



Traumatic Brain Injury

Overview

Traumatic brain injury:

Mild traumatic brain injury may affect your brain cells temporarily. More-serious traumatic brain injury can result in bruising, torn tissues, bleeding and other physical damage to the brain. These injuries can result in long-term complications or death.

The terms "mild," "moderate" and "severe" are used to describe the effect of the injury on brain function. A mild injury to the brain is still a serious injury that requires prompt attention and an accurate diagnosis.

Rehabilitation

Most people who have had a significant brain injury will require rehabilitation. They may need to relearn basic skills, such as walking or talking. The goal is to improve their abilities to perform daily activities.

Therapy usually begins in the hospital and continues at an inpatient rehabilitation unit, a residential treatment facility or through outpatient services. The type and duration of rehabilitation is different for everyone, depending on the severity of the brain injury and what part of the brain was injured.

Rehabilitation specialists may include:

- **PMR doctor** trained in physical medicine and rehabilitation, who oversees the entire rehabilitation process, manages medical rehabilitation problems and prescribes medication as needed
- **Occupational therapist**, who helps the person learn, relearn or improve skills to perform everyday activities
- **Physical therapist**, who helps with mobility and relearning movement patterns, balance and walking
- **Speech and language therapist**, who helps the person improve communication skills and use assistive communication devices if necessary
- **Neuropsychologist**, who assesses cognitive impairment and performance, helps the person manage behaviors or learn coping strategies, and provides psychotherapy as needed for emotional and psychological well-being
- **Social worker or case manager**, who facilitates access to service agencies, assists with care decisions and planning, and facilitates communication among various professionals, care providers and family members
- **Rehabilitation nurse**, who provides ongoing rehabilitation care and services and who helps with discharge planning from the hospital or rehabilitation facility



Prevention

Follow these tips to reduce the risk of brain injury:

- Seat belts and airbags. Always wear a seat belt in a motor vehicle. A small child should always sit in the back seat of a car secured in a child safety seat or booster seat that is appropriate for his or her size and weight.
- Alcohol and drug use. Don't drive under the influence of alcohol or drugs, including prescription medications that can impair the ability to drive.
- Helmets. Wear a helmet while riding a bicycle, skateboard, motorcycle, snowmobile or all-terrain vehicle. Also wear appropriate head protection when playing baseball or contact sports, skiing, skating, snowboarding or riding a horse.
- Pay attention to your surroundings. Don't drive, walk or cross the street while using your phone, tablet or any smart device. These distractions can lead to accidents or falls.

Preventing falls

The following tips can help older adults avoid falls around the house:

- Install handrails in bathrooms
- Put a nonslip mat in the bathtub or shower
- Remove area rugs
- Install handrails on both sides of staircases
- Improve lighting in the home, especially around stairs
- Keep stairs and floors clear of clutter
- Get regular vision checkups
- Get regular exercise

Preventing head injuries in children

- The following tips can help children avoid head injuries:
- Install safety gates at the top of a stairway
- Keep stairs clear of clutter
- Install window guards to prevent falls
- Put a nonslip mat in the bathtub or shower
- Use playgrounds that have shock-absorbing materials on the ground
- Make sure area rugs are secure
- Don't let children play on fire escapes or balconies