



When to seek medical attention

Danger signs in young adults

In rare cases, repeat concussions in young athletes can result in brain swelling or permanent brain damage.

Contact your health care professional or emergency department right away if you see any of the following danger signs in your child after a bump, blow, or jolt to the head or body:

- Headache that gets worse and does not go away or is very severe
- Weakness, numbness or decreased coordination
- Repeated vomiting or nausea
- Slurred speech

Take your child to the emergency department if he or she:

- Looks very drowsy or cannot be awakened
- Has convulsions or seizures
- Cannot recognize people or places
- Is getting more and more confused, restless or agitated
- Has unusual behavior
- Loses consciousness (a brief loss of consciousness should be taken seriously)

Danger signs in infants/young children

Take your child to the emergency department right away if they received a bump, blow, or jolt to the head or body, and:

- Has any of the danger signs for young adults listed above
- Will not stop crying and cannot be soothed
- Will not nurse or eat

Source: www.cdc.gov/concussion

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Rocky Mountain Hospital for Children

Each day we are inspired by the courage of hundreds of children and families receiving treatment throughout our Family of Care facilities in metro Denver, Colorado. Whether caring for an injured child in an emergency, performing minimally invasive surgery on a newborn or supporting a teen through cancer treatments, we are committed to providing the highest level of care for every child in a variety of locations. Rocky Mountain Hospital for Children at Presbyterian/St. Luke's is the anchor hospital in the system and a destination facility for advanced pediatric and neonatal care.

RockyMountainHospitalForChildren.com



Injury Prevention

HealthONECares.com
HealthONEInjuryPrevention.com

HealthONE Trauma Centers are acclaimed referral centers serving trauma and neurotrauma patients throughout the Rocky Mountain region. HealthONE Trauma Centers provide experienced physicians you can trust, facilities that provides leading-edge technology and staff that cares for patients and families.

In addition, HealthONE provides educational outreach programs and information on a variety of trauma-related topics, including car seat safety, wheeled and pedestrian sports, adult fall prevention and seasonal activities.



The Medical Center of Aurora
Centennial Medical Plaza
North Suburban Medical Center
North Suburban Northeast ER
North Suburban Northwest ER
Presbyterian/St. Luke's Medical Center &
Rocky Mountain Hospital for Children

Rose Medical Center
Saddle Rock ER
Sky Ridge Medical Center
Swedish Medical Center
Swedish Southwest ER

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Concussion and Brain Injury Facts



Rocky Mountain
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Concussion and Brain Injury Facts

What is a concussion?

A **concussion** is a type of traumatic brain injury (TBI) that results from a bump, blow or jolt to the head (or by a hit to the body) that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, damaging the brain cells that can alter the way the brain normally works.

Concussion = Brain Injury

Concussion signs and symptoms

Most people with a concussion recover

quickly and fully. But for some people, symptoms can last for days, weeks, or longer. In general, recovery may be slower among older adults, young children, and teens. Those who have had a concussion in the past are also at risk of having another one and may find that it takes longer to recover if they have another concussion.

Symptoms usually fall into four categories:

- 1 | Thinking/Remembering**
 - > Difficulty thinking clearly, concentrating or remembering new information
 - > Feeling slowed down
- 2 | Physical**
 - > Headache, dizziness, fuzzy or blurred vision
 - > Nausea or vomiting (early on)
 - > Sensitivity to noise or light
 - > Balance problems
 - > Feeling tired, having no energy
- 3 | Emotional/Mood**
 - > Irritability, sadness, overly emotional
 - > Nervousness or anxiety
- 4 | Sleep**
 - > Sleeping more or less than usual
 - > Trouble falling asleep

Some of these symptoms may appear right away, while others may not be noticed for a few hours to a day or two after the injury, or until your child resumes everyday activities.

Preventing traumatic brain injury

There are many ways to reduce the chances of sustaining a traumatic brain injury, including:

- ✿ Buckling your child in the car using a child safety seat, booster seat, or seat belt (according to the child's height, weight, and age).
- ✿ Making sure your children wear helmets when:
 - Riding a bike, motorcycle, snowmobile, scooter or all-terrain vehicle
 - Playing a contact sport, such as football, ice hockey or boxing
 - Using in-line skates or riding a skateboard
 - Batting and running bases in ball games
 - Riding a horse
 - Skiing or snowboarding
- ✿ Making living areas safer for children, by:
 - Installing window guards to keep young children from falling out of open windows
 - Using safety gates at the top and bottom of stairs when young children are present
 - Making sure the surface on your child's playground is made of shock-absorbing material, such as hardwood mulch or sand



Getting better

Rest is very important after a concussion because it helps the brain to heal. Ignoring symptoms and allowing your

child to "tough it out" often makes symptoms worse. Healing takes time an average time is 2-4 weeks.

As symptoms subside and upon the advice of your physician, your child can gradually return to daily activities, such as work and school. If symptoms return or new symptoms occur with more activity, this is a sign that your child is returning to play/school too soon. Remove your child from these activities and have them take more time to rest and recover. As the days go by, you can expect to gradually feel better. You should not return to sports or physical activity until your health care provider says it's OK and until all of your symptoms are gone.



Helping your child get better:

- ✿ Make sure your child gets plenty of sleep at night and rest during the day
- ✿ Avoid activities that are physically demanding or require a lot of concentration like sustained computer use or video games

For more information visit:

- ✿ HealthONEInjuryPrevention.com
- ✿ YouthSportsMed.com or
- ✿ RockyMountainHospitalForChildren.com



RockyMountainHospitalForChildren.com

