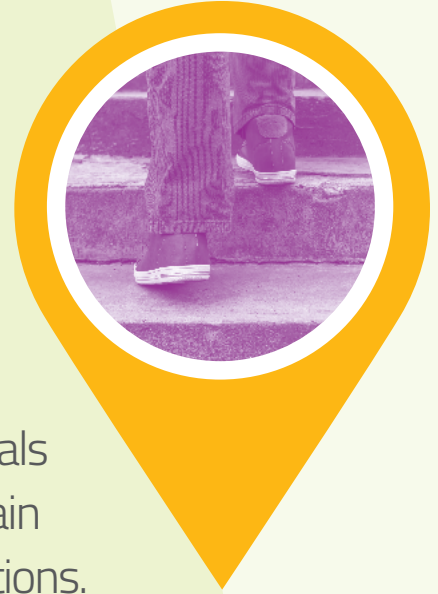


Physical Changes



The brain receives the signals from all the nerves in the body. By reacting to the signals the brain controls physical functions. A brain injury may disturb one or all of these functions.

The following are a variety of ongoing physical problems survivors of a brain injury may experience while recovering. Along with some examples of the problems, we offer suggestions that may help you understand and deal with them.

COMMON PHYSICAL EFFECTS

Fatigue

Fatigue (being extremely tired) is very common during the journey to recovery. The body needs time and energy to heal after the injury.

In addition to one's body feeling tired, a survivor can also have cognitive fatigue because of a brain injury. This affects thinking, causes irritability, and bad headaches.

Fatigue can slow down the return to normal life activities such as school and work. Over time, energy will improve and last longer and fatigue will lessen.

Tips for reducing the effects of fatigue:

- Recognize the signs of fatigue and take breaks as needed.
- Set a schedule that includes regular rest breaks or naps.
- Avoid evening naps as this can upset regular day/night sleep patterns and result in increased fatigue the next day.
- Start practicing simple activities that you can complete easily without fatigue.
- Over time, practice more complex activities taking breaks as needed.

Headaches

Headaches are another common physical effect following a brain injury. Some people have a headache all the time while others have headaches that come and go.

Tips for minimizing headaches:

- Get enough sleep as rest can help relieve a headache.
- Avoid alcohol.
- Cold foods, aged hard cheeses or chocolate can trigger headaches. Avoid if possible.
- Stress can increase headaches. Breaks during activities can help manage stress. Take the approach of “small steps slowly,” which can be less stressful.
- Keep track of headaches and share the information with your doctor, who may be able to help.

Sleep Changes

Sleep problems are very common in the first few months after a brain injury. This problem can sometimes occur because survivors sleep during the day from fatigue and then have difficulty falling or staying asleep at night.

Tips for reducing sleep problems:

- Work with your doctor to set healthy sleeping patterns. Schedule a regular late afternoon nap followed by enough activity to help you feel tired by bedtime.
- Avoid caffeine after noon.
- Get regular exercise.
- Go to bed at the same time every night. It doesn't matter what time, what's important is the amount and quality of your sleep.

Dizziness

Dizziness is a term used to describe feeling faint, lightheaded or weak.

As other parts of the body are affected after injury, a number of signals to and from the brain are disrupted. These signals control sense of balance so you may feel dizzy.

Dizziness often happens in the first few weeks following injury. If you feel dizzy, be careful as there is an increased chance of falling. If dizziness does not go away, tell your doctor.

Tips to minimize the effects of dizziness:

- Remove items that you could slip on such as rugs and electrical cords.
- After lying down sit upright a few moments before standing.
- Use a cane, walker or other assistance.
- Avoid driving a car when feeling lightheaded.
- Before walking, give your brain time to adjust by sitting for a few minutes.

Seizures

After a brain injury, there may be scar tissue in the brain. This scar tissue may cause you to have seizures.

Seizures are most common in the first year after injury. It happens when the electrical system in the brain misfires as is common with a brain injury.

Although seizures can be frightening, it's important to know the following:

- You cannot swallow your tongue.
- You will not die.

Grand Mal seizures (tonic-clonic seizures) are the most common type of seizure and likely the most commonly experienced by those who have an acquired brain injury. This type of seizure has the following signs:

- It usually lasts about 40 seconds.
- The person is unconscious.
- It affects the whole body with jerking movements.
- The person may bite cheeks or tongue and have foamy saliva.
- Loss of bladder and bowel control can happen.
- Skin might turn slightly blue.

Following a seizure, the person will likely feel very tired, have sore muscles, and be confused. It is common for the person to rest for a few hours after a seizure to regain strength.

Tips for helping someone who is having a seizure:

- If the individual is standing or sitting, help them to the ground and place something soft under the head (pillow, jacket, or your lap).
- Clear the area surrounding the individual to reduce harm to jerking limbs and body.
- Do not try to restrain movement during a seizure as this can lead to injury.
- Do not put objects in the mouth to stop the biting as this could cause choking.
- Once the seizure is over, stay with the individual. They will have little or no memory of the event. Calmly explain what happened.
- Clear any crowd that has gathered to reduce anxiety and embarrassment.

