

CONCUSSION/HEAD INJURY IN SCHOOLS AND SPORTS

A concussion is a type of brain injury that changes the way the brain normally works. A concussion is caused by a bump, blow, or jolt to the head. Concussions can also occur from a fall or blow to the body that causes the head and brain to move rapidly back and forth. Any blow to the head or change in a student's behavior should be taken seriously. Teachers, staff, and coaches need to be able to recognize symptoms of a concussion/head injury and know what actions to take.

Children and adolescents are among those at greatest risk for a concussion. Concussions can result from a fall, or any time the head comes into contact with a hard object, such as the floor, a desk, or another person's head or body. The potential for a concussion is greatest during activities where collisions can occur, such as during physical education (PE) class, recess, or sports activities. Students may also get a concussion when doing activities outside of school, but symptoms of the concussion do not start to show until they are at school.

What are the signs and symptoms of concussion?

Signs Observed by the School Nurse or Staff

- Appears dazed or stunned
- Is confused about events
- Answers questions slowly
- Repeats questions
- Can't recall events *prior* to the hit, bump, or fall
- Can't recall events *after* the hit, bump, or fall
- Loses consciousness (even briefly)
- Shows behavior or personality changes

Symptoms Reported by the Student

Thinking/Remembering:

- Difficulty thinking clearly
- Difficulty concentrating or remembering
- Feeling more slowed down
- Feeling sluggish, hazy, foggy, or groggy

Physical:

- Headache or “pressure” in the head
- Nausea or vomiting
- Balance problems or dizziness
- Fatigue or feeling tired
- Blurry or double vision
- Sensitivity to light or noise
- Numbness or tingling
- Does not “feel right”

Emotional:

- Irritable
- Sad
- More emotional than usual
- Nervous

Sleep:*

- Drowsy
- Sleeps *less* than usual
- Sleeps *more* than usual
- Has trouble falling asleep

*Only ask about sleep symptoms if the injury occurred on a prior day.

Remember, you can't see a concussion and some students may not experience or report symptoms until hours or days after the injury. Most young people with a concussion will recover quickly and fully. But for some, concussion signs and symptoms can last for days, weeks, or longer. Children and teens with a concussion should NEVER return to sports or recreational activities on the same day the injury occurred. They should delay returning to their activities until a health care professional experienced in evaluating concussions says they are symptom free and it is okay to return to play. This means not returning to PE class, sports practices or games, or physical activity during recess until permitted by a health care professional.

The student should be taken to the closest emergency department right away if he/she exhibits any of the following danger signs after a bump, blow, or jolt to the head or body:

- One pupil is larger than the other
- Is drowsy or cannot be awakened
- A headache that gets worse and does not go away
- 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 (even brief loss of consciousness should be taken seriously)

Remember your A, B, C's - **Assess** the situation, **Be** alert for signs and symptoms, and **Contact** a health care professional. Below are the steps to take when a student experiences a bump, blow, or jolt to the head or body:

1. Observe the student for signs and symptoms of concussion for 30 minutes. If the injury occurs during a sporting event, the coach should appoint another individual or volunteer to monitor the student. If any danger symptoms are present, call emergency response team (9-1-1) immediately.
2. Complete the attached *Concussion Signs and Symptoms Checklist* and monitor students consistently during the observation period.
3. Notify the student's parent(s) or guardian(s) that their child had an injury to the head. If symptoms **ARE** present or begin to become present, immediately refer the student to a health care professional by calling an emergency response team (9-1-1). Send a copy of the *Concussion Signs and Symptoms Checklist* with the student for the health care professional to review. Students should follow their health care professional's advice about when they can return to school and to physical activity. If signs or symptoms are **NOT** present, the student may return to class, but should not return to sports or recreational activities on the day of the injury. Send a copy of the *Concussion Signs and Symptoms Checklist* with the student for their parent(s) or guardian(s) to review and ask them to continue to observe the student at home for any changes. Explain that signs and symptoms of concussion can take time to appear. Note that if signs or symptoms appear, the student should be seen immediately by a health care professional.

Concussion and head injury information need to be reviewed with staff, teachers, and coaches yearly and whenever an incident occurs. Signs and symptoms should be recognized and immediate action taken. Encourage teachers and coaches to also monitor students who return to school after a concussion. Students may need to limit activities while they are recovering. Exercising and 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 concentration and learning - should be carefully monitored and managed by health and school professionals.

- **Prepare a concussion action plan**
To ensure that concussions are identified early and managed correctly, have an action plan in place before the start of the school year. This plan can be included in your school concussion policy. Be sure that other appropriate school and athletic staff know about the plan and have been trained to use it. An online action plan for sports and recreation activities can be accessed at www.cdc.gov/concussion/response.html
- **Educate parents, teachers, coaches, and students about concussion**
Parents, teachers, and coaches know their students well and may be the first to notice when a student is not acting normally.



