

Concussion in Children and Teenagers

What is a concussion?

A concussion is a mild injury to the brain that disrupts how the brain normally works. It is usually caused by a sudden blow or jolt to the head, although children often bump or hit their heads without getting a concussion. Signs of a concussion can include dizziness, headache, vomiting, confusion, acting dazed, forgetting what happened before or after the injury, and being “knocked out.” A person does not need to be knocked out or lose consciousness to have had a concussion. Other words or terms for a concussion include mild traumatic brain injury (mild TBI) and mild closed-head injury (CHI).

What should you do in the first days after a concussion?

Serious problems after a concussion are rare, but can occur. For this reason, a medical doctor should always be involved in your child’s care after a concussion. In the first 1-2 days after the injury, you should watch your child very carefully. You can give acetaminophen (Tylenol®) for headaches, but no other medications should be given during this time without your doctor’s approval. You should get immediate medical help if your child displays:

- headache that gets worse, lasts for a long time, or is severe
- confusion, extreme sleepiness, or trouble waking up
- vomiting 3 or more times
- trouble walking or talking
- seizure (arms or legs shake uncontrollably)
- any other sudden change in thinking or behavior

What behaviors can I expect my child to have following a concussion?

Most young people will recover completely from one concussion within a few weeks. Some people can take longer to recover than others. Common problems seen after a concussion are listed below. You should watch out for these problems. Talk with your child’s doctor about any changes that you notice in these areas:

<u>Physical</u>	<u>Thinking (Cognitive)</u>	<u>Behavioral/emotional</u>
Headaches	Slowed thinking	Irritability or grouchiness
Sick to stomach or vomiting	Trouble focusing	Easily upset or frustrated
Dizziness or balance problems	Difficulty remembering	Nervousness
Low energy or being run down	Acting like “in a fog”	Sadness
Vision/Seeing difficulties	Easily confused	Acting without thinking
Bothered by light or noise	School performance worse	Any other personality change
Sleeping problems		

When should I consult a specialist?

Consult a concussion specialist if:

- any of the above problems last more than 2-3 weeks
- any problem seems especially severe
- your child has had more than one concussion
- your child has been diagnosed with a moderate or severe brain injury

What can you do to help your child?

A concussion can be scary and stressful for both you and your child. It's important to remember that most problems will last only for a short time. The following suggestions should be helpful as your child is healing from the concussion:

- Keep your child safe. While problems caused by the concussion are still seen, it will be very important that your child does not hit his or her head again. Your child will probably need to take it easy for a while.
- Have your child rest. Doing too much too soon after a concussion can make problems worse. In the first days after the concussion, don't expect too much of your child. He or she will probably need lots of time to rest and relax.
- Make sure your child gets enough sleep and eats properly. Some children will need more sleep than usual. Allowing naps during the day and making sure your child gets plenty of sleep at night should help. You should also make sure your child is eating healthy foods and drinking plenty of water.
- Allow extra time to finish things. Some children may be a little slower in how they do things. If so, allow more time than usual to finish tasks and make sure your child doesn't feel pressured to get things done quickly.
- Give more chances to learn. When learning, make sure your child is paying attention. He or she might also need to hear or review information more times than usual to learn it.
- Allow more breaks. Paying attention during hard or boring tasks might be difficult. If so, have your child take breaks when doing homework and other similar tasks.
- Be patient. After a concussion, your child might seem cranky, more easily upset, or more tired and forgetful. This behavior is probably being caused by the concussion. Try to be patient and understanding when this happens. If the behavior continues, talk with your doctor.

What should you do about school?

After a concussion, you should follow these steps to help with school:

- Ask your child's doctor when it will be okay for your child to go back to school.
- Tell your child's teacher, school counselor, and administrators (e.g., principal) that your child had a concussion, even if the concussion happened over the summer.

- Have the teacher and other school staff watch your child carefully for the next 1-2 months. They should look out for the common physical, thinking, and behavioral problems listed earlier.

If problems are seen, your child might need extra help at school. Talk with your child’s teacher to begin getting this help. If problems last more than a few weeks, a formal school plan should probably be developed. There are two types of formal school plans: a “Section 504 Plan” and an “Individualized Education Program” (IEP).

Help that can be given to a student after a concussion include:

- Student returns to school slowly (e.g., for a few hours at first, then for a half day, then for a full day)
- Student not asked to do all missed work, and extra help given to get caught back up
- Rest time, breaks, and check-in meetings with teacher provided
- Homework and class work lessened
- No more than one test each day
- Assignments allowed to be turned in late
- Tests put off until student back to normal
- Extra time given to complete tests
- Special seating to help the student focus and so teacher can watch carefully
- Indoor recess provided if needed

If problems at school last more than 2-3 weeks, your child should be checked by a team of healthcare and/or school professionals who know about concussions. Medical doctors should be asked about any physical problems (e.g., headaches, dizziness). A special type of evaluation called a “neuropsychological assessment” could also be useful, especially to help manage any changes that are seen in thinking or behavior.

When can my child play sports or return to his or her normal physical activities?

As long as your child is “symptomatic” – which means that any physical, thinking, or behavioral problems caused by the concussion are still seen – it is very important that he or she not do anything that might cause another concussion. When there are still symptoms or problems, your child should not do any of the following until a medical doctor says it is okay:

- contact sports (football, hockey, soccer, rugby, wrestling, basketball, volleyball, etc.)
- riding a bike, scooter, motorcycle, ATV, 4-wheeler, or horse
- driving a car
- skateboarding, rollerblading, ice-skating
- snow or water skiing, snowboarding, sledding
- martial arts
- gymnastics
- jumping on a trampoline or any climbing activities (on playground equipment, trees, etc.)
- any other activity in which your child might hit his or her head

In some situations, neuropsychological or school-based testing can be useful after a concussion. However, these types of evaluations should not be used by themselves to decide whether an athlete is safe to return to play sports or do other physical activities. A medical doctor should always make this

decision. When the doctor says it's safe again, he or she should develop a specific plan to return your child to these activities in a step-by-step, gradual fashion.