitivity to light or noise.
- **Treatment:** Emphasis on cognitive and physical rest to allow the brain and body to rest as much as possible.
- **Intervention Examples:**
  - No School attendance or school work.
  - Avoid activities that exacerbate symptoms. Activities that commonly trigger symptoms include reading, video games, computer use, texting, television, and/or loud music.

- Other symptom “triggers” that worsen symptoms should be noted and avoided in the effort to promote healing.
- No physical activity-this includes anything that increases the heart rate as this may worsen symptoms.
- No tests, quizzes or homework.
- Provide students with copies of class notes (teacher or student generated).

*Phase 2: Part-Time School Attendance with Accommodations*

- **Symptom Severity:** In this phase, the student’s symptoms have decreased to manageable levels. Symptoms may be exacerbated by certain mental activities that are complex or of long duration. Often students can do cognitive activities but only for very short periods of time (5-15 minutes) so need frequent breaks to rest and “recharge their batteries.”
- **Treatment:** Re-introduction to school. Avoid settings and tasks that trigger or worsen symptoms. In the first few days of returning to school the goal is not to immediately start catching up on the missed work or learn new material. Rather the initial goal is simply to make sure the student can tolerate the school environment without worsening symptoms. This means the first few days often include just sitting in class and listening (no note-taking or reading). Once the student can tolerate this, he/she can try short intervals (5-15 minutes) of cognitive work per class.
- **Intervention Examples:**
  - Part-time school attendance, with focus on the core/essential subjects and/or those which do not trigger symptoms; prioritize what classes should be attended and how often. Examples: (1) half-days, alternating morning and afternoon classes every other day; or (2) attending every other class with rest in the nurse’s office, library, or other quiet location in between. Symptoms reported by the student should be addressed with specific accommodations.
  - Eliminate “busy work” or non-essential assignments or classes.
  - Limit or eliminate “screen time” (computers, phones, tablets, and smart boards), reading and other visual stimuli, based on the student’s symptoms.
  - Provide student with copies of class notes (teacher or student generated).
  - Give no tests or quizzes.
  - Homework load based on symptoms. There should be no due dates on homework assignments. This allows students to work at a pace that does not exacerbate symptoms and reduces their anxiety about completing the assignments. Many students have heightened anxiety during concussion recovery and due dates exacerbate this.

- o Allow to leave class 5 minutes early to avoid noisy, crowded hallways between class changes.
- o No physical activity including gym/recess or participation in athletics.

*Phase 3: Full-Day Attendance with Accommodations*

- **Symptom Severity:** In this phase, the student’s symptoms are decreased in both number and severity. They may have intervals during the day when they are symptom-free. Symptoms may still be exacerbated by certain activities.
- **Treatment:** As the student improves, gradually increase demands on the brain by increasing the amount, length of time, and difficulty of academic requirements, as long as this does not worsen symptoms.
- **Intervention Examples:**
  - o Continue to prioritize assignments, tests and projects; limit students to one test per day with extra time to complete tests to allow for breaks as needed based on symptom severity.
  - o Continue to prioritize in-class learning; minimize overall workload.
  - o Gradually increase amount of homework.
  - o Address all reported symptoms with specific accommodations. These accommodations are reduced or eliminated as symptoms resolve.
  - o No physical activity unless specifically prescribed by the student’s physician or health care provider. If the student has not resolved his/her symptoms after 4-6 weeks, health care providers will often prescribe light aerobic activity at a pace and duration below that which triggers symptoms. This “sub-symptom threshold exercise training” has been shown to facilitate concussion recovery. The student can do this at school in place of regular PE class, by walking, riding a stationary bike, swimming, or jogging. No contact sports are permitted until the student is completely symptom-free with full days at school with no accommodations, and has received written clearance from a licensed health care professional.

*Phase 4: Full-Day Attendance without Accommodations*

- **Symptom Severity:** In this phase, the student may report no symptoms or may experience mild symptoms that are intermittent.
- **Treatment:** Accommodations are removed when student can participate fully in academic work at school and at home without triggering symptoms.
- **Intervention Examples:**
  - o Construct a reasonable step-wise plan to complete missed academic work; an extended period of time is recommended in order to minimize stress.

- o Physical activities as specified by student's physician (same as phase 3).

*Phase 5: Full School and Extracurricular Involvement*

- Symptom Severity: No symptoms are present. Student is consistently tolerating full school days and typical academic load without triggering any symptoms.
- Treatment: No accommodations are needed.
- Intervention Example:
  - o Before returning to physical education and/or sports, the student should receive written clearance and complete a step-wise return-to-play progression as indicated by the licensed healthcare professional.

*Possible Accommodation Examples That May Be Utilized By Teachers:*

- Detailed class notes (student or teacher made) to allow student to listen and not be consumed with note-taking during class.
- Hands-on learning opportunities as they apply.
- Reduce homework assignments to the least amount possible to demonstrate mastery learning concept.
- Provide outline of necessary steps to complete complex assignments/problems (concussed students often experience difficulty remembering and may leave out pertinent steps).
- Extra time provided as needed to complete in-class assignments and homework.
- Oral discussion for learning and oral test-taking preferred to written work.
- Extending time on testing and assignments to allow for slower processing speed especially if there is a significant reading demand. Students recovering from concussion have limited endurance and therefore can only attend to a task for short intervals (5-15 min) before triggering symptoms. Symptoms are not just limited to physical symptoms. If there is a lack of comprehension despite 2 or 3 attempts, even without a headache, the student should take a break.
- Providing a quiet room for testing to minimize distraction.
- Offering preferential seating (usually in the front of class or away from windows) to minimize distraction and allow better monitoring of the student.
- Class information and corresponding assignments should be divided into manageable chunks to minimize cognitive load.



