



TBI: Get the Facts

Overview

Traumatic brain injury (TBI) is a major cause of death and disability in the United States. From 2006 to 2014, the number of TBI-related emergency department visits, hospitalizations, and deaths increased by 53%. In 2014, an average of 155 people in the United States died each day from injuries that include a TBI.¹ Those who survive a TBI can face effects that last a few days, or the rest of their lives. Effects of TBI can include impairments related to thinking or memory, movement, sensation (e.g., vision or hearing), or emotional functioning (e.g., personality changes, depression). These issues not only affect individuals but also can have lasting effects on families and communities.



What is a TBI?

A TBI is caused by a bump, blow, or jolt to the head that disrupts the normal function of the brain. Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from “mild” (i.e., a brief change in mental status or consciousness) to “severe” (i.e., an extended period of unconsciousness or memory loss after the injury). Most TBIs that occur each year are mild, commonly called concussions.²

How big is the problem?

- In 2014,¹ about 2.87 million TBI-related emergency department (ED) visits, hospitalizations, and deaths occurred in the United States, including over 837,000 of these health events among children.
 - TBI contributed to the deaths of 56,800 people, including 2,529 deaths among children.
 - TBI was diagnosed in approximately 288,000 hospitalizations, including over 23,000 among children. These consisted of TBI alone or TBI in combination with other injuries.
- In 2014, an estimated 812,000 children (age 17 or younger) were treated in U.S. EDs for concussion or TBI, alone or in combination with other injuries.¹
- Over the span of eight years (2006–2014), while age-adjusted rates of TBI-related ED visits increased by 54%, hospitalization rates decreased by 8% and death rates decreased by 6%.¹

What are the leading causes of TBI?

- In 2014,¹ falls were the leading cause of TBI. Falls accounted for almost half (48%) of all TBI-related emergency department visits. Falls disproportionately affect children and older adults:
 - Almost half (49%) of TBI-related ED visits among children 0 to 17 years were caused by falls.
 - Four in five (81%) TBI-related ED visits in older adults aged 65 years and older were caused by falls
- Being struck by or against an object was the second leading cause of TBI-related ED visits, accounting for about 17% of all TBI-related ED visits in the United States in 2014.
- Over 1 in 4 (28%) TBI-related ED visits in children less than 17 years of age or less were caused by being struck by or against an object.
- Falls and motor vehicle crashes were the first and second leading causes of all TBI-related hospitalizations (52% and 20%, respectively).
- Intentional self-harm was the first leading cause of TBI-related deaths (33%) in 2014.

Risk factors for TBI

Among TBI-related deaths in 2014:

- Rates were highest for persons 75 years of age and older.
- The leading cause of TBI-related death varied by age:
 - Falls were the leading cause of death for persons 65 years of age or older.
 - Intentional self-harm was the leading cause of death for persons 45-64 years of age.
 - Motor vehicle crashes were the leading cause of death for persons 15-24, 25-34, and older adults aged ≥ 75 years.
 - Homicide was the leading cause of death for children ages 0-4 years.

Among TBI-related ED visits and hospitalizations in 2014:¹

- Hospitalization rates were highest among persons 75 years of age and older.
- Rates of ED visits were highest for persons 75 years of age and older and children 0-4 years of age.
- The leading cause of TBI-related ED visits varied by age:
 - Falls were the leading cause of ED visits among young children aged 0 to 4 years and older adults 65 years and older.
 - Being struck by or against an object was highest among those 5 to 14 years of age.
- The leading cause of TBI-related hospitalizations varied by age:
 - Falls were the leading cause of hospitalizations among children 0 to 17 years and adults 55 years of age and older.
 - Motor vehicle crashes were the leading cause of hospitalizations for adolescents and adults aged 15 to 44 years of age.