

Brain Injury Association of Pennsylvania, Inc.



Sports and Concussion Facts

Our Position:

A concussion is a brain injury. We believe coaches of every school athletic team and every extracurricular athletic activity should be trained to recognize the signs and symptoms of brain injury, including concussions and second impact syndrome. We believe young athletes who appear to have sustained a concussion should have written authorization by a health care professional before returning to play.

Quick Facts:

- A concussion is a brain injury.
- Most concussions occur without a loss of consciousness.
- Recognition and proper response to concussions when they first occur can help prevent further injury or even death.
- Athletes who have ever had a concussion are at increased risk for another concussion.
- Children and teens are more likely to get a concussion and take longer to recover than adults.

What is a concussion?

A concussion is a brain injury. Concussions are caused by a bump, blow, or jolt to the head. A concussion can also occur from a blow to the body that causes the head to move rapidly back and forth. They can range from mild to severe and can disrupt the way the brain normally works. Even a “ding” or a bump on the head can be serious and result in a long-term or lifelong disability.

What are the signs and symptoms?

❖ You cannot see a concussion. Signs and symptoms of concussion can show up right after the injury or can take days or weeks to appear and may include:

- Headache
- Nausea or vomiting
- Balance problems or dizziness
- Double or fuzzy vision
- Sensitivity to light or noise
- Feeling groggy, foggy or sluggish
- Concentration or memory problems
- Confusion
- Irritability
- Sadness
- Nervousness or anxiety
- Sleeping more or less than usual
- Trouble falling asleep

❖ Medical attention should be sought immediately if an athlete:

- Appears dazed or stunned
- Is confused about assignments
- Forgets plays
- Is unsure of game, score, opponent
- Move clumsily
- Answers questions slowly
- Can't recall events prior to or after a hit

If an athlete is suspected as having sustained a concussion, implement the CDC's recommended 4-step action plan:

1. Remove the athlete from play. When in doubt, keep the athlete out of play.
2. Ensure the athlete is evaluated by a health care professional experienced in evaluating for a concussion.
3. Inform the athlete's parents or guardians about the possible concussion and give them a fact sheet on concussion.
4. Keep the athlete out of play the day of the injury and until a health care professional, experienced in evaluating for a concussion, says they are symptom-free and it's okay to return to play.

❖ Sometimes people do not recognize that a bump, blow, or jolt to the head can cause a concussion. As a result, athletes may receive no medical care at the time of the injury, but they may later report symptoms such as headache and dizziness. These symptoms can be a sign of a concussion.

Sports and Concussions

- ❖ An estimated 3.8 million sports and recreation related concussions occur in the United States each year. For Pennsylvania the figure could be as high as 156,000 concussions per year. (1)
- ❖ During 2001-2005, children and youth ages 5-18 years accounted for 2.4 million sports related emergency department (ED) visits annually, of which 6% (135,000) involved a concussion. (2)
- ❖ In organized high school sports, concussions occur more often in competitive sports, with football accounting for more than 60% of concussions. (3)

- ❖ For males, the leading cause of high school sports concussion is football; for females, the leading cause of high school sports concussion is soccer. (3)
- ❖ Among children and youth ages 5-18 years, the five leading sports or recreational activities, which account for concussions include bicycling, football, basketball, playground activities, and soccer. (2)
- ❖ Collegiate and high school football players who have had at least one concussion are at an increased risk for another concussion. (3)
- ❖ The potential for concussions is greatest in athletic environments where collisions are common. Environmental factors also can cause injury. For example, a player may collide with an unpadded goalpost or trip on an uneven playing surface. (4)
- ❖ A repeat concussion that occurs before the brain recovers from the first—usually within a short period of time (hours, days, or weeks)—reportedly can result in brain swelling, permanent brain damage, and even death. This condition is called second impact syndrome. (3)

What is known about sports, concussion risk, and recovery?

- ❖ High school athletes' recovery times for a sports concussion are longer than college athletes' recovery times. (5)
- ❖ High school athletes who sustain a concussion are three times more likely to sustain a second concussion. (3)
- ❖ Lack of proper diagnosis and management of concussion may result in serious long-term consequences, or risk of coma or death. (6,7)

Estimated statistics on brain injuries in Pennsylvania

- ❖ 287,000 Pennsylvanians are living with lifelong disability due to brain injury
- ❖ 82,000 Pennsylvanians sustain a brain injury each year
- ❖ 21,000 Pennsylvania children ages 0-14 sustain brain injuries each year
- ❖ 2,300 Pennsylvanians die from brain injuries each year

References

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