Seizures come and go. Some things that trigger seizures include the following:

- stress
- alcohol and other drugs
- fatigue
- flashing lights
- emotional upsets
- poor nutrition and low blood sugar

Seizures can happen over the short or long term. It is very important to control them and medication is the most common way to do this. It usually takes about two weeks to adjust to a new medication or dosage change. Let your doctor know if you have any side effects.

Sensory Changes

When a person has a brain injury, each of the five senses is at risk of a change. Typically, this lasts for about a year following injury. For some, these changes may not go away. In these cases, therapy and rehabilitation will help.

Examples of changes you might see:

- blurry vision, double vision or sensitivity to light
- hearing problems including ringing in the ears
- changes in taste and smell

Tips for minimizing effects of sensory changes:

- See a neuro-ophthalmologist to evaluate visual problems.
- Avoid alcohol.
- Check hearing and use hearing aids if necessary
- Seek further evaluation and treatment as needed.

LESS COMMON PHYSICAL EFFECTS

Apraxia

Apraxia is the inability to carry out movements even though muscle strength, coordination, and sensation are normal. This happens when messages from the brain to the part of the body involved in the task are disrupted.

Someone with apraxia may have trouble with the following:

- writing
- folding
- putting clothes on correctly
- putting a letter inside an envelope
- using cutlery for eating

Tips for minimizing the frustration of those with apraxia:

- Allow the individual as much time as needed to do the task.
- Offer to guide the person to do the task step by step.
- Write instructions for the person to follow.
- To support independence, help only if the person asks for it or accepts your offer to help.
- Work with the physiotherapist and the individual to develop more helpful ways to carry out daily routines.



Bladder/Bowel Changes

The brain controls bladder and bowel function. The health care professionals involved in your care will be the first to assess these functions following injury. Do not assume that all bladder and bowel changes are a direct result of the brain injury. Have your doctor verify that they are not the result of other issues. After assessment, there will be a plan set to meet these main goals:

- Maintain dry and healthy skin.
- Establish a regular elimination pattern suited to the individual.
- Manage constipation, incontinence (no control), and diarrhea.

Tips for minimizing the effects of bowel and bladder changes:

- Try to set a regular schedule to empty bowels, which you can adjust to fit needs and activities.
- Seek help from healthcare professional to teach bladder retraining and to provide medications that may help.
- If caring for an individual unable to ask for assistance, try to learn to recognize signs of discomfort leading to a bowel movement.
- Be aware of the location of bathrooms when on outings.
- Get enough fiber and fluids in diet to avoid constipation.
- Use an adult diaper.

Spasticity

Spasticity refers to an abnormal increase of muscle tone throughout the body. This occurs when the part of the brain that controls movement is injured. You may be unable to move your muscles when stretched. Instead, they remain stiff and interfere with your ability to perform regular daily tasks (e.g., getting dressed).

The degree to which an individual experiences muscle stiffness varies from slight to severe and recovery can be a lifelong process.

Tips for minimizing the effects of spasticity:

- Seek help from a physical therapist to develop a stretching program.
- Have someone help you do the recommended stretches.
- If you use splints, monitor the skin area for redness, blisters or open sores, which can lead to pressure ulcers.
- Ask your doctor for other treatment options if spasticity gets worse.



FIND
HELP

Swallowing

Problems swallowing can happen after a brain injury. Whether this happens and how much of a problem it is depends on the location of the brain damage. The frontal lobes of the brain are responsible for the muscle action in swallowing and the brain stem is responsible for relaying the message to swallow to the frontal lobes. Tracheostomies or tube feeding may also cause problems with swallowing. The technical term health care professionals use to describe this is dysphagia.

Swallowing problems can cause food to go into the lungs instead of the stomach. When food or fluid gets into the lungs it often causes pneumonia.

Following a brain injury there can be many factors that can contribute to difficulty swallowing. Examples include the following:

- decreased strength in muscles used for swallowing
- decreased concentration level
- poor control and strength in the upper body and head

Tips for minimizing the effects of swallowing problems:

- Seek help from a speech or occupational therapist to figure out the best types of liquids and foods to eat.
- To avoid weight loss due to appetite changes, see a dietician to review what you're eating and learn how to have a balanced diet.
- Write meal times in a day planner and check them off when finished.

Visual Spatial Problems

Visual spatial problems can include blind spots and changes in the brain's ability to understand what the eyes see. The ability to be aware of where you are in space and in relation to other items surrounding you can also be affected. This is called spatial relations syndrome, which includes difficulties judging distance between two or more objects.

Examples of visual spatial problems:

- bumping into things on the affected side
- confusion between right and left
- difficulties seeing
- difficulty finding your way around
- ignoring things on one side of the body

Tips for minimizing the effects of visual spatial problems:

- Have a place for everything and keep everything in its place.
- Arrange your house to make tasks easier.
- Slow down and carefully look and feel for things around you.
- Avoid going to new places alone.
- Seek professional advice about whether it is safe to drive.