

Oxford Area High School

Oxford Area School District

Concussion Protocol

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Sports Medicine



Oxford Area High School

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Definition of Concussion

According to the Centers for Disease Control, a concussion is a type of traumatic injury to the brain. A concussion is a disturbance in brain function and metabolic activity after a direct or indirect force to the brain. For instance, concussions may be caused by head to object collisions or by whiplash forces produced by chest/body to object collisions which result in trauma to the brain. Recent research suggests that concussions are caused not only by the force of one-time impacts, but also by cumulative forces over time.

Concussions are often referred to as "mild traumatic brain injuries" since they are not life threatening. Unfortunately, the use of the term "mild" can be misleading as it discourages student athletes from taking adequate measures to care for their injury. When concussions are not handled in an appropriate manner, they can produce serious long-term problems that may impede activities of daily living. In some cases, inadequate care of concussions has proved fatal¹.

Symptoms of a Concussion

A concussion should be suspected in the presence of ANY of the following signs or symptoms:

Physical: decreased coordination, clumsiness, loss of consciousness, ringing in ears, visual disturbances (double or blurry vision, seeing stars), headache, nausea, sensitivity to light, sensitivity to noise, feeling foggy, numbness or tingling in extremities, dizziness, vomiting, feeling slowed down, and seizures.

Cognitive: confusion, loss of memory, loss of orientation, difficulty paying attention, easily distracted, and difficulty concentrating.

Emotional: irritability, inappropriate emotions, nervousness, sadness, and feeling more emotional.

Sleep: fatigue, change in sleep patterns, drowsiness, and difficulty falling asleep.

Observed by Others: dazed appearance, slow response, changes in personality, glassy eyes or blank stare, slurred speech, balance problems or uneven gait, and sluggish appearance.

¹ Information courtesy of the Centers for Disease Control (CDC) online

General cognitive status can be determined by simple sideline cognitive testing. The Athletic Trainer (AT) may utilize the SCAT (Sports Concussion Assessment Tool), the SAC, or other standard tools for sideline cognitive testing. Immediate removal from athletic participation, careful examination and close monitoring are vital in ensuring safety and wellbeing of student-athlete (SA) following a head injury.

Guidelines for Staff Members in the Absence of an Athletic Trainer

- 1. If a SA exhibits any of the following signs and/or symptoms, activate Emergency Medical Services (EMS) immediately by dialing 9-1-1.
 - a. Loss of consciousness (LOC) of any duration
 - b. Concussion symptoms which worsen over time
 - c. Decreasing neurological function (ex: unexplained weakness, speech impairment)
 - d. Decreasing level of consciousness or alertness
 - e. Slow or irregular respirations
 - f. Slow or irregular pulse
 - g. Unequal, dilated or unresponsive pupils
 - h. Indication of additional or associated injury such as fracture to the spine or skull
 - i. Bleeding or leaking from the ear canal
 - j. Change in mental status (ex: lethargy, difficulty maintaining alertness, confusion or agitation)
 - k. Seizure activity
 - 1. Cranial nerve deficits (ex: inability to swallow, inability to move eyes)

Procedures for Athletic Trainer

- Computer based neurocognitive testing will be utilized to perform Baseline testing on SA prior to athletic competition.
- If SA is having symptoms of a concussion following head trauma, the coach should contact the AT immediately, and the SA will be removed from activity until they have been assessed.
- The Athletic Trainer will perform a Concussion Cognitive Assessment (i.e SCAT).
- If AT assessment reveals patient has symptoms concordant with a concussion, the following steps will be made:
 - \circ SA will be removed from play until further evaluation with a physician.
 - AT will contact parent/guardian to notify them of head injury. AT will make recommendations for urgent versus routine evaluation with appropriate healthcare professional (i.e Emergency Department, PCP, team physician, etc.)
 - AT will send home written instructions on a handout. This handout is available for review in Appendix.
 - AT will complete Concussion Symptom Checklist daily with SA. Checklist is available for review in Appendix.

- 1. The stepwise RTP protocol may begin once the SA has been cleared from a physician AND has been asymptomatic for 24 hours.
- 2. When returning from a concussion, the student athlete, regardless of medical clearance from Doctor will have to successfully complete a 5-day Return-to-Play protocol.
- 3. Only one-step of the protocol can be completed in a 24-hour period. If symptoms arise at any point of the protocol, the SA must return to the previous step of which they successfully completed without symptoms.
- 4. SA's will not be allowed to progress to the next step of the protocol until authorized by the Athletic Trainer.
- 5. SA's must complete all 5 stages of the RTP progression symptom free prior to clearance in competition.
- 6. Team physician and Athletic Trainer have final say in concussion clearance.
- 7. AT will document stepwise return to play and date of final clearance on subsequent document.



