

What is a Concussion?

A concussion is an injury that changes how the cells in the brain normally work. A concussion is caused by a blow to the head or body that causes the brain to move rapidly inside the skull. Even a “ding,” “getting your bell rung,” or what seems to be a mild bump or blow to the head can be serious. Concussions can also result from a fall or from players colliding with each other or with obstacles, such as a goalpost.

Why Concussion Awareness is Important

In the past six months, I have brought both my son and my husband to the ER with concussions. Through the experiences of their injuries and recoveries, I have learned a lot about *why* concussion awareness has become such an important topic.

First, **concussions are not simple or obvious to diagnose**. The signs and symptoms of concussion are wide-ranging and varied, do not necessarily include loss of consciousness, and frankly can be quite vague. It is easy to miss the signs of concussion if you are not aware of them.

Second, while an initial concussion is a serious and significant injury, **a second head trauma within days, weeks or even months is significantly more serious than the initial concussion**, resulting in prolonged recovery and possibly permanent impact to brain function, in rare cases even death.

As coaches, I believe we need to be sufficiently informed on concussion signs and symptoms as well as the risks of returning to play so that we can protect our players. We need to be able to identify when an athlete may have sustained a concussion, and know that the safe course of action is to take them off the field and have their parents take them for evaluation by a medical professional with experience in concussions.

Concussion Signs & Symptoms

The following information on concussion signs and symptoms is taken from the website for the SCORE (Safe Concussion Outcome Recovery & Education) Concussion program at Children’s National Medical Center. I recommend reviewing the information to gain familiarity with the wide range of signs and symptoms that signal a possible concussion.

Further below is information on a concussion app for iPhone and Android that can aid in concussion diagnosis during practice or games, so that you don’t need to commit the signs and symptoms to memory.

Signs & Symptoms

- All concussions are serious
- Most concussions occur *without* loss of consciousness
- Recognition and proper response to concussions when they first occur can help prevent further injury
- **When in doubt, sit them out**

Signs Observed by Coaches / Parents	Symptoms Reported by Athlete
<ul style="list-style-type: none"> • Appears dazed or stunned (such as glassy eyes) • Is confused about assignment or position • Forgets an instruction or play • Is unsure of score or opponent • Moves clumsily or poor balance • Answers questions slowly • Loses consciousness (<i>even briefly</i>) • Shows mood, behavior, or personality changes • Can't recall events <i>prior</i> to hit or fall • Can't recall events <i>after</i> hit or fall 	<ul style="list-style-type: none"> • Headache or "pressure" in head • Nausea or vomiting • Balance problems or dizziness • Double or blurry vision • Sensitivity to light or noise • Feeling sluggish, hazy, foggy, or groggy • Concentration or memory problems • Confusion • Feeling more emotional, nervous, or anxious • Does not "feel right" or is "feeling down"

You can't see a concussion, and some athletes may not experience and/or report symptoms until hours or days after the injury. If you have any suspicion that your athlete has a concussion, you should keep the athlete out of the game or practice and have their parents take them for evaluation by a medical professional with experience in concussions.

Concussion App for Youth Coaches

The Director of the SCORE Concussion program developed an app to help youth coaches recognize and respond to concussions. **The app is called "Concussion Recognition & Response: Coach & Parent Version"** and is available for iPhone and Android for \$0.99.

Within the app, coaches answer basic questions about the signs (what they observe) and symptoms (what an injured athlete reports) to determine if the athlete has suffered a suspected concussion and how to respond. Additionally, an email interface allows detailed information taken on the field to be sent immediately to the athlete's parents and physician.

Risks of Returning to Play Too Soon

If you even slightly suspect a concussion, it is critical to take the athlete off the field and have the parents take them for evaluation by a medical professional with experience in concussions. A child or teen who returns to practice or play when he or she still has symptoms is at significant risk for a more severe or potentially catastrophic injury.

Second-Impact Syndrome (SIS) can occur when a person suffers a second concussion before symptoms from an earlier one have subsided, and results in severe disability or death. Children and teens are particularly susceptible to SIS, and the occurrence of SIS is not dependent on the severity of the initial concussion. Concussion symptoms typically take several weeks to subside and it's therefore of utmost importance that the athlete does not return to play during this time.

Even after concussion symptoms have fully subsided, a second concussion within weeks or even months of the initial injury will result in a greatly prolonged recovery period. For this reason, medical professionals recommend a gradual return-to-play plan, beginning with mild jogging and progressing over a period of several weeks to individual drills, then limited contact drills, and finally to scrimmage and full play.