

WHAT IS A CONCUSSION?

A concussion is a mild traumatic brain injury (TBI) caused by a blow or direct or indirect force to the head or body. The spinal cord is also susceptible to concussions. Signs and symptoms of a concussion can range from mild to severe. The vast majority of concussion patients return to normal if they are treated early and aggressively. In some cases, people may suffer a moderate to severe TBI in a car accident or serious fall and require treatment from a neurologist or neurosurgeon to recover. Here are some of the symptoms a concussion patient may experience. (*Having these symptoms does not necessarily indicate a concussion.)

PHYSICAL

- Headache
- Nausea
- Vomiting
- Balance Problems
- Dizziness
- Visual Problems
- Fatigue
- Sensitivity to Light
- Sensitivity to Noise
- Numbness/Tingling
- Dazed or Stunned

COGNITIVE

- Feeling Mentally "Foggy"
- Feeling Slowed Down
- Difficulty Concentrating
- Difficulty Remembering
- Forgetful of Recent Information or Conversations
- Confused About **Recent Events**
- Answers Questions Slowly
- Repeats Questions

EMOTIONAL

- Irritability
- Sadness
- More Emotional
- Nervousness

SLEEP

- Drowsiness
- Sleeping Less than Usual
- Sleeping More than Usual
- Trouble Falling Asleep

When to Seek Emergency Care

If the student athlete displays any of the following symptoms, seek immediate medical care at an emergency department near you:

- Changes in alertness and consciousness
- Convulsions or seizures
- Muscle weakness on one or both sides
- Persistent confusion
- Remaining unconsciousness
- Repeated vomiting
- Unequal pupils
- Unusual eye movements
- Walking problems

DID YOU KNOW: Concussion Statistics

- More than 300,000 sports-related concussions are diagnosed each year in the United States (U.S. Centers for Disease Control and Prevention, 2011). The actual number is thought to be much higher, however, due to those that are not reported and/or diagnosed.
- A 2010 study by the CDC found that U.S. emergency rooms annually treat 173,285 concussions related to sports or recreation among people age 19 years of age and under.

DID YOU KNOW: Each year, more than 200,000 Orange County children are expected to receive care at CHOC, ranked by U.S. News & World Report as among the nation's top pediatric hospitals. The Emergency Department in the Bill Holmes Tower opened in March 2013 as Orange County's first and only Emergency Department just for kids. It features 31 treatment rooms and three triage suites designed for rapid diagnosis and treatment.



- During the last decade, emergency room visits for sports and recreation-related concussions among children and adolescents increased by 60 percent (CDC).
- Overall, the activities associated with the greatest number of traumatic brain injury-related emergency room visits included football, bicycling, playground activities, basketball and soccer (CDC). Numbers and rates were the highest in football (55,007) and girls soccer (29,167).