

UNDERSTANDING TRAUMATIC BRAIN INJURY



The brain controls everything we do, say, think and feel. It controls the very functions that keep us alive, and it is through the brain that we experience emotion and personal expression.

A traumatic brain injury, or TBI, is an injury to the brain caused by something outside the body. Some of the most common causes of TBI include falls, car accidents, being hit in the head by an object, acts of violence, and sports-related concussions.

TBIs happen to persons in all places, regardless of race, ethnicity, gender, socio-economic class or age. The only known cure for brain injury is prevention.

Some people believe that when the brain is injured that it can mend completely like a broken bone.

Rehabilitating from a brain injury takes time because damaged cells need to relearn how to do things while the brain uses healthy cells to compensate.

MAJOR CAUSES OF TRAUMATIC BRAIN INJURIES*



*Based on information from the National Center for Injury Prevention and Control, CDC

1%	SUICIDE
11%	ASSAULT
19%	STRUCK BY OBJECTS (INCL. SPORTS)
20%	MOTOR VEHICLE ACCIDENTS
21%	OTHER
28%	FALLS

HOW LONG WITH THE EFFECTS OF TBI BE PRESENT?

It is vitally important to understand that no two brain injuries are the same, and therefore the recovery from each brain injury is unique as well. In most cases, the greatest recovery takes place in the first six months, with less dramatic improvement in the second six months, and then little if any healing after one year. Additional gains can still be made by learning compensation strategies to adjust to the "new normal."

How well someone does after a TBI depends on how severe the injury is, what part of the brain is damaged, what strategies are learned to work around remaining problems, and the support the TBI survivor has around them.



**It is not about what you lost -
It is about how you use what you have left!**

POSSIBLE CHANGES FOLLOWING A TRAUMATIC BRAIN INJURY



TBIs may result in temporary or permanent cognitive, physical, behavioral and/or emotional changes. Brain injury can lead to different problems, depending on the parts of the brain that are affected by the injury.

Some affects of TBIs are the same for all persons, and some are different for each person. It may take a long time before the person can return to the activities they did before the injury.

The Three Primary Areas of Change after Traumatic Brain Injury involve Physical Activities, Thinking Activities, and Emotions/Behavior.

Some people will never be able to return to all the activities they did before the injury, but may return to some.

THE PART OF THE BRAIN INJURED DETERMINES THE FUNCTIONS AFFECTED

Frontal Lobe Injury

- Difficulty with attention
- Personality changes
- Loss of verbal expression
- Loss of spontaneity
- Uncontrollable emotional or social behavioral changes
- Poor voluntary movement initiation

Occipital Lobe Injury

- Vision defects (visual field cuts)
- Hallucinations
- Difficulty reading and writing

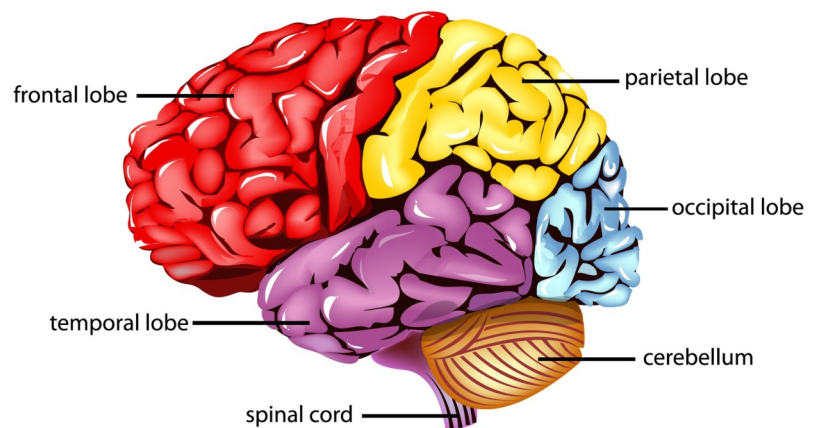
Temporal Lobe Injury

- Difficulty understanding speech
- Short-term memory loss
- Persistent talking
- Increased aggressive behavior
- Difficulty recognizing faces

Brain Stem/Spinal Cord Injury

- Difficulty swallowing food and fluid
- Difficulty with balance/movement
- Impaired regulation of temperature, heart rate, and respiration

Parts of the Human Brain



Parietal Lobe Injury

- Difficulty with academic skills
- Right/left confusion
- Difficulty with eye/hand coordination
- Impaired spatial orientation
- Difficulty naming objects

Cerebellum Injury

- Impaired fine motor skills
- Loss of ability to walk
- Impaired control of eye movements
- Tremors/dizziness
- Slurred speech