

What is a Traumatic Brain Injury?

Traumatic brain injury (TBI) happens when a bump, blow, jolt, or other head injury causes damage to the brain. Every year, millions of people in the U.S. suffer brain injuries. More than half are bad enough that people must go to the hospital. The worst injuries can lead to permanent brain damage or death. Half of all TBIs are from motor vehicle accidents. Military personnel in combat zones are also at risk.

Symptoms of a TBI may not appear until days or weeks following the injury. A concussion is the mildest type. It can cause a headache or neck pain, nausea, ringing in the ears, dizziness, and tiredness. People with a moderate or severe TBI may have those, plus other symptoms:

- A headache that gets worse or does not go away
- Repeated vomiting or nausea
- Convulsions or seizures
- Inability to awaken from sleep
- Slurred speech
- Weakness or numbness in the arms and legs
- Dilated eye pupils

Health care professionals use a neurological exam and imaging tests to assess TBI. Serious traumatic brain injuries need emergency treatment. Treatment and outcome depend on how severe the injury is. TBI can cause a wide range of changes affecting thinking, sensation, language, or emotions. TBI can be associated with post-traumatic stress disorder. People with severe injuries usually need rehabilitation.

Home Care

Your friend or loved one was in the hospital after a serious brain injury. First, doctors and nurses provided treatment to prevent any further damage to the brain, and to help the heart, lungs, and other important parts of the body.

After the person became stable, doctors and nurses did tests and treatment to help them recover from the brain injury. They may have stayed in special units that help people with brain injuries.

What to Expect at Home

People with a serious brain injury improve at their own pace. They may regain an ability (such as movement or speech) then stay the same or get worse for a while. Both of these may be followed by another period where the person will have more improvement.

Behavior and Social Interaction

People may display inappropriate behavior after a brain injury. It is okay to point out when behavior is not appropriate. Explain the reason and suggest a different behavior. Offer praise when the person calms down or changes their behavior.

Sometimes suggesting a new activity or a new place to go is the best option.

It is important for family members and others to stay calm.

- Try to ignore angry behavior. Do not make a face or show anger or judgment.
- Your doctor, nurse, or therapist will help you learn when to decide to step in and when to ignore certain behavior.

Muscles, Joints, and Movement

At home, the person who had the brain injury may need to practice everyday activities. It may help to create a routine where certain activities are done at the same time each day.

The doctor, nurse, and therapist will help you decide how independent the person can be and when you can leave them alone. Make sure your home is safe so injuries don't happen. This includes making the bathroom safe, for either a child or an adult, and protecting against falls.

Family and caregivers may need to help the person with the following:

- Exercising the elbows, shoulders, and other joints, to keep them loose
- Watching for joint tightening (contractures)
- Making sure splints are used in the correct way
- Making sure arms and legs are in a good position when sitting or lying
- Caring for muscle spasticity or spasms

If the person is using a wheelchair, they will need follow-up visits with their health care provider to make sure it fits well. The person also needs to change positions in the wheelchair several times an hour during the day, to help prevent skin ulcers.

Learn to make your home safer if the person with the brain injury wanders in or from the home.

Diet and Swallowing

Some people with brain injuries forget about eating. If so, help them learn to add extra calories. Talk with your doctor if the person is a child. Children need to get enough calories and nutrition to grow.

If the person with the brain injury has problems with swallowing, help them follow any special diet that makes eating safer. Ask your doctor what the signs of swallowing problems are. Learn tips to make feeding and swallowing easier and safer.

Tips for Daily Life

Tips for making clothing easier to put on and take off:

- Do not give the person too many choices.
- Velcro is much easier than buttons and zippers. If the clothing has buttons or zippers, they should be in the front.

- Use pullover clothes when possible and slip on shoes.

Tips for talking to the person with a brain injury (if they have problems understanding):

- Keep distractions and noise down. Move to a quieter room.
- Use simple words and sentences, speaking slowly. Keep your voice lower. Repeat if needed. Use familiar names and places. Tell them when you are going to change the subject.
- If possible, make eye contact before touching or speaking to them.
- Ask questions so the person can answer “yes” or “no.” When possible, give clear choices. Use props or visual prompts when possible. Do not give the person too many options.

When giving instructions:

- Break down instructions into small and simple steps.
- Allow time for the person to understand.
- If the person becomes frustrated, take a break or consider redirecting them to another activity.

Try using other methods of communicating:

- You may want to use pointing, hand gestures, or drawings.
- Develop a book with pictures of words or photographs to use when communicating about common topics or people.

Bladder, Bowels, and Bathing

Have a routine. Once the person finds a bowel routine that works, help them stick with it. Pick a regular time, such as after a meal or a warm bath.

- Be patient. It may take 15 to 45 minutes for the person to have bowel movements.
- Try having the person gently rub their stomach to help stool move through their colon.

The person may have problems starting to urinate or emptying all of the urine out of their bladder. The bladder may empty too often or at the wrong time. The bladder may become too full, and they may leak urine out of the overfilled bladder.

Some men and women may need to use a urinary catheter. This is a thin tube that is inserted into your bladder. Know how to care for the catheter.

When to Call the Doctor

Call the person’s doctor if they have:

- Problems taking drugs for muscle spasms
- Problems moving their joints (joint contracture)

- Problems moving around or it is getting harder for them to transfer out of a bed or chair
- Skin sores or redness
- Pain that is becoming worse
- Choking or coughing when eating
- Signs of a bladder infection (fever, burning with urination, or frequent urination)
- Behavior issues that are hard to manage