What is a concussion?
A concussion:
• Is a type of traumatic brain injury (TBI) caused by a blow to the head or another part of the body.
• Affects how the brain functions and processes information at the neurochemical level.
• Is not a structural injury to the brain, so imaging tests such as a CT scan or MRI will most often look normal.

Concussions are rarely life-threatening. Despite sometimes being referred to as a “mild” TBI, a concussion is still a TBI and can have serious effects, especially if not recognized and treated. Multiple concussions are especially dangerous.

What are the common symptoms of a concussion?
Symptoms of concussion can occur right away or up to two days after the injury. They may include:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Thinking and remembering</th>
<th>Social and emotional</th>
<th>Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>Trouble thinking clearly</td>
<td>Being irritable or fussier</td>
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<tr>
<td>Sensitivity to noise and light</td>
<td>Hard time remembering</td>
<td>than normal</td>
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<td>Loss of balance</td>
<td>Feeling slower</td>
<td>Feeling more emotional</td>
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<tr>
<td>Trouble walking</td>
<td></td>
<td>Feeling sad or nervous</td>
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<td>Being really tired or drowsy</td>
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<td>Being aggressive</td>
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<td>Nausea or vomiting</td>
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<td>Hard to console</td>
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<td>Vision changes</td>
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</table>

What to watch for after your child’s concussion
1. Symptoms may worsen or new ones may appear over the first 48 hours.
2. Your child may not know they have symptoms until they try to do their normal activities.
3. Most people feel better within about two weeks. If your child does not, they may need to see a specialist.

What to do in the first few days
1. Take it easy in a quiet environment. When symptoms are more severe:
   • Limit cognitive (thinking or remembering) and physical activities to allow the brain to heal.
   • Avoid excessive screen time (watching TV or looking at a cell phone or computer screen). Find relaxing activities at home, such as drawing and playing with toys.
   • Slowly resume normal activity, as long as symptoms do not get worse.

2. Your child may slowly return to regular (nonstrenuous) activities as they start to feel better. During this time, encourage them to:
   • Spend time outside, such as taking short walks.
   • Get as much sleep as possible at night.
   • Take fewer daytime naps or return to their daytime nap schedule (as appropriate for their age).
   • Do homework for 10 to 15 minutes at a time, as long as symptoms do not get worse.
   • At this point, your child may check their cell phone, watch TV, play video games and visit with friends for short periods of time, as long as symptoms do not get worse.
3. As symptoms improve, you may:
   - Encourage outside time.
   - Return your child to their regular schedule.
   - Have your child take breaks if their symptoms worsen. If you notice any changes, call your child’s doctor.

**Important tips**
1. **Make an appointment with your child’s primary care doctor (PCP) as soon as possible.** Keep the appointment even if your child starts to feel better. Your child’s doctor will track their recovery and advise on their safe return to school and sports or play activities.
2. **Avoid waking up your child at night to check on them.** Your child’s brain needs to rest and get as much sleep as possible in the first few days after a concussion.
3. **Have your child eat a healthy diet and drink more clear fluids (like water) than normal.** Even though your child may not feel like eating, offer small amounts of food and fluids every three to four hours. Limit soft drinks and caffeine.
4. **Give acetaminophen (Tylenol) or ibuprofen (Motrin or Advil) for pain if advised by your child’s doctor.**

**Helping your child safely return to school**
Your child may:
- Need to take a short time off from school right after the concussion, but it is not necessary for a child to be 100 percent symptom-free before returning to school. Multiple absences from school and prolonged inactivity after a concussion are discouraged.
- Return to school with accommodations even if they still have symptoms. Accommodations are changes to your child’s normal schedule and activities. Most schools require written accommodations from your child’s doctor. For most children, only short-term changes are needed.

Please note: returning to school does not mean returning to sports and play. Your child should not return to PE, recess, sports or workouts until their doctor says it is OK.

**Helping your child safely return to sports and play**
1. Your child should not return to sports and play on the same day of the injury.
2. Your child must return to normal schoolwork and studies before returning to game play.
3. Your child’s doctor will let you know when it is OK for your child to return to sports.
4. The Children’s Healthcare of Atlanta Sports Medicine team has return to play (RTP) instructions for 11 sports on choa.org. The stages vary depending on the sport.
5. If your child is a student athlete, it is very important that their school is aware of their concussion.

   Returning to sports too early may slow healing and increase risk of a second concussion, which has serious effects (e.g., second impact syndrome).

See the separate return to learn and return to play instructions for more information.

**When to seek help right away**
If you cannot reach your doctor right away, return to the emergency department if your child:
- Has more headaches or neck pain
- Is hard to wake up
- Vomits more than two times in 24 hours
- Has unusual behavior, or seems confused, restless or agitated
- Cannot think clearly or remember things
- Has slurred speech, weakness or numbness, or does not move like normal
- Cannot recognize people or places
- Has convulsions or seizures
- Passes out

**Have questions? Call the Children’s Concussion Program nurse**
Speak with our Concussion Program nurse for advice and help if you cannot reach your doctor. Our nurses can also help you schedule an appointment if your child needs to see a Children’s concussion specialist.

1. **Call 404-785-KIDS (5437) Monday through Friday from 8 a.m. to 4 p.m.**
2. **Visit choa.org/concussion** for more education and return to learn/play instructions.
3. **You can also find information at cdc.gov/headsup** (Centers for Disease Control and Prevention).