What our research experts say:

“Through neuroimaging and tests of memory and learning, we’ve found that brain white matter is affected by multiple concussions, specifically in athletes. We’ve learned that even when a concussion isn’t diagnosed, studies show changes in brain white matter directly related to the frequency and severity of brain injuries.”

THOMAS McALLISTER, M.D., IU SCHOOL OF MEDICINE
CHAIR, DEPARTMENT OF PSYCHIATRY

TBI Fast Facts

- **1.7 million** people sustain a TBI each year, resulting in **52,000** deaths and **275,000** hospitalizations
- **30%** of all injury deaths in the U.S. are associated with TBI
- **75%** of TBIs each year are diagnosed as concussions
- **57%** increase in incidence of ED visits from 2001-2009 for sports-related injuries with a concussion/TBI diagnosis in children 19 and younger

What happens?

When you hit your head, your brain collides with the inside of the skull, potentially causing bruising and deformation of the brain surface. The movement of the brain in the skull may tear or stretch your brain’s axons (long tube-like structures that connect neurons), resulting in interrupted neuron communication and reduced brain function.

What are the leading causes of TBI?

- **40.5%** Falls
- **19%** Unknown/Other
- **15%** Struck by/against
- **10.7%** Assaults
- **14.3%** Motor vehicle traffic

What are the symptoms?

- Headache
- Nausea or vomiting
- Dizziness or loss of balance
- Fatigue or drowsiness
- Blurred vision
- Ringing in the ears
- Sensitivity to light and sound
- Trouble with memory and concentration

How is it treated?

Nothing can be done to reverse the initial brain damage caused by trauma, but a mild traumatic brain injury or concussion can be treated with prompt medical attention and rest. For moderate to severe cases, skull and neck X-rays or a CT scan are required to determine treatment options.

How to Respond

- Seek medical attention immediately
- Rest
- Do not return to a sport until cleared by a medical professional

About the IU School of Medicine

The Indiana University School of Medicine and the Rehabilitation Hospital of Indiana are one of just 16 centers in the U.S. designated as a Traumatic Brain Injury Model System site. A member of the NCAA and DOD’s CARE Consortium, the IU School of Medicine approaches TBI research with an interdepartmental focus and is recognized as a national leader in concussion research.

For more about TBI and concussion research:

[medicine.iu.edu/research](http://medicine.iu.edu/research)

Share the facts! #concussion #TBI #braininjury

**SOURCES:**

- [www.cdc.gov/traumaticbraininjury/get_the_facts.html](http://www.cdc.gov/traumaticbraininjury/get_the_facts.html)
- [www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/basics/definition/con-20029302](http://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/basics/definition/con-20029302)
- [careconsortium.net](http://careconsortium.net)