



# HEADS + UP

## CONCUSSION IN HIGH SCHOOL SPORTS

GUIDE FOR COACHES



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION



# The Facts

- A concussion is a **brain injury**.
- All concussions are **serious**.
- Most concussions occur **without** loss of consciousness.
- Concussions can occur **in any sport** or recreation activity.
- Recognition and proper response to concussions when they **first occur** can help prevent further injury or even death.



A bump, blow, or jolt to the head can cause a concussion, a type of traumatic brain injury (TBI). Concussions can also occur from a blow to the body that causes the head and brain to move rapidly back and forth. Even a “ding,” “getting your bell rung,” or what seems to be a mild bump or blow to the head can be serious.

During sports and recreation activities, concussions may result from a fall or from players colliding with each other, the ground, or with obstacles, such as a goalpost. The potential for concussions is greatest in athletic environments where collisions are common.<sup>1</sup> Concussions can occur, however, in any organized or unorganized sport or recreational activity, as well as outside of sports from events such as a motor vehicle crash.

Sometimes people do not recognize that a bump, blow, or jolt to the head or body can cause a concussion. As a result, athletes may not receive medical attention at the time of the injury, but they may later report symptoms such as a headache, dizziness, or difficulty remembering or concentrating. These symptoms can be a sign of a concussion.<sup>2</sup>



**For a full list of concussion symptoms, see page 5.**





## DID YOU KNOW?

- \* Athletes who have ever had a concussion are at increased risk for another concussion.
- \* Young children and teens are more likely to get a concussion and take longer to recover than adults.<sup>3-6</sup>
- \* A repeat concussion that occurs before the brain recovers from the first—usually within a short period of time (hours, days, or weeks)—can slow recovery or increase the likelihood of having long-term problems.<sup>7,8</sup>

# Recognizing a Possible Concussion



To help recognize a concussion, you should watch for and ask others to report the following two things among your athletes:

1. A forceful bump, blow, or jolt to the head or body that results in rapid movement of the head.

--and--

2. Any concussion symptoms or change in the athlete's behavior, thinking, or physical functioning.

Athletes who experience **one or more** of the signs and symptoms listed on page 5 after a bump, blow, or jolt to the head or body should be kept out of play the day of the injury and until a health care professional, experienced in evaluating for concussion, says they are symptom-free and it's OK to return to play.<sup>9,10</sup>

SIGNS OBSERVED BY COACHING STAFF
Appears dazed or stunned
Is confused about assignment or position
Forgets an instruction
Is unsure of game, score, or opponent
Moves clumsily
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

SYMPTOMS REPORTED BY ATHLETE
Headache or "pressure" in head
Nausea or vomiting
Balance problems or dizziness
Double or blurry vision
Sensitivity to light
Sensitivity to noise
Feeling sluggish, hazy, foggy, or groggy
Concentration or memory problems
Confusion
Just not "feeling right" or is "feeling down"

# When a Concussion is Suspected



If you suspect that an athlete has a concussion, implement your four-step “Heads Up” action plan:

**1. Remove the athlete from play.** Look for signs and symptoms of a concussion if your athlete has experienced a bump or blow to the head or body. *When in doubt, sit them out.*

**2. Ensure that the athlete is evaluated by a health care professional experienced in evaluating for concussion.**

Do not try to judge the severity of the injury yourself.

Health care professionals have a number of methods that they can use to assess the severity of concussions. As a coach, recording the following information can help health care professionals in assessing the athlete after the injury:

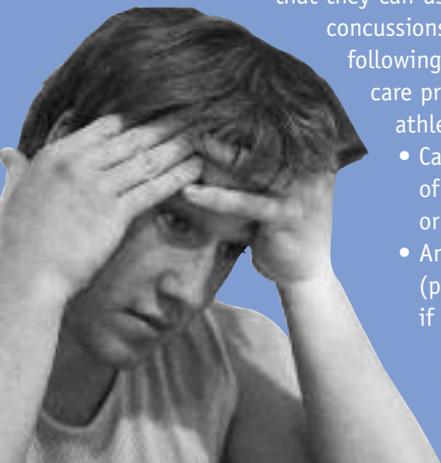
- Cause of the injury and force of the hit or blow to the head or body
- Any loss of consciousness (passed out/knocked out) and if so, for how long

- Any memory loss immediately following the injury
- Any seizures immediately following the injury
- Number of previous concussions (*if any*)

**3. Inform the athlete’s parents or guardians about the possible concussion and give them the fact sheet on concussion.** Make sure they know that the athlete should be seen by a health care professional experienced in evaluating for concussion.

**4. Keep the athlete out of play the day of the injury and until a health care professional, experienced in evaluating for concussion, says s/he is symptom-free and it’s OK to return to play.** A repeat concussion that occurs before the brain recovers from the first—usually within a short period of time (hours, days, or weeks)—can slow recovery or increase the likelihood of having long-term problems. In rare cases, repeat concussions can result in edema (brain swelling), permanent brain damage, and even death.

**CONCUSSION:** [Prevention and Preparation](#)



Remember, you can't see a concussion and some athletes may not experience and/or report symptoms until hours or days after the injury. Most people with a concussion will recover quickly and fully. But for some people, signs and symptoms of concussion can last for days, weeks, or longer. Exercising or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games may cause concussion symptoms (such as headache or tiredness) to reappear or get worse. After a concussion, physical *and* cognitive activities—such as concentrating and learning—should be carefully managed and monitored by a health care professional.

It is normal for athletes to feel frustrated, sad, and even angry because they cannot return to sports right away or cannot keep up with their school work. Talk with athletes about these issues and offer support and encouragement.

**CONCUSSION:** [When a Concussion is Suspected](#)

## Danger Signs

In rare cases, a dangerous blood clot may form on the brain in a person with a concussion and crowd the brain against the skull. An athlete should receive immediate medical attention if after a bump, blow, or jolt to the head or body s/he exhibits any of the following danger signs:

One pupil larger than the other
Is drowsy or cannot be awakened
A headache that not only does not diminish, but gets worse
Weakness, numbness, or decreased coordination
Repeated vomiting or nausea
Slurred speech
Convulsions or seizures
Cannot recognize people or places
Becomes increasingly confused, restless, or agitated
Has unusual behavior
Loses consciousness (a brief loss of consciousness should be taken seriously).