

Traumatic Brain Injury



Risk Factors:

- **Age**
Older adults aged 65+ years, young adults 15-24.
- **Sex**
Males have a higher risk of TBI.
- **Race/Ethnicity**
Non-Hispanic White residents and residents in the Non-Hispanic "Other" category have the highest risk of TBI.
- **Substance Use**
- **Mental Health/ Suicidal Ideation**
- **Lack of Physical Activity**
- **Living in a rural area/ lack of trauma center access**

Physical Symptoms:

- Headache
- Seizures
- Blurred vision
- Unequal pupil size
- Clear fluids from nose/ ears
- Nausea/ vomiting
- Weakness/ loss of balance

Cognitive/ behavioral symptoms:

- Loss of consciousness
- Confusion
- Memory/ Concentration problems
- Frustration/ irritability
- Nerve damage

Traumatic Brain Injury (TBI) is a condition in which there is a disruption in normal brain function. This injury occurs from an external force, a blow to the head or body, or penetrating injury to the head. Bleeding, swelling, and tearing damage to the brain tissue and nerve fibers can be focal (confined to one area), or diffuse (widespread).

Events that can cause TBI: Falls, motor vehicle crashes, firearm-related suicide, assaults, explosions/ blasts, and blunt-trauma accidents.

Two broad types of TBI:

Penetrating: An object pierces the skull (bullet, shrapnel, bone fragment).

Non Penetrating (Blunt): An external force is able to move the brain within the skull.

Severity Classifications: Mild/ Concussion, *Moderate, *Severe
**Can result in long-term effects or death.*

For more information and data go to www.SDHealthStatistics.com
Community Health Statistics Unit:
619-692-6667

Facts

- There were 68,663 TBI Deaths in 2023 in the U.S.
- TBIs may be misdiagnosed in older adults due to symptom overlap with other medical conditions.
- While men are more likely to experience TBI, women are more likely to experience TBI from intimate partner violence.

Prevent Complications

- **"Brain Rest"** following a concussion by avoiding activities that require concentration.
- **Get Active.** Older adults engage in strength and balance exercise to reduce fall risk.
- **Follow up with a healthcare provider.**
- **Avoid repeated head traumas.**



Resources

CDC Traumatic Brain Injury & Concussion
[Facts About TBI | Traumatic Brain Injury & Concussion | CDC](#)
National Institute of Neurological Disorders and Stroke:
[Traumatic Brain Injury \(TBI\) | National Institute of Neurological Disorders and Stroke](#)

Data Sources



¹ Centers for Disease Control and Prevention. (2024, April 29). *Facts about TBI*. Centers for Disease Control and Prevention. <https://www.cdc.gov/traumatic-brain-injury/data-research/facts-stats/index.html>

² National Institute of Neurological Disorders and Stroke. (2024, June 6). *Traumatic Brain Injury (TBI)*. National Institute of Health. <https://www.ninds.nih.gov/health-information/disorders/traumatic-brain-injury-tbi>

³ Centers for Disease Control and Prevention. (2024, October 29). *TBI Data*. Centers for Disease Control and Prevention. <https://www.cdc.gov/traumatic-brain-injury/data-research/index.html>

⁴ Centers for Disease Control and Prevention. (2025, January 30). *Health Disparities in TBI*. Centers for Disease Control and Prevention. <https://www.cdc.gov/traumatic-brain-injury/health-equity/index.html>

⁵ Centers for Disease Control and Prevention (2024, May 16). *About Mild TBI and Concussion*. Centers for Disease Control and Prevention. <https://www.cdc.gov/traumatic-brain-injury/about/index.html>

⁶ American Brain Foundation. (2025, April 10a). *Traumatic Brain Injury*. American Brain Foundation. <https://www.americanbrainfoundation.org/diseases/traumatic-brain-injury/>

⁷ Centers for Disease Control and Prevention. (2025, April 6a). *Heads Up*. Centers for Disease Control and Prevention. <https://www.cdc.gov/heads-up/>

⁸ Defense Health Agency. (2025, April 6a). *DoD Numbers for Traumatic Brain Injury Worldwide*. Defense Health Agency. <https://health.mil/Reference-Center/Reports/2025/03/13/2023-DOD-Worldwide-Numbers-for-TBI>

⁹ Indian Health Service. (2025, February 3a). *Behavioral Health*. U.S. Department of Health and Human Services. <https://www.ihs.gov/newsroom/factsheets/behavioralhealth/>

¹⁰ Centers for Disease Control and Prevention. (2024, April 22). *About STEADI*. Centers for Disease Control and Prevention. <https://www.cdc.gov/steadi/about/index.html>

¹¹ Centers for Disease Control and Prevention. (2024, May 16). *National Concussion Surveillance System*. Centers for Disease Control and Prevention. <https://www.cdc.gov/traumatic-brain-injury/programs/index.html>

¹² Concussion Alliance. (2025, February 6a). *Your child or adolescent was just diagnosed with a concussion. What do you do now?*. Concussion Alliance. <https://www.concussionalliance.org/concussion-management-for-children-and-adolescents>

¹³ DePalma, R., Kobeissy, F. (2024, June 6). *Combat TBI: History, Epidemiology, and Injury Modes*. NIH National Library of Medicine. <https://pubmed.ncbi.nlm.nih.gov/26269923/>

¹⁴ Miller, G., PhD, et. al (2021, May). *Predictors of Traumatic Injury Morbidity and Mortality: Examination of data from the National Trauma Data Bank*. Division of Injury Prevention, National Center for Injury Prevention and Control. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8107124/pdf/nihms-1683652.pdf>

