# **Traumatic Brain Injury (TBI):** Pediatric Causes and Prevention Strategies



B is an injury caused by a blow, jolt, or penetrating object that disrupts normal functioning of the brain.

CDC reports that more than **2.8 million** U.S. people sustain a TBI each year; of those, more than **55,000** die and more than **280,000** are hospitalized.<sup>1</sup>

TBI can be mild to severe.



Severe TBI can lead to permanent disability and even death.

**75%** of brain injuries are mild (not life-threatening). Concussion is a type of mild TBI.<sup>2</sup>

# All types of TBI can seriously affect a child's daily life.



Brain injury can cause problems with speaking or understanding, movement or mobility, thinking or memory, and personality or mood.



Eunice Kennedy Shriver National Institute of Child Health and Human Development



# Causes

### The leading causes of TBI in the United States are<sup>1</sup>

#### Falls



About half of brain injuries in children are caused by falls from objects like stairs and bicycles.

# Unintentional blunt trauma



of brain injuries in children are caused by being hit in the head with an object, like a baseball or soccer ball.



Motor vehicle

crashes

Car accidents are the #1 cause of TBI-related death in children older than age 5.

#### Homicide



Homicide is the #1 cause of TBI-related death in children age 4 and younger.

# **Prevention Strategies**

## Take the following actions to reduce the risk of TBI in children.



Use a child safety seat or a seat belt when the child is in a motor vehicle.



Make sure the child wears a helmet when riding a bicycle, skateboarding, and playing sports like hockey and football.



Install window guards and stair safety gates at home.



Avoid shaking your baby. Learn how to prevent shaken baby syndrome.<sup>3</sup>

NICHD supports research to better understand and find safe and effective treatment options for TBI. To learn more, visit: <u>https://www.nichd.nih.gov/health/topics/tbi</u>.

- <sup>1</sup> Centers for Disease Control and Prevention. (2019). TBI: Get the Facts.
- <sup>2</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2003). Report to Congress on mild traumatic brain injury in the United States: Steps to prevent a serious public health problem.
- <sup>3</sup> National Institute of Neurological Disorders and Stroke. (2019). Shaken Baby Syndrome Information Page.





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