

Sports-Related Concussion and Head Injury Fact Sheet

A concussion is a traumatic brain injury that can be caused by a blow to the head or body that disrupts the normal functioning of the brain. This sudden movement can cause the brain to bounce around or twist in the skull, creating chemical changes in the brain and sometimes stretching and damaging brain cells, disrupting the way the brain normally functions. Concussions can cause significant and sustained neuropsychological impairment affecting balance, reading (tracking), problem solving, planning, memory, attention, concentration, and behavior. Concussions can range from mild to severe. Having a concussion increases the risk of sustaining another concussion. Second-impact syndrome may occur when a person sustains a second concussion while still experiencing symptoms of a previous concussion. It can lead to severe impairment and even death.

Requirements addressing sports-related concussions and head injuries for student athletes and cheerleaders

- Each school district, charter, and non-public school shall develop a written policy describing the prevention and treatment of sports-related concussion and other head injuries sustained by interscholastic student-athletes and cheerleaders.

Quick Facts

- Most concussions do not involve loss of consciousness.
- You can sustain a concussion even if you do not hit your head.
- A blow elsewhere on the body can transmit an “impulsive” force to the brain and cause a concussion.
- Signs and symptoms of concussion can show up right after an injury or may not appear or be noticed until hours or days after the injury.

Signs of Concussions (Observed by Coach, Athletic Trainer, Parent/Guardian/Caregiver, Teammate, and others)

- Appears dazed or stunned
- Forgets plays or demonstrates short term memory difficulties (e.g., unsure of game, opponent)
- Exhibits difficulties with balance, coordination, concentration, and attention
- Answers questions slowly or inaccurately
- Is unable to recall events prior to or after the hit or fall

Symptoms of Concussion (Reported by Student-Athlete)

- Headache
- Nausea/vomiting
- Balance problems or dizziness
- Double vision or changes in vision - trouble reading
- Sensitivity to light/sound
- Feeling of sluggishness or foggy - fatigue
- Difficulty with concentration, short term memory, and/or confusion

Dangerous Signs & Symptoms of a Concussion

- New onset of symptoms
- One pupil is larger than the other
- Drowsiness or inability to wake up
- A headache that gets worse and does not go away
- Slurred speech, weakness, numbness, or decreased coordination
- Repeated vomiting, nausea, or seizures (shaking or twitching)
- Unusual behavior, increased confusion, restlessness, or agitation
- Loss of consciousness (passed out/knocked out); even a brief loss of consciousness should be taken seriously.

What should a student-athlete do if they think they have a concussion?

- Do not hide it. Tell your athletic trainer, coach, school nurse, or parent/guardian.
- Report it. Do not return to competition or practice with symptoms of a concussion or head injury.
- Take time to recover. If you have a concussion, your brain needs time to heal. While your brain is healing you are much more likely to sustain a second concussion.
- What can happen if a student-athlete continues to play with a concussion or returns to play too soon?
- Continuing to play with the signs and symptoms of a concussion leaves the student-athlete vulnerable to second impact syndrome.
- Second impact syndrome is when a student-athlete sustains a second concussion while still having symptoms from a previous concussion or head injury.
- Second impact syndrome can lead to severe impairment and even death in extreme cases.

Should there be any temporary academic accommodation made for student-athletes who have suffered a concussion?

- Most students will only need help through informal, academic adjustments as they recover from a concussion.
- Students may need to take rest breaks, spend fewer hours at school, be given extra time to complete assignments, as well as being offered other instructional strategies and classroom accommodations
- Contact the school nurse if symptoms persist to discuss whether additional accommodations are necessary.
- To recover, cognitive rest is just as important as physical rest. Reading, texting, computer use and even watching movies can slow down recovery. Limit screen time during recovery.

Students who have sustained a concussion may not return to practice or competition until they receive written clearance from a physician trained in the evaluation and management of concussion and complete the graduated Six-step return to play protocol outlined by the CDC:

Step 1: Back to regular activities (such as school)

Athletes or cheerleaders are back to their regular activities (such as school).

Step 2: Light aerobic activity

Begin with light aerobic exercise only to increase an athlete's heart rate. This means about 5 to 10 minutes on an exercise bike, walking, or light jogging. No weightlifting at this point.

Step 3: Moderate activity

Continue with activities to increase an athlete's heart rate with body or head movement. This includes moderate jogging, brief running, moderate-intensity stationary biking, moderate-intensity weightlifting (less time and/or less weight from their typical routine).

Step 4: Heavy, non-contact activity

Add heavy non-contact physical activity, such as sprinting/running, high-intensity stationary biking, regular weightlifting routine, non-contact sport-specific drills (in 3 planes of movement).

Step 5: Practice & full contact

Athletes may return to practice and full contact (if appropriate for the sport) in controlled practice.

Step 6: Competition

Young athletes may return to competition.

For further information on Sports-Related Concussions and other Head Injuries, please visit:

- [CDC Heads Up](#)
- [Keeping Heads Healthy](#)
- [New Jersey Department of Education Concussion Guidance](#)