



Things About Concussion Parents Need to Know

Concussion Facts

Concussions are traumatic brain injuries (TBIs) that can happen to anyone of any age during any activity that jars the brain.

Overall, the activities associated with the greatest number of TBI-related emergency department visits include biking, football, playground activities, basketball, and soccer.

- High school athletes are one of the most at-risk groups for sustaining a concussion. It is estimated that more than 140,000 high school athletes across the United States suffer a concussion each year. (Data from [NFHS Injury Surveillance System](#))
- Concussions occur most frequently in football, but lacrosse, ice hockey, girl's soccer, wrestling, and girl's basketball follow closely behind. All athletes are at risk.

Q. What is a concussion?

A concussion is a brain injury that results in a temporary or in some cases lasting disruption of normal brain function. A concussion occurs when the brain is violently rocked back and forth or twisted inside the skull as a result of a blow to the head or body. Concussion symptoms may last from a few days to several months. Some may never go away. Concussions can cause symptoms that interfere with school, work, and social life.

Q. If my child has a concussion, will s/he be OK?

Most likely, your child will be fine. The vast majority of children who have sustained a concussion make a complete recovery with no complications. However, it's crucial that a child with a concussion is diagnosed and treated properly, and that s/he avoids physical and mental exertion for the period of time recommended by the doctor.

Some children with concussions do develop more serious complications. It might be months before they regain normal brain function and feel "like themselves" again. This is especially true of children who experience a second concussion before fully recovering from their first.

If your child has suffered a possible concussion, the most important thing you can do to maximize his/her chances of a full recovery is to seek immediate medical treatment. Always follow prescribed recommendations for rest, monitoring, and follow-up care. And, if your child plays sports, be sure to adhere to the restrictions and gradual schedule for return to play outlined by the doctor.

Q: Is there any way to prevent concussions? Do helmets and mouth guards help?

Nothing can prevent a concussion. Helmets were designed to guard against catastrophic brain injuries, not concussions. Mouth guards, although very good at protecting the mouth and teeth, do not lower the risk of concussions.

Neck-strengthening exercises may help reduce the chance of your child's head snapping forward or backward

if s/he sustains a blow to the body. Talk to your doctor about recommended exercises for your child's age, size, and (if applicable) sport.

If your child has already suffered one concussion, the best way to prevent another is to make sure s/he has recovered fully (getting plenty of mental and physical rest) and been cleared by a doctor before returning to his/her normal routine, including athletics.

I Suspect My Child Has a Concussion: The First 24 Hours

Q. How can I tell if my child has sustained a concussion?

Concussions can have many different symptoms. Some children experience many symptoms, whereas others have only a few. Every concussion is different!

Things you might observe or your child might experience following a concussion:

- Dizziness
- Headaches
- Balance problems
- Disorientation
- Nausea
- Difficulty remembering
- Confusion
- Behavior or personality changes
- Sensitivity to light
- Sleep problems
- Fatigue
- Vision changes
- Hearing changes
- Decreased attention
- Increased irritability
- Feeling sluggish or foggy

Signs — Observed by Others

Physical

- Moves clumsily (altered coordination)
- Exhibits balance problems
- Loses consciousness (even briefly)
- Less energetic

Cognitive

- Appears dazed or stunned
- Seems confused
- Forgets plays or instructions
- Is unsure about game, score, opponent
- Responds slowly to questions
- Forgets events prior to hit or fall
- Forgets events after the hit or fall

Emotional

- Shows changes in mood, behavior, or personality

Signs — Reported by Athletes

Physical

- Headaches or pressure in head
- Nausea or vomiting
- Double vision, blurry vision
- Sensitivity to light or noise
- Feeling sluggish, fatigued, or groggy
- Balance problems or dizziness
- Numbness or tingling

Cognitive

- Problems concentrating
- Problems remembering
- Foggy or hazy feeling

Emotional

- Just not feeling right or feeling down

Sleep problems

- Difficulty falling or staying asleep
- Sleeping less/more than usual

Q. My child did not lose consciousness. Does this mean my child did not have a concussion?

A child can have a concussion without losing consciousness. In fact, very few children lose consciousness when they sustain a concussion.

Q. My child did not get hit in the head. Could s/he still have a concussion?

It is possible to sustain a concussion without being directly hit in the head. A concussion is most often caused by a direct blow to the head, but it can also result from body actions that snap the head forward or back, shaking the brain around in the skull hard enough to cause brain injury, such as a whiplash injury. Any action that results in the brain being bounced around can cause a concussion.

