



## The truth about 7 common concussion myths.

Here's what athletes, coaches, parents, and other adults need to know about some of the most pervasive concussion myths.

Imagine your brain is like a bowl of jello. If you smack or shake the bowl, you can picture the jello undulating like a wave in response. That's the same thing that happens to your head if you experience a body blow or a whiplash injury. During a concussion, the brain shakes like jello inside the skull, disrupting the nerves, causing pain (headaches), and ultimately making it harder for the brain to function normally.

Knowing the truth about concussions is important for safe and appropriate treatment and recovery. Still, many concussion misconceptions exist, which can contribute to improper treatment and put someone with a concussion at risk for re-injuring themselves or worse. Read on to learn some of the most pervasive concussion myths as well as the facts all athletes, parents, coaches, and adults need to know for proper recognition and treatment of concussions.



### **Myth 1: Concussions only happen if the person loses consciousness.**

Truth: While some people who get a concussion may lose consciousness, it's far more likely that they won't. In fact, less than 10% of people with a concussion will lose consciousness, and it's even less likely in pediatric patients, according to recent studies. It's far more common for people to experience other concussion symptoms, such as:

- Headaches
- Neck pain
- Dizziness
- Confusion
- Difficulty with balance
- Changes in speech
- Blurred vision
- Light or noise sensitivity

As a result, loss of consciousness is not a factor to determine whether or not someone gets a concussion. However, losing consciousness may indicate that you experienced a more severe concussion and may need a longer time to fully recover.

### **Myth 2: Concussions are only caused by a direct impact to the head.**

Truth: Concussions are caused by any abrupt jolt that causes the brain to forcefully shift forward, backward, or side-to-side. While direct blows to the head can cause concussions, a hit to the body or neck can also cause your brain to reverberate. For example, if you're ice skating and you land on your rear end, the impact of the fall can still send a forcewave to your brain, causing a concussion.

### **Myth 3: Concussions primarily occur during contact sports.**

Truth: The majority of concussions are caused by something unrelated to sports. Only about 20 to 30 percent of concussions are related to sports injuries. Because a concussion can occur from any force that impacts the body, head, or neck, it can happen anytime, such as during everyday activities or at work. Other frequent causes of concussions include workplace related injuries, such as a fall, or car accidents that involve whiplash, even if there is no direct trauma to the head.

#### **Myth 4: If symptoms don't appear immediately, it's not a concussion.**



Truth: It can take three to five days, on average, for concussion symptoms to progress. That's why it's so important for athletes in particular to know the signs of a concussion. Because they're the only ones who know what they're feeling, they have to know when to remove themselves from the game after an injury, even if there's no direct hit to the head. In addition, coaches and parents should be fully supportive of getting that athlete out of play and not getting them back in the game until they've been evaluated, even if they say they feel better. If they re-enter the game, now with less coordination or mental awareness, they could worsen their injury and require a longer recovery period. Instead, athletes with suspected concussions should get evaluated over the next few days and be medically cleared before returning to play.

#### **Myth 5: Helmets prevent concussions.**

Truth: Helmets do not prevent concussions, but they can prevent skull fractures or more severe brain injuries. If someone body slams you, a helmet does not protect your head and neck from jerking in a whiplash movement, which can still lead to a concussion. However, helmets can lessen the severity of the impact to your brain, helping you to avoid a skull fracture or worse. They may also help to lower your chances of losing consciousness in the event of a concussion. In order to benefit from helmets, they must be worn properly and well maintained. Learn more about helmet safety and concussion protocols at [CDC.gov/HeadsUp](https://www.cdc.gov/HeadsUp).

#### **Myth 6: You must keep a person with a concussion awake following their injury.**

Truth: If someone with a concussion is allowed to go home with you, you do not need to wake them up. Years ago, people feared that falling asleep after a concussion would put someone at risk for falling into a coma. However, research has disproved this. If someone is stable after a concussion, it's not worrisome to let them sleep. In fact, rest is necessary for your brain to repair itself uninterrupted without the demands placed on it while you're awake. If someone is progressively getting worse, exhibiting symptoms like persistent vomiting, slurred speech, and difficulty maintaining consciousness, they should be taken to the emergency department. There, medical staff will be closely monitoring the individual's consciousness. They will also determine whether or not the patient needs imaging, such as a CT scan or MRI—these diagnostic imaging scans are used to check for an intracranial bleed or skull fracture, but they do not confirm whether or not someone suffered a concussion.)

#### **Myth 7: If an athlete doesn't lose consciousness after a head injury, they can return to play.**

Truth: There are specific concussion protocols and state laws for returning athletes safely to their sport after a concussion. Athletes need to be removed from the sport after a suspected concussion and they should not return to the game (or practice) until they have written permission from a medical provider that they are ready to come back. These protocols are necessary for preventing reinjury, additional injuries, or a prolonged recovery.

To be cleared for play after a concussion, medical providers will evaluate an athlete's symptoms in a variety of settings, including during academics and cardiovascular activity. If math problems or a solo jog are triggering headaches, it's not yet time to go back to the sport. Once a patient is cleared to gradually resume play, they must follow a specific, five-stage protocol. When a player can get through each supervised exercise level without symptoms, they can return to competition with written clearance from the doctor.



Returning too soon can jeopardize an athlete's recovery and put them at risk for repetitive or worsening injury. That's why it's critical that coaches, parents, and healthcare providers are both fully aware and supportive of concussion management and maintain clear communication to optimize the athlete's safe return-to-play. The CDC's Heads Up program is an excellent resource for education on updated concussion protocols for athletes of all ages in all levels of play.

MedStar Health has a multidisciplinary team of concussion experts that provide diagnosis, treatment, and management of head injuries. To learn more, visit [MedStarHealth.org/ConcussionClinic](https://www.MedStarHealth.org/ConcussionClinic).