

## What is a concussion?

A concussion is an injury resulting from trauma to the brain resulting in a change in how the brain functions<sup>1-3</sup>. Any hit or fall causing the brain to ‘shake’ within the skull can lead to a concussion. These traumatic events can be from a collision between two players, hitting an obstacle (such as the ground or goal post) or even from a hit to the body causing the head to suddenly change direction. Descriptions such as “dings” and “getting one’s bell rung” should be avoided, as they minimize the injury severity<sup>1</sup>. According to the Center for Disease Control and Prevention, more than 3.5 million sports-and-related concussions occur each year in the United States<sup>4</sup>.

## Signs and Symptoms

- Loss of consciousness
- Seizure or convulsion
- Balance Problems
- Nausea or vomiting
- Drowsiness
- More emotional
- Irritability
- Sadness
- Fatigue or low energy
- Nervous or anxious
- “Don’t feel right”
- Difficulty remembering
- Headache
- Dizziness
- Confusion
- Feeling slowed down
- “Pressure in head”
- Blurred Vision
- Sensitivity to light
- Amnesia
- Feeling in a “fog”
- Neck pain
- Sensitivity to noise
- Difficulty concentrating

Below are some recommendations for you and your child once they have sustained a concussion. Please keep in mind that youth athletes may have a more prolonged recovery and may have a longer return to play progression<sup>1-3</sup>.

## Once you have taken your child home

It is okay to:	There is no need to:	Do not allow your child to:
<ul style="list-style-type: none"> <li>• Use acetaminophen (Tylenol) for headaches</li> <li>• Use ice pack on head/neck as needed for comfort</li> <li>• Go to sleep</li> <li>• Rest (no strenuous activity or sport)</li> </ul>	<ul style="list-style-type: none"> <li>• Check your child’s eyes with a flashlight</li> <li>• Wake up frequently (unless otherwise instructed)</li> <li>• Test reflexes</li> <li>• Stay in bed</li> </ul>	<ul style="list-style-type: none"> <li>• Drive a car</li> <li>• Engage in physical activity (exercise, sports)</li> <li>• Engage in mental activity (school, homework, computer games)</li> <li>• Engage in limited TV/computer screen exposure</li> </ul>

1. Broglio SP, Cantu RC, Guskiewicz KM, et. al. National Athletic Trainers’ Association position statement: management of sport concussion. J Athletic Training.2014;(2):245-265. 2. Harmon KG, Drezner JA, Gammons M, et al. American Medical Society for sports Medicine position statement: concussion in sport. Br J Sport Med. 2013;(1):15-26. 3. McCrory P, Meeuwisse WH, Abury M, et. Al. Consensus statement on concussion in sport: the 4<sup>th</sup> International Conference on Concussion in Sport held in Zurich, November 2012. Br J Sports Med. 2013;47(4):250-8. 4. Centers for Disease Control and Prevention (CDC). Sports-related recurrent brain injuries-United States. Morbidity and Mortality Weekly Report 1997;46(10):224-227

## When to go to ER

If any of the following develop, the athlete should be taken to the emergency room:

- New headache or headache gets worse
- Persistent or increasing neck pain
- Becomes drowsy or can't be woken up
- Cannot recognize people or places
- Behaving unusually, seems confused
- Has seizures
- Has weakness, numbness or tingling (arms, legs, face)
- Is unsteady walking or standing
- Has slurred speech
- Has difficulty understanding speech or directions
- Pupils become unequal in size
- Repeated vomiting

## What to expect

If your child has sustained an injury to their head, you should make an appointment with his or her primary care physician or a sports medicine specialist as soon as possible. A licensed health care professional will be able to decide how serious the concussion is and when it is safe for your child to return to regular activities, including sports. It is

**Oregon State law that student athletes are prohibited from participating in any athletic event** or training until medical release has been obtained from an appropriate health care professional (Physician (MD), Physician's Assistant (PA), Doctor of Osteopathic (DO) licensed by the Oregon State Board of Medicine, nurse practitioner licensed by the Oregon State Board of Nursing, or Psychologist licensed by the Oregon Board of Psychologist Examiners) for any athlete who exhibits signs, symptoms or behaviors consistent with a concussion.

Your child may have some trouble in some classes at school or even with activities at home. At school, you may need to:

- Take rest breaks as needed
- Spend fewer hours at school
- Be given more time to take tests or complete assignments
- Receive help with schoolwork
- Reduce time spent reading, writing or on the computer

Make sure you talk with your child's teachers, school nurse, coach and athletic trainer about your child's concussion and symptoms. As your child's symptoms decrease, the extra help or support can be removed gradually.

Just as your child will gradually return to school, they will also gradually return back into sport activity after a concussion. Your child will follow a 'return to sport progression' once all the concussion symptoms have reso