Q. It didn't appear that my child got hit that hard. Could s/he really have sustained a concussion?

Yes, a fairly light looking hit can result in a concussion, and a hit that appears to be hard or very forceful might not result in any symptoms at all. Many other factors affect the severity of injury (if any), including angle of hit, whether the athlete was prepared for the hit, etc.

Q. The coach pulled my child from the game after she collided with a teammate. She got up and stumbled and looked dazed, but said she felt fine except for a mild headache. Is it really necessary to take her out of the game?

If an athlete is suspected of having a concussion, s/he must immediately be removed from play, be it a game or practice. Continuing to participate in physical activity after a concussion can lead to worsening concussion symptoms, increased risk for further injury, and even death. Parents and coaches are not expected to be able to diagnose a concussion. That is the job of a medical professional. However, you must be aware of the signs and symptoms of a concussion, and if you or a coach is suspicious, then the child must stop playing: **When in doubt, sit them out!**

Q. Is a concussion always obvious right away?

Most of the time, signs or symptoms appear at the time of the injury. However, it's always possible that symptoms won't emerge until later (or that they will be subtle enough to be overlooked, especially if the child has also suffered a more visible injury such as a **fracture** or **laceration**).

For this reason, even if your child received immediate treatment from an athletic trainer, school nurse, EMT, or in the emergency room or urgent care, s/he must also see his/her regular doctor as soon as possible. S/he should be monitored closely for the next few days.

Q. My child sustained a concussion. Should I take him/her to see a doctor?

All athletes who sustain a concussion need to be evaluated by a health care professional who is familiar with sports concussions. You should call your child's physician and explain what has happened and follow your physician's instructions. If your child is vomiting, has a severe headache, or is having difficulty staying awake or answering simple questions, s/he should be taken to the emergency department immediately.

Q. Do I need to wake my child up every hour when s/he is sleeping?

No. Sleep is the best treatment for a concussion. It is OK to let him/her sleep without interruption the night of the injury after evaluation by a health care professional, or if you have spoken with your child's physician and s/he does not think your child needs further evaluation in the emergency department.

Q. Is it okay to give my child medicine for his/her headache?

Relieving headache pain is certainly appropriate, but it does not replace the need for cognitive and physical rest if symptoms are present. Be aware that symptom improvement with medication does not mean that the brain has recovered. After a concussion is diagnosed, talk to your physician about the use of medication — including type of medication and dose — for headache pain and other symptoms.

Q. What signs indicate a need for immediate emergency attention rather than waiting to see our pediatrician?

In the first 1–2 days after the injury, you should watch your child very carefully. You should get immediate medical help if your child:

- Loses consciousness/can't be awakened
- Vomits repeatedly
- Gets a headache that worsens, lasts for a long time, or is severe
- Has weakness, numbness, trouble walking, or decreased coordination
- Has difficulty recognizing familiar people
- Is very confused
- Has trouble talking or slurred speech
- Has a seizure (arms or legs shake uncontrollably).

Q. My child wants to sleep all day long. Should I allow him/her to sleep as much as s/he wants?

A concussion affects how the brain works, so resting the brain as much as possible is necessary for recovery. Large amounts of sleep are normal. When your child is sleeping, his/her brain is recovering. It is a good idea to track the amount your child is sleeping and report it to your medical professional.

Q. Does my child need to give up sports if s/he has suffered a concussion?

Athletes should not return to sports while still having symptoms from a concussion because they are at risk for prolonging symptoms and further injury. It is very rare that any child is told to give up playing sports after a single injury. However, if the recovery is quite prolonged (greater than 6 months), you should consult with a concussion specialist to further discuss the possible risks of return to playing sports. An evaluation with a concussion specialist should be considered in any child who has had more than one sports-related concussion.

**Q. My doctor told my child to have mental rest. What exactly does “rest” mean?
Can my child watch television, play video games, text, etc.?**

Mental rest means avoiding activities that require the brain to work hard to process information. This includes critical thinking and problem solving activities such as schoolwork, homework, and technology use.

Restrictions from the following should be considered, because these activities increase brain function and can therefore worsen symptoms and delay recovery:

- Computer work/Internet use
- Video games
- Television
- Text messaging/cell phone use
- Bright lights, such as strobe lights at school dances
- Listening to loud music or music through headphones
- Loud noises
- Parties, concerts, pep rallies, etc.
- Driving
- Work

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