

Facts About Concussion



What Is a Concussion?

A concussion is a mild traumatic brain injury (mTBI) caused by a blow or jolt to the head or body that causes the brain to shake. The shaking can cause the brain to not work normally and can result in serious side effects. Concussions can occur even when a child does not lose consciousness. In fact, only 10 percent of children with concussions report being “knocked out.”

Some of the symptoms of a concussion can appear immediately after the injury, while others may not be recognized for several days. Symptoms may last days, weeks or months. Sometimes symptoms may be subtle and not obvious.

How Is a Concussion Diagnosed?

Your child’s doctor will ask a lot of questions to understand how the injury happened and what symptoms your child is experiencing. Your child may be asked to take a computerized test to better understand how his brain is functioning; however, there is not a single test that can diagnose a concussion. (You cannot see a concussion on brain imaging, like a CT scan or an MRI, because brain imaging looks at the structure of the brain, and a concussion affects the function of the brain — not its structure.) Doctors will use all of the information they have gathered to diagnose and manage your child’s concussion.

What Types of Symptoms Will My Child Have from a Concussion?

The symptoms of a concussion are related to how well the brain cells are functioning and working together. The most common symptoms are listed in the table below.

Often, symptoms will worsen over a matter of days, and it is common for new symptoms to appear in the day following the injury. Symptoms may also worsen when the brain is stressed, for example, when a child is doing schoolwork or participating in a physical activity.

Pre-existing Conditions

For children with pre-existing conditions, concussion symptoms may be more severe or prolonged. These conditions include migraine headaches, learning disabilities, attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), visual disorders, and emotional and mental health conditions. It is important to know that a concussion may also worsen these underlying conditions and make them more difficult to control.

Physical	Sleep	Thinking/Remembering (Cognitive)	Mood Disruption
<ul style="list-style-type: none"> ■ Headache ■ Nausea and vomiting ■ Balance problems ■ Slowed reaction time ■ Dizziness ■ Sensitivity to light ■ Sensitivity to sound ■ Fuzzy or blurry vision 	<ul style="list-style-type: none"> ■ Sleeping more or less than usual ■ Trouble falling asleep ■ Feeling fatigued or drowsy 	<ul style="list-style-type: none"> ■ Difficulty concentrating ■ Difficulty remembering ■ Confusion ■ Feeling “mentally foggy” ■ Feeling slowed down 	<ul style="list-style-type: none"> ■ More emotional ■ Irritable ■ Sad ■ Nervous ■ Depressed

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Parents should be on the lookout for signs that your child is in immediate danger as a result of this brain injury.

Call 911 if your child has any of the following symptoms:

- Seizures (twitching or jerking movement of parts of the body; may look stiff)
- Weakness or tingling in the arms or legs
- Cannot recognize people or places
- Confused, restless or agitated
- Impaired consciousness
- Difficult to arouse or unable to awaken
- Repeated vomiting
- Slurred speech
- Bloody or clear fluid from the nose or ears

Additional Resources

After The Injury

www.AfterTheInjury.org

This website is dedicated to helping you understand your child's reactions to injury and learn what you can do to help her respond in a healthy way.

Brain Injury Association of Pennsylvania

www.biapa.org
800-444-6443

Brain Injury Alliance of New Jersey

www.bianj.org
800-669-4323

Brain Injury Association of Delaware

www.biade.com
800-411-0505

BrainSTEPS: Brain Injury School Re-Entry Program

www.brainsteps.net
724-944-6542

The Centers for Disease Control and Prevention – Concussion and Mild Traumatic Brain Injury

www.cdc.gov/concussion

How Do I Treat My Child's Concussion?

Initial rest, followed by a gradual return to activity, is the best strategy for recovery. Too much activity (mental and physical) early in the recovery can be harmful. However, too much rest late in the process can also be harmful.

Your child should see a healthcare professional if you think they have a concussion. The time period for rest is different for each person and should be guided by symptoms and recommendations from the healthcare professional.

Early in the recovery, allow your child to sleep as much as they need. It is important to watch your child closely, pay attention to their specific symptoms and contact your physician with any concerns.

If your child has acute concussion symptoms, they should not participate in activities that will increase symptoms. Activities to avoid may include:

- Any activities that could cause another head injury (such as sports, gym class, riding a bike, etc.)
- Other physical activities that cause an increase in symptoms (running and weightlifting, for example)
- Activities that require a lot of concentration or eye tracking and provoke symptoms (for example, school work, playing video games, texting, using a computer/social media, etc.)

With guidance from your doctor, your child can slowly return to mental and physical activity as they begin to feel better.

If you have questions about your child's injury, please call your child's primary care doctor, who can discuss symptoms and help you create a plan. If you have further questions after seeing your child's primary care doctor, please call CHOP's Trauma Center at 215-590-5932 or the Center for Sports Medicine and Performance at 215-590-1527.

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www.chop.edu/concussion