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Oxford Area School District Concussion Return to Play

Name:	

Date of Injury: _____

Protocol to begin after athlete has complete resolution of symptoms, completed ImPACT post-injury testing, and has been cleared by physician/provider to begin return to play protocol.

If the athlete reports concussion-like symptoms during any of the return to play steps, the athlete should stop activity immediately and report symptoms to the athletic trainer. Athlete must check in with Athletic Trainer daily before progressing to the next step.

Date	Step	Instruction	AT Initials
	STEP 1: No Activity	This is a recovery stage with complete physical and cognitive rest, meaning no participation in exercise/sports and focus on brain rest. Additional recommendations may have been provided by physician/provider or athletic trainer.	
	STEP 2: Light Aerobic Exercise	Athlete will use stationary bicycle following Buffalo Protocol under the supervision of Athletic Trainer. Alternative exercise could include walking, light jogging, stretching, yoga, or swimming. No resistance training or sport specific skills.	
	STEP 3: Sport-Specific Exercise	Athlete will spend 15-30 minutes participating in sport specific exercise. This could include warm-up drills, moderate jogging, or moderate stationary bicycling. No impact activities. (Soccer: no headers)	
	STEP 4: Non-Contact Training Drills	Athlete may participate in non-contact practice. These can include warm up, passing and shooting drills, stick work, skill work, core strengthening, running, and resistance training. For activities such as swimming/cross country, athletes should still do lower intensity or less distance than a regular practice. No scrimmaging, no contact drills/exercises.	
	STEP 5: Full Contact Practice	Athlete may participate in full contact practice without restriction to restore confidence and assess functional skills.	
	STEP 6: Return to Play	Athlete is cleared by physician/provider or athletic trainer for all further practices and games without restriction.	

Date of final clearance: ______ AT Signature: _____



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Parent/Guardian Head Injury Information Sheet

Your child has sustained a head injury while participating in their sport. Signs and symptoms of a head injury can appear immediately following the injury, or may be delayed, not appearing until several hours or days after injury. It is important that you are familiar with common signs and symptoms to monitor your child at home.

Things to avoid:

- Anti-inflammatories such as Ibuprofen/Advil (Tylenol is OK)
- Crowded environments/social events
- Loud noises
- Sedatives or alcohol
- Physical activity
- Electronic use (TV, phone, computer)

Concerning Symptoms to Watch For:

If your child experiences any of the following, medical help should be sought IMMEDIATELY. Rapid or prolonged loss of consciousness

- Vomiting
- Prolonged mental confusion
- Worsening or severe headache despite rest
- Blood or clear fluid coming from ears or nose
- Poor balance or unsteadiness
- Weakness in arms or legs
- Convulsions or seizures
- Unequal pupils
- Uncoordinated or involuntary movement of the eyes
- Persistent ringing in the ears
- Slurred speech

Your child *must be* evaluated and cleared by a physician/provider before returning to sport participation. A letter of clearance must be provided to the Athletic Trainer (AT) at which time your child will begin the 5 step post-concussion return to play protocol to ensure safe return to sport activity.

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Concussion Symptoms Checklist

Name: _____

Date of Injury: _____

Key: 0 = I have not experienced this symptom at all in the past 24 hours

1 = I have experienced mild impairment in the past 24 hours

3 = I have experienced moderate impairment in the past 24 hours

6 = I have experienced significant impairment in the past 24 hours

Symptom	Date:						
Headache							
Pressure in head							
Neck Pain							
Nausea/vomiting							
Dizziness							
Visual Problems							
Balance Problems							
Sensitivity to light							
Sensitivity to noise							
Feeling slowed down							
Feeling "in a fog"							
"Don't feel right"							
Difficulty concentrating							
Difficulty remembering							
Fatigue or low energy							
Confusion							
Drowsiness							
More emotional							
Irritability							
Sadness							
Nervous or anxious							
Sleeping Changes							
Severity of symptoms							
(out of 132)							

Do symptoms worsen with mental activity? Yes/No				
Do symptoms worsen with physical activity? Yes/No				
AT Initials				