- **Prevent long term problems**

A repeat concussion that occurs before the brain recovers from the previous concussion - 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. Keep students with a known or suspected concussion out of any physical activity such as sports or playground use on the day of the injury and until a health care professional with experience in evaluating for concussion says they are symptom-free and it is okay for the student to return to play.

- **Create a safe school environment**

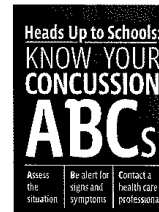
Make sure your school has policies and procedures to ensure that the environment is a safe, healthy place for students. Talk to all school staff and administrators and encourage them to keep the physical space safe, keep stairs and hallways clear of clutter, secure rugs to the floor, and check the surfaces of all areas where students are physically active, such as playing fields and playgrounds. Proper supervision of students is also important.

- **Monitor the health of your students**

Make sure to ask whether an athlete has ever had a concussion and insist that your athletes are medically evaluated and in good condition to participate in sports. Keep track of athletes who sustain concussions during the school year.

All data and information were obtained through the Centers for Disease Control and Prevention. For more information, tool kits, posters, training materials, and videos for youth sports coaches and high school coaches, visit: www.cdc.gov/Concussion

Concussion Signs and Symptoms Checklist



Student's Name: _____ Student's Grade: _____ Date/Time of Injury: _____

Where and How Injury Occurred: *(Be sure to include cause and force of the hit or blow to the head.)* _____

Description of Injury: *(Be sure to include information about any loss of consciousness and for how long, memory loss, or seizures following the injury, or previous concussions, if any. See the section on Danger Signs on the back of this form.)* _____

DIRECTIONS:

Use this checklist to monitor students who come to your office with a head injury. Students should be monitored for a minimum of 30 minutes. Check for signs or symptoms when the student first arrives at your office, fifteen minutes later, and at the end of 30 minutes.

Students who experience one or more of the signs or symptoms of concussion after a bump, blow, or jolt to the head should be referred to a health care professional with experience in evaluating for concussion. For those instances when a parent is coming to take the student to a health care professional, observe the student for any new or worsening symptoms right before the student leaves. Send a copy of this checklist with the student for the health care professional to review.

To download this checklist in Spanish, please visit: www.cdc.gov/Concussion. Para obtener una copia electrónica de esta lista de síntomas en español, por favor visite: www.cdc.gov/Concussion.

May 2010

OBSERVED SIGNS	0 MINUTES	15 MINUTES	30 MINUTES	<input type="checkbox"/> MINUTES Just prior to leaving
Appears dazed or stunned				
Is confused about events				
Repeats questions				
Answers questions slowly				
Can't recall events <i>prior</i> to the hit, bump, or fall				
Can't recall events <i>after</i> the hit, bump, or fall				
Loses consciousness (even briefly)				
Shows behavior or personality changes				
Forgets class schedule or assignments				
PHYSICAL SYMPTOMS				
Headache or "pressure" in head				
Nausea or vomiting				
Balance problems or dizziness				
Fatigue or feeling tired				
Blurry or double vision				
Sensitivity to light				
Sensitivity to noise				
Numbness or tingling				
Does not "feel right"				
COGNITIVE SYMPTOMS				
Difficulty thinking clearly				
Difficulty concentrating				
Difficulty remembering				
Feeling more slowed down				
Feeling sluggish, hazy, foggy, or groggy				
EMOTIONAL SYMPTOMS				
Irritable				
Sad				
More emotional than usual				
Nervous				

→ More



Danger Signs:

Be alert for symptoms that worsen over time. The student should be seen in an emergency department right away if s/he has:

- One pupil (the black part in the middle of the eye) larger than the other
- Drowsiness or cannot be awakened
- A headache that gets worse and does not go away
- Weakness, numbness, or decreased coordination
- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Difficulty recognizing people or places
- Increasing confusion, restlessness, or agitation
- Unusual behavior
- Loss of consciousness (even a brief loss of consciousness should be taken seriously)

Additional Information About This Checklist:

This checklist is also useful if a student appears to have sustained a head injury outside of school or on a previous school day. In such cases, be sure to ask the student about possible sleep symptoms. Drowsiness, sleeping more or less than usual, or difficulty falling asleep may indicate a concussion.

To maintain confidentiality and ensure privacy, this checklist is intended only for use by appropriate school professionals, health care professionals, and the student's parent(s) or guardian(s).

For a free tear-off pad with additional copies of this form, or for more information on concussion, visit: www.cdc.gov/Concussion.

Resolution of Injury:

- ___ Student returned to class
- ___ Student sent home
- ___ Student referred to health care professional with experience in evaluating for concussion

SIGNATURE OF SCHOOL PROFESSIONAL COMPLETING THIS FORM: _____

TITLE: _____

COMMENTS:

For more information on concussion and to order additional materials for school professionals FREE-OF-CHARGE, visit: www.cdc.gov/Concussion.

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

