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| MYTH: ONLY A PHYSICAL BLOW TO THE HEAD CAN CAUSE CONCUSSIONS**Most often, when we think of concussions, we think of a person hitting their head. But in fact, a concussion can result from a hit to the face, neck, or anywhere on the body if the force of the impact is strong enough to be transmitted to the head.****The brain sits inside the skull in a body of cerebrospinal fluid, unanchored. When a force is large enough to move the body or head, the brain accelerates as well, hitting the skull and potentially leading to a concussion.** | WAYS CONCUSSIONS CAN OCCUR IN SPORTSBe on the lookout for some common mechanisms of injury at various sporting events. It is important to note that this list does not include all possible ways an athlete may receive a concussion. * Helmet-to-helmet tackles
* Body checks against hard surfaces
* Heading a ball incorrectly in soccer
* Skateboarding or biking wipeouts
* Collisions between athletes
 |  Image result for CONCUSSIONSCONCUSSIONMYTHS:CONFRONTED HEAD-ON  |
|  |  | Christina Benedict |

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| Concussions and MTBI’sA concussion is a type of Traumatic Brain Injury (TBI) resulting from violent movement of the brain. The movement of the brain can be caused from forceful contact directly to the head or body, or from a sudden jolt of the body causing spinal cord shaking and change in direction or speed of the head.While a concussion is considered a mild TBI, the symptoms and effects of a concussion are far from minor. Depending on the location of the trauma in the brain, the amount and duration of symptoms vary. Some definitions of concussions describe that minor symptoms may be monitored acutely from home as long as symptoms do not worsen**WHAT DOES THIS HAVE TO DO WITH ATHLETES?**The last two decades have seen research indicating long term, severe brain damage from repeated concussions and hits among the NFL player population.It’s not just about football though, all athletes have an increased risk of receiving concussions. Therefore, it is important to know the symptoms of concussions in order to best protect your athlete.  | Image result for concussions sports clipartStatisticsThe following statistics are from UMPC Sports Medicine Concussion Program:* **5 of 10** concussions go unreported or undetected.
* Between **1.7 and 3 million** sports- and recreation-related concussions happen each year. Around **300,000** are football-related.
* Girls' soccer sees the second-most concussions of all high school sports. Girls’ basketball sees the third most.
* **2 in 10** high-school athletes who play contact will suffer a concussion this year.

SIGNS AND SYMPTOMS* Headache
* Temporary loss of consciousness
* Amnesia surrounding the event
* Dizziness or "seeing stars"
* Ringing in the ears
* Nausea or vomitting
* Slurred speech
* Fatigue
* Sensitivity to light and noise
* Sleep disturbances
 | wHAT TO DO IF YOU SUSPECT A CONCUSSIONImage result for linear acceleration concussionIf worrisome symptoms develop, seek emergency care. Remember, a concussion could occur without a direct hit to the head, so take all symptoms seriously. An athlete with a suspected concussion should not return to play until he or she has been medically evaluated by a health care professional. [DID YOU KNOW?]**There are two types of accelerations that lead to concussions: linear and rotational.****In a linear acceleration, the brain moves forward (linearly) and hits the front of the skull, bruising, or tearing the brain.** **In rotational acceleration, the hit is off-center, causing the brain to spin within the skull. Because the inside of the skull is not a smooth surface, this rotation the brain and blood vessels can be stretched, sheared, and torn.****Rotational acceleration is oftentimes the worse of the two kinds of forces leading to a concussion, although on virtually every concussion involves both types of forces.** |