- Reduce light sensitivity by allowing the student to wear sunglasses in class.
- Allow frequent breaks (every 15 minutes or so) for prolonged reading or computer/computation time.
- Allow the student to eat lunch in a quiet location.
- Avoid assemblies, pep rallies, athletic events and other events with loud noise and/or bright lights.

If concussion symptoms increase, it usually means the student is reaching a point of over-exertion and needs a break. Some students may only need periodic breaks throughout the school day while others may need more frequent breaks depending on the severity of symptoms.

### *Privacy*

The return-to-learn team should recognize that communication is essential for the success of the management plan. However, they should be aware that a student's medical and academic information is considered private and is protected by the Health Insurance Portability and Accountability Act (HIPAA) and the Family Educational Rights and Privacy Act (FERPA). The team should have a clear understanding of who is allowed to receive information regarding a student's medical and academic status. Team members should only discuss what is absolutely necessary to manage a student's return-to-learn plan. In compliance with requirements of the Oklahoma School Student Records Act that regulates how schools may share a "school student record" with a non-school employee, the student's parent or guardian (or student if he/she is over 18) must complete a Release of Medical Information (ROMI) if they would like the physician to speak with school staff about the student's medical care and provide guidance about how to implement the recommended accommodations. This release can be signed at the physician's office.

### Athletic Trainer/Licensed Health Care Professional—Management

If the district has an athletic trainer or licensed health care professional, the following procedures will be performed by that individual as available.

After the initial evaluation the student-athlete's parents/guardian will be contacted to go over the injury and give written and verbal home and follow up care instructions.

During the recovery process the athletic trainer and/or training staff will continue to provide coordinated care with physicians, coaches, parents, administrators, and teachers until the student athlete is returned to full competition without restrictions.

The athletic trainer is responsible for administering all post-injury testing. If the ImPACT test is required; the initial post-concussion test will be administered within 48–72 hours of the injury, whenever possible. The testing will take place in the athletic training room, or computer lab. Repeat tests will be given at appropriate intervals and is dependent upon clinical presentation. All data acquired during testing will be shared with student-athlete, parents/guardians and physician as deemed necessary.

The athletic trainer is responsible for monitoring recovery and conditioning following the outlined guidelines and coordinating appropriate return to play activity progression. The athletic trainer will also maintain appropriate documentation regarding assessment and management of the injury.

### Guidelines and procedures for coaches:

Following the 3 Rs: Recognize, Remove, and Refer:

#### *Recognize concussion*

- All coaches should become familiar with the signs and symptoms of concussion.

#### *Remove from activity*

- If a coach suspects the athlete has sustained a concussion, the athlete should be removed from activity until evaluated medically. All athletes who exhibit signs or symptoms of a concussion will be removed immediately assessed and should not be allowed to return to activity that day.

#### *Refer the athlete for medical evaluation*

- Coaches should report all head injuries to the certified athletic trainer, if the district has an athletic trainer, and/or a licensed health care professional as soon as possible for assessment, management and coordination of home and follow-up care. Coaches should seek assistance from the host site certified athletic trainer if at an away contest. If there is no certified athletic trainer or licensed health care professional available, the coach is responsible for notifying the athlete's parents of the injury.
  - Contact the parents to inform them of the injury and make arrangements for them to pick the athlete up at school.
  - Contact the athletic trainer, if the district has an athletic trainer, or health care professional with the athlete's name and home phone number, so that follow-up can be initiated.
  - Remind the athlete to report directly to the athletic training room on the day they return to school.
  - The coach or athletic trainer, if the district has an athletic trainer, should insure that the athlete will be with a responsible individual, who is capable of monitoring the athlete and understanding the home care instructions, before allowing the athlete to go home. The coach or athletic trainer, if the district has an athletic trainer, should continue efforts to reach the parent.

### Graduated Stepwise Return to Athletic Participation

#### *Baseline: No Symptoms*

As the baseline step of the Graduated Stepwise Return to Athletic Participation, the athlete needs to have completed physical and cognitive rest and not be experiencing concussion symptoms for a minimum of 24 hours. Keep in mind, the younger the athlete, the more conservative the treatment.

*Step 1: Light aerobic activity*

The Goal: Only to increase an athlete's heart rate.

The Time: 5 to 10 minutes.

The Activities: Exercise bike, walking, or light jogging.

Absolutely no weight lifting, jumping, or hard running.

*Step 2: Moderate activity*

The Goal: Limited body and head movement.

The Time: Reduced from typical routine.

The Activities: Moderate jogging, brief running, moderate-intensity stationary biking, and moderate-intensity weightlifting.

*Step 3: Heavy, non-contact activity*

The Goal: More intense but non-contact.

The Time: Close to typical routine.

The Activities: Running, high-intensity stationary biking, the player's regular weightlifting routine, and non-contact sport-specific drills. This stage may add some cognitive component to the practice session in addition to the aerobic and movement components introduced in Steps 1 and 2.

*Step 4: Practice & full contact*

The Goal: Reintegrate in full contact practice.

*Step 5: Competition*

The Goal: Return to competition.

If the athlete becomes symptomatic as they progress through the return to activity protocol, he/she will stop activity for that day, rest at least one day or as many days as needed to return to asymptomatic status, and repeat the previous step.