



# Brain Injury Facts



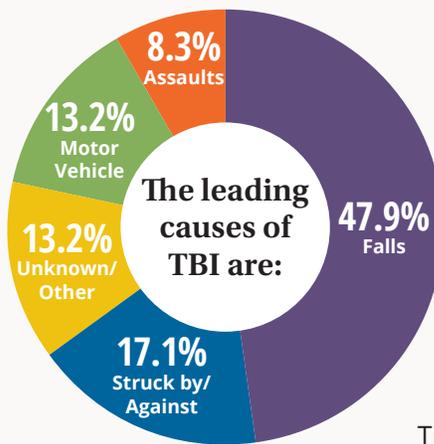
Shepherd Center

## What is brain injury?

Brain injury, also called acquired brain injury, is any damage to the brain affecting a person physically, emotionally or behaviorally. Brain injuries can happen at birth, or later, from an illness or a trauma, and are called either traumatic or non-traumatic, depending on the specific cause.

## How common is brain injury?

- They are most common in men between the ages of 15 to 24.
- After a brain injury, survivors are at higher risk (3 to 8 times higher) of having another brain injury.



An estimated **1.7 million** people sustain a traumatic brain injury (TBI) each year.

About **5.3 million** Americans are living with a TBI-related disability.

## The Impact of Brain Injury

A brain injury may lead to a wide range of short- or long-term issues affecting:

### • Cognitive Function



- Memory
- Attention
- Processing Speed
- Problem-Solving
- Language

### • Sensation



- Hearing
- Vision
- Sensation
- Body Awareness
- Smell

### • Physical Function



- Strength
- Coordination
- Balance
- Swallowing
- Bowel and Bladder Control

### • Emotion & Behavior



- Depression
- Anxiety
- Irritability/anger
- Impulse control
- Personality changes



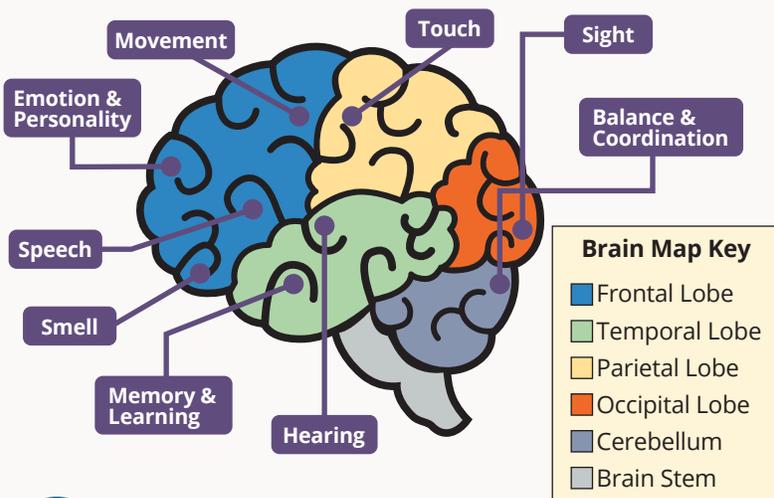
» [cdc.gov/traumaticbraininjury/severe.html](https://cdc.gov/traumaticbraininjury/severe.html)

## Rancho Levels 1-10

The Rancho Los Amigos Levels of Cognitive Functioning-Revised is a 10-point system used to characterize TBI. It measures the levels of awareness, cognition, behavior and interaction with the environment.

<b>Level 1</b>	No Response: Total Assistance
<b>Level 2</b>	Generalized Response: Total Assistance
<b>Level 3</b>	Localized Response: Total Assistance
<b>Level 4</b>	Confused/Agitated: Maximal Assistance
<b>Level 5</b>	Confused, Inappropriate, Non-Agitated: Maximal Assistance
<b>Level 6</b>	Confused, Appropriate: Moderate Assistance
<b>Level 7</b>	Automatic, Appropriate: Minimal Assistance for Daily Living Skills
<b>Level 8</b>	Purposeful, Appropriate: Stand-By Assistance
<b>Level 9</b>	Purposeful, Appropriate: Stand-By Assistance on Request
<b>Level 10</b>	Purposeful, Appropriate: Modified Independent

## What part of the brain is responsible for what?



» [neuroskills.com/resources/rancho-los-amigos-revised.php](https://neuroskills.com/resources/rancho-los-amigos-revised.php)



» [biausa.org/brain-injury/about-brain-injury/basics/function-of-the-brain](https://biausa.org/brain-injury/about-brain-injury/basics/function-of-the-brain)

» [shepherd.org](https://shepherd.org) | Continued on back →



## Injury Prevention

- Remove trip hazards, such as throw rugs.
- Stay healthy and active to reduce your risk of falls.
- Drive sober and distraction free.
- Always wear a seat belt.
- Wear a helmet while riding a bike, skateboard, motorcycle, horse or ATV.
- Wear a helmet while playing contact sports, skiing, skating or snowboarding.



## Avoid Alcohol

- Alcohol slows down or stops brain injury recovery.
- Alcohol magnifies some of the cognitive and mood problems caused by brain injury.
- Alcohol lowers the seizure threshold and may trigger seizures.
- Alcohol use increases risk of another brain injury.



» [msktc.org/tbi/factsheets/Alcohol-Use-After-Traumatic-Brain-Injury](https://msktc.org/tbi/factsheets/Alcohol-Use-After-Traumatic-Brain-Injury)

## Improving Sleep After Brain Injury



### Do:

- » Follow a bedtime routine.
- » Establish a regular bed and wake time.
- » Have a regular daytime routine
- » Create a restful atmosphere.
- » Minimize screen time before bed.



### Don't:

- » Nap more than 20 minutes during the day.
- » Eat, read, watch TV or do work while in bed.
- » Bring screen time into the bedroom
- » Use caffeine, nicotine, alcohol and sugar for five hours before bedtime.
- » Watch the clock.

Talk to your doctor about options to improve your sleep.



For more tips go to:

» [msktc.org/tbi/factsheets/Sleep-And-Traumatic-Brain-Injury](https://msktc.org/tbi/factsheets/Sleep-And-Traumatic-Brain-Injury)

## Exercise Regularly

People with TBI who exercise show fewer symptoms of depression, fatigue and cognitive problems. Talk to your providers about an exercise plan that meets your physical needs.

### The Brain Benefits of Exercise



Increases production of neurochemicals that promote brain cell repair



Boosts decision making skills



Improves memory and attention span



Prompts growth of new nerve cells and blood vessels



Improves multi-tasking and planning



» [brainline.org/content/2008/07/aerobic-exercise-following-tbi\\_pageall.html](https://brainline.org/content/2008/07/aerobic-exercise-following-tbi_pageall.html)

## Use Organization Tools

Calendars, daily planners, checklists, phone reminders and pill organizers to help stay organized and assist your memory.



## Manage Stress

### Stress Management

- Therapy
- Exercise
- Yoga
- Music
- Hobby
- Nature



## Monitor Mood

- Depression is about eight times more common in the first year after TBI than in the general population (about 50% of people with TBI).
- Seek help! There are many options to help with depression following TBI.



» [nimh.nih.gov/health/topics/depression/index.shtml](https://nimh.nih.gov/health/topics/depression/index.shtml)

