

Concussions in Youth and Adolescents Keeping up with the Facts and Myths

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The science of concussions is moving very rapidly, but the media is ahead of the science. Unfortunately, information that is shared with the public is often inaccurate and causes anxiety. Stay calm and be aware of the myths and facts:

Myth: Hitting your head is the only way to get a concussion:

Fact: A concussion is a mild traumatic brain injury caused by a bump, blow, or jolt to the head **OR** body that causes the brain to rapidly move within the skull.

Myth: Concussions only happen in football and contact sports:

Approximately 3 million concussions occur in the USA annually. Most occur in children and teens due to weak neck strength and because the brain is not fully developed. "Wheeled" sports (biking, skating) and playground accidents are the leading causes of concussions in children <14 years. Among teens, it's motor vehicle accidents (MVA), biking, football (males), and soccer (females). In adults, MVA and falls are the leading cause.

Myth: It's only a concussion if a person loses consciousness:

Most concussions occur **without** loss of consciousness. A variety of symptoms typically develop immediately or within 24 hours and include impaired physical, cognitive, emotional, and behavioral functioning.

Myth: A CT or MRI of the brain is the only way to diagnose a concussion:

A concussion temporarily changes the chemical balance in brain cells. These changes **can't be seen on a clinical MRI or CT scan**. A CT of the head may be recommended if a skull fracture, swelling or a bleed is suspected.

Myth: Concussion symptoms and recovery are the same for everyone:

No two concussions are the same. At least 80% of kids will recover within 2-3 weeks, but for a small number of kids, the symptoms can last longer. Risk factors for longer recovery include a history of a prior concussion, mental health, learning disability, migraine headaches, visual, balance, or vestibular diagnoses.

Myth: A concussion causes permanent brain damage:

Permanent damage is **extremely unlikely** from single concussion. To prevent a more serious injury, if a concussion is suspected, a child should be **IMMEDIATELY** removed from risk activities

(sports, driving) and not return until treated by a trained professional. If treated appropriately, even a few concussions are highly unlikely to result in permanent deficits. Researchers are currently looking at the effects of repeated hits to the brain such as those in the NFL but the findings are not clear at this time.

Myth: To treat a concussion you must 'cocoon' yourself from activities:

Sitting in a dark room for days away from all activities is very outdated and can cause harm. Rest and reduction in stimulation for the first 3-5 days, followed by gradual increases in cognitive and physical demands under the care of a trained clinician results in the best outcome.

Myth: Certain 'concussion proof' gear can help prevent concussions:

There is no scientific evidence that strongly supports any type of equipment to be 'concussion proof' (mouth guards, soccer head bands, etc.). Helmets prevent skull fractures, not concussions and must be properly fitted.

For more information, visit www.gaylord.org; www.cdc.gov/headsup; www.onsf.org