

# TRAUMATIC BRAIN INJURY (TBI)



*The Mecca of Black Wellness*



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## What is a traumatic brain injury?

The Centers for Disease Control and Prevention (CDC) defines a **traumatic brain injury (TBI)** as: a disruption in the normal function of the brain that can be caused by a bump, blow, or jolt to the head, or penetrating head injury.<sup>1</sup> A TBI is an injury that disrupts the normal function of the brain and can negatively impact a person's quality of life in numerous ways.

## What are some examples of traumatic brain injury?

The leading causes of non-fatal TBI in the United States are falls (35%), motor vehicle-related injuries (17%), and strikes or blows to the head from or against an object (17%), such as in sports and recreational injuries.<sup>2</sup> Additional examples include concussions, injuries related to acts of violence (e.g., gunshot wounds; violent shaking of the head), injuries related to child abuse among infants and children, and exposure to explosive blasts (most common among military personnel).

## Examples of difficulties after a TBI:

- **Motor deficits and disabilities:** Loss of fine motor skills, such as buttoning a shirt
- **Physical effects and changes:** Loss of stamina (easily tired)
- **Cognitive effects and changes:** Problems with "thinking tasks," such as coming up with the correct change in the checkout line at the grocery store or placing an order at a restaurant
- **Speech and language effects:** Aphasia (difficulty with talking or expressing ideas, understanding everyday language, and problems with reading and writing)
- **Sensory and perceptual effects:** Partial or total loss of vision, effects on vision, hearing, smell, or taste
- **Social emotional and behavioral effects:** Problems establishing and maintaining personal and professional relationships

## Are African Americans at increased risk for traumatic brain injuries?

Between years 2002 and 2006, the average annual rates of TBI-related ED visits were estimated to be 456.6 among Whites and 568.7 per 100,000 population among African Americans.<sup>3</sup> Compared to Whites, African Americans also had higher annual TBI-related hospitalization rate (69.8 versus 78.7 per 100,000 population).<sup>2</sup> African Americans had the second highest annual average TBI-related mortality rates overall and the second highest annual average among males.<sup>2</sup>

Prior research indicated that racial and ethnic minorities appear to be at increased risk for TBI and poor health outcomes after TBI.<sup>3</sup> Specifically, previous research found that racial and ethnic minorities were less likely to use in-hospital and post-hospital health care services after a TBI.<sup>3</sup>

## TREATMENT OF TRAUMATIC BRAIN INJURIES

The best treatment for a TBI is determined by understanding the severity of the injury and the specific location of the of the injury on the brain. A range of treatments and therapies can help with recovery from the physical, emotional, and cognitive problems that TBIs can cause. Therapies often include relearning old skills or learning new ways to make up for lost skills. Treatment should be designed to meet each person's specific needs and to strengthen their ability to function at home and in the community. Below is a brief list of possible treatments for TBIs.

- **Rest.** Mild TBI, sometimes called concussion, may not require specific treatment other than rest. However, it is very important to follow a medical provider's instructions for complete rest and gradual return to normal activities after a mild TBI. If normal activities resume too soon and a person starts experiencing TBI symptoms, the healing and recovery process may take much longer.
- **Emergency care.** Emergency care for moderate to severe traumatic brain injuries focuses on making sure the person has enough oxygen and an adequate blood supply, maintaining blood pressure, and preventing any further injury to the head or neck.
- **Medications.** Medications may be used to treat symptoms of TBI and/or to limit secondary damage to the brain immediately after an injury. Examples of types of medication include:
  - **Diuretics.** These drugs reduce the amount of fluid in tissues and increase urine output
  - **Anticonvulsants or Anti-seizure medication.** To avoid any additional brain damage that might be caused by a seizure
  - **Anticoagulants.** To prevent blood clots
  - **Coma-inducing medication.** May be used to put people into temporary comas because a comatose brain needs less oxygen to function
  - **Antidepressants.** To treat symptoms of depression and mood instability
  - **Anti-anxiety medication.** To lessen feelings of nervousness and fear
  - **Stimulants.** To increase alertness and attention
- **Rehabilitation.** Rehabilitation can include several different kinds of therapy. Depending on the injury, these therapies may be needed briefly after the injury, occasionally throughout a person's life, or on an ongoing basis. Examples of types of therapies include:
  - **Cognitive therapy.** Activities designed to improve memory, attention, perception, learning, planning, and judgment
  - **Physical therapy.** Focused on building physical strength, coordination, and flexibility
  - **Occupational therapy.** Aimed at learning or relearning how to perform daily tasks, such as getting dressed, cooking, and bathing
  - **Speech therapy.** Improving the ability to form words and other communication skills as well as how to use special communication devices if necessary
  - **Psychological counseling.** Focused on learning coping skills, working on relationships, and improving general emotional well-being
  - **Vocational counseling.** Specific to a person's ability to return to work, find appropriate work opportunities, and manage workplace challenges

## RESOURCES



To learn more about traumatic brain injury (TBI):

**Centers for Disease Control and Prevention**

<https://www.cdc.gov/traumaticbraininjury/index.html>

**Brain Injury Association of America**

<https://www.biausa.org/brain-injury/about-brain->

**National Institute of Neurological Disorders and Stroke**

<https://www.ninds.nih.gov/Current-Research/Focus-Disorders/Traumatic-Brain-Injury>

## FOR MORE INFORMATION

[www.BlackMentalWellness.com](http://www.BlackMentalWellness.com)



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### References

1. Centers for Disease Control and Prevention (2019). Surveillance Report of Traumatic Brain Injury-related Emergency Department Visits, Hospitalizations, and Deaths—United States, 2014. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.
2. Faul, M., Wald, M. M., Xu, L., & Coronado, V. G. (2010). Traumatic brain injury in the United States; emergency department visits, hospitalizations, and deaths, 2002-2006.
3. Gao, S., Kumar, R. G., Wisniewski, S. R., & Fabio, A. (2018). Disparities in Health Care Utilization of Adults With Traumatic Brain Injuries Are Related to Insurance, Race, and Ethnicity: A Systematic Review. The Journal of head trauma rehabilitation, 33(3), E40–E50. doi:10.1097/HTR.0000000000000338.

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