

Concussion (head injury)

A concussion is an injury to the brain usually caused by a blow to the head. In most cases, it does not involve a loss of consciousness. When you've bumped your head, it's important to know:

- the symptoms of a concussion
- how it should be managed
- its lasting effects

Symptoms

Because the brain is very complex, every brain injury is different. Some symptoms may appear right away, while others may not show up for days or weeks after the concussion. Sometimes the injury makes it hard for people to recognize or to admit that they are having problems.

Symptoms of a concussion are usually temporary, but may last for days, weeks, or even longer. Generally, if you feel something is "not quite right," or if you're "feeling foggy," you should talk with your health care provider.

The following can indicate a concussion:

- low-grade headaches that won't go away
- having more trouble than usual:
 - remembering things
 - paying attention or concentrating
 - organizing daily tasks
 - making decisions or solving problems
- slowness in thinking, acting, speaking, or reading
- getting lost or easily confused
- neck pain
- feeling tired all the time, lack of energy
- change in sleeping pattern
 - sleeping for much longer periods of time than before
 - trouble sleeping or insomnia
- loss of balance, feeling dizzy, light-headed
- increased sensitivity to light, sound, distractions

- blurred vision, eyes that tire easily
- loss of sense of taste or smell
- ringing in the ears
- change in sexual drive
- mood changes:
 - feeling sad, anxious, listless
 - becoming easily irritated or angry for little or no reason
 - lack of motivation

You should avoid

- drinking alcohol
- any medications that cause drowsiness or changes in level of consciousness (pain medications, sleeping pills, muscle relaxants, tranquilizers or recreational drugs)
- a heavy diet (may cause vomiting)
- strenuous activity
 - operating heavy machinery or driving
 - hitting your head again (especially within 3 months after your recovery)

Recovery time

You should never return to any sort of strenuous activity (including sports) while you still have signs of a concussion, like headache or dizziness. If you've had memory loss or loss of consciousness, you may not be able to return to heavy activity for two to four weeks.

How fast people recover from brain injury varies. Although

most people have a good recovery, how quickly they improve depends on many factors. These factors include how severe their concussion was, what part of the brain was injured, their age, and how healthy they were before the concussion.

Rest is very important after a concussion because it helps the brain to heal. You'll need to be patient because healing takes time. Return to your daily activities, such as work or school, at your own pace. As the days go by, you can expect to gradually feel better.

If you already had a medical problem at the time of your concussion, it may take longer for you to recover from your brain injury. Anxiety and depression may also make it harder to adjust to the symptoms of brain injury.

Danger Signs In rare cases, along with a concussion, a dangerous blood clot may form on the brain, crowding the brain against the skull.	
Contact your health care provider or emergency department immediately if, after a blow to the head, you have any of these danger signs: <ul style="list-style-type: none"> • headaches that get worse • weakness, numbness or decreased coordination • repeated vomiting 	The people checking on you should take you to the emergency department right away if you: <ul style="list-style-type: none"> • cannot be awakened • have one pupil that is larger than the other • have convulsions or seizures • have slurred speech • are getting more confused, restless, or agitated

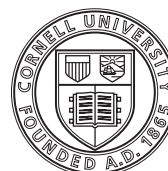
Treatment

The best treatment for a concussion is rest and careful observation. Most individuals can be safely observed at home by friends, roommates, or family. In fact, friends and family members may be better at noticing changes in behavior than a medical provider (who may not know the patient as well).

Management

- Take acetaminophen for a headache (i.e. Tylenol).
- Eat a light diet, especially if you're feeling nauseated.
- Get plenty of rest and keep activity light.
- Watch for signs of later symptoms.

If symptoms increase or do not improve within 24 hours, call Gannett (255-5155).



While you are healing, you should be very careful to avoid doing anything that could cause a blow or a jolt to your head. Although not common, receiving another concussion before a brain injury has healed can be fatal.

Tips for healing

Here are a few tips to help you get better:

- Get plenty of sleep at night, and rest during the day.
- Return to your normal activities gradually, not all at once.
- Avoid activities that could lead to a second brain injury, such as contact or recreational sports, until your health provider says you are well enough to take part in these activities.
- Ask your health care provider when you can drive a car, ride a bike, or operate heavy equipment because your ability to react may be slower after a brain injury.
- Talk with your health care provider about when you can return to work or school. Ask your caregiver about ways to help your employer or professor understand what has happened to you.
- Consider talking with your professors/advisors about returning to work or school gradually and changing your work activities until you recover.
- Take only drugs approved by your health care provider.
- Don't drink alcoholic beverages until your health care provider says you are well enough to do so. Alcohol and certain other drugs may slow your recovery and can put you at risk of further injury.
- If it's harder than usual to remember things, write them down.
- If you're easily distracted, try to do one thing at a time. For example, don't try to watch TV while fixing dinner.
- Consult with family members or close friends when making important decisions.
- Prioritize your basic needs such as eating well and getting enough rest.

FOR ATHLETES

Return to Play

Report all head injuries or symptoms of concussion to your team athletic trainer immediately. Never return to your sport or a heavy activity level after a major concussion until you've been cleared by your team physician.

Stages of Recovery

1. Rest until asymptomatic (physical and mental rest) and ImPACT scores have normalized
2. Light aerobic exercise (e.g., stationary cycling)
3. Sport-specific exercise
4. Non-contact training drills (start light resistance training)
5. Full contact training drills after medical clearance (by team physician and athletic trainer)
6. Return to competition

At least 24 hours should be devoted to each stage of recovery. You should return to Stage One if symptoms recur. Resistance training should only be added in the later stages. Medical clearance must be given before return to play.

Even after your brain injury has healed, you should protect yourself from having another concussion. People who have had repeated brain injuries, such as boxers or football players, may have serious problems later in life. These problems include difficulty with concentration and memory, and sometimes with physical coordination.

Lasting effects

While signs of concussion can last for weeks to months, most people recover without any permanent damage. Repeated concussions should be avoided at all cost. If you return to sports too early, you risk suffering from "second impact syndrome." There is evidence that repeated head injuries over time (especially within 3 months of each other) can result in permanent brain damage and sometimes even death. After several concussions, most doctors will recommend that you consider changing sports or current activities.

ImPACT testing

Varsity athletes at higher risk for head injury will have baseline neuropsychological (imPACT) testing before starting their sport freshman year. They will have post-injury testing under direction of their team athletic trainer which will be reviewed by team physician prior to return to their sport. ImPACT testing may be used to assess concussions for patients without baseline testing under discretion of their treating physician.

For more information visit imPACTtest.com

Fall and Spring Semester Hours:

Monday-Friday	8:30 am-5:00 pm
Saturday	10:00 am-4:00pm
Sunday	building closed

Check the web for hours during breaks, winter and summer sessions: www.gannett.cornell.edu

Source Materials:

Facts About Concussion and Brain Injury, Centers for Disease Control and Prevention