Concussion Facts Youth Athletes



What is a concussion?

When an athlete gets their "bell rung" or gets "lit up" they have suffered a concussion. Concussions are a type of traumatic brain injury (TBI). Concussions are caused by a bump, blow, hit, or jolt to the head or body that moves the head and brain rapidly back and forth. Falling or being hit against or by another person or object are common causes of concussions. Your head doesn't have to be struck to cause a concussion; for example, a body-to-body hit has the potential to cause a concussion.



What does a concussion do to my brain?

When you experience a concussion, your brain may bounce or twist inside your skull, sometimes stretching or damaging brain cells and causing chemical changes within the brain. A concussion interrupts your brain's functioning. When your brain is injured by a concussion, the injury can affect you physically, emotionally, behaviorally, and/or cognitively (how you think).

Can the risk of concussion be reduced?

YES! There are ways to reduce your risk of a concussion. Practice good sportsmanship and follow your coach's instructions for safe game play. If you play contact sports, learn the fundamentals and appropriate techniques. Make sure bicycle, athletic, and ATV helmets fit properly and are worn consistently. While a helmet doesn't prevent a concussion, it does protect your head from more severe injuries.

Can I keep playing after a concussion?

Your brain needs time to heal after a concussion. If you continue to play or return to play too soon - before your brain has finished healing - you have a greater chance of getting another concussion. A repeat concussion that occurs while your brain is still healing can be very serious and can affect you for a lifetime. It can even be fatal. If you think you may have sustained a concussion during a practice or game, immediately talk to your coach, game official, athletic trainer, or parent/guardian and remove yourself from play. Do not return to play on the same day as the injury. You need to see a health care professional to be evaluated for a concussion and given written clearance to return to play.

SIGNS AND SYMPTOMS

There are many signs and symptoms of a concussion. **Concussion symptoms may appear minutes, hours, or days after the initial injury.** Symptoms may be physical, emotional, behavioral, or cognitive (affect thinking). You may notice these symptoms yourself or someone else may observe them. If you experience any of these symptoms after a blow to the head or body, tell someone immediately.

Physical

Emotional/Behavioral

- Headache or pressure in the head
- Dizziness, balance problems
- Nausea or vomiting
- Sensitivity to noise, ringing in ears
- Sensitivity to light, blurry or double vision
- Feel tired
- Tingling
- Do not "feel right"
- Seem dazed, stunned

- Become irritable
- Become sad or depressed
- More emotional than usual
- Anxious or nervous
- Personality or behavioral changes such as becoming impulsive

Cognitive

- Trouble thinking clearly
- Trouble concentrating
- Trouble remembering, can't recall events before or after the hit
- Feel sluggish, hazy, foggy, or groggy
- Feel "slowed down"
- Repeat questions or answer questions more slowly
- Confusion
- Forget routine things

DANGER SIGNS

If one or more of these symptoms emerges after a hit to the head or body, **IMMEDIATELY** call 911 or get someone to drive you to the nearest emergency room.

- One pupil larger than the other
- Drowsy or cannot wake up
- Headache that gets worse and does not go away
- Slurred speech, weakness, numbness
- Decreased coordination
- Loss of consciousness

Learn more: concussion.health.ok.gov | 405.271.3430

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- Repeated vomiting or ongoing nausea
- Shaking or twitching (convulsions or seizures)
- Unusual behavior, increased confusion, restlessness, or agitation





RETURN TO PLAY: BACK TO SPORTS AFTER A CONCUSSION

Before you begin:

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An athlete's progression through the return to play protocol should be monitored by a designated return to play case manager, such as a coach, athletic trainer, or school nurse.

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Each step should take a *minimum* of 24 hours; it should take at least one week to proceed through the full return to play protocol. This process can take several weeks or months, depending on the individual and the injury.

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If concussion symptoms return at any step during the return to play process, the protocol must be stopped. The athlete may only resume return to play activities when they have been symptom-free for a *minimum* of 24 hours. Return to play progression must resume at the step *before* symptoms reemerged.

Example: An athlete going through return to play protocol has progressed to Step 5 (practice and contact) when concussion symptoms return. Return to play activities must be halted until the symptoms stop and remain absent for at least 24 hours. At that point, the return to play protocol resumes; **however**, the athlete restarts at Step 4 (heavy non-contact activity), the step **before** concussion symptoms reemerged.

WHEN IN DOUBT, SIT THEM OUT

Athletes should not begin the return to play protocol on the same day of the injury. A licensed health care professional must evaluate the athlete and provide written clearance for the athlete to return to activity. Continuing to play, or returning to play too soon, after a concussion increases the chances of sustaining another concussion. A repeat concussion that occurs while the brain is still healing from the first injury can be very serious and can affect an athlete for a lifetime. It can even be fatal.

RETURN TO PLAY PROTOCOL

STEP 1: **BACK TO REGULAR** ACTIVITIES



Goal: Complete normal activities and remain symptom-free for at least 24 hours



STEP 2: LIGHT AEROBIC ACTIVITY



Goal: Minimal increase in heart rate Time: 5-10 minutes Feels easy: walking ≤ 2 mph, stretching exercises NO weight lifting, resistance training, jumping, or hard running.







Goal: Noticeable increase in heart and respiratory rates with limited body and head movement Time: Less time than typical routine Feels fairly easy to somewhat hard: brisk walking (15 min/mile)

NO head impact activities. NO helmet or other equipment use.



STEP 4: HEAVY NON-CONTACT ACTIVITY



Goal: High-intensity activity without contact Time: Close to typical routine Non-contact training drills in full uniform, weight lifting, resistance training, running, high-intensity stationary cycling.



STEP 5: **PRACTICE AND** CONTACT

Goal: Return to practice, full contact as applicable to sport







Goal: Return to full game play, practice, and competition

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