

Traumatic Brain Injury

UNDERSTANDING TBI

Traumatic brain injury (TBI) is a serious public health problem in the United States. A TBI is caused by a bump, blow, jolt, or penetration to the head that disrupts the normal function of the brain. Each year, traumatic brain injuries contribute to a substantial number of deaths and cases of permanent disability.

Impact and Magnitude of TBI

During 2021, a TBI was sustained by 29,697 people in Illinois. Among those injured, 2,780 (21 per 100,000 population) died where TBI was reported as a cause of death, another 7,806 (36 per 100,000) were hospitalized with a TBI, and an additional 19,111 (71 per 100,000) were treated and released from emergency departments with a TBI. In all instances, the TBI could be either the only injury or one of several injuries and/or medical conditions listed.

Causes of TBI

Cause of TBI injury, as measured by rate per 100,000 people, varies across the three levels of severity. Firearm injury was the leading cause of TBI-related deaths (6.4 per 100,000). Fall was the leading cause of TBI-related hospitalizations (35.8 per 100,000) and the leading cause of TBI-related emergency department visits (70.8 per 100,000 treated and released).

TBI by Age and Sex

The highest number of TBI-related deaths* were among males ages 25-34, as shown in Figure 3. Among those with TBI-related hospitalizations,** persons ages 75-84 were most affected. Persons ages 25-34 made the most TBI-related emergency department visits.**

* TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions

** TBI alone or in combination with other injuries or conditions

Figure 1: Percentage of Annual TBI-Related Deaths, Hospitalizations, and Emergency Department Visits by Cause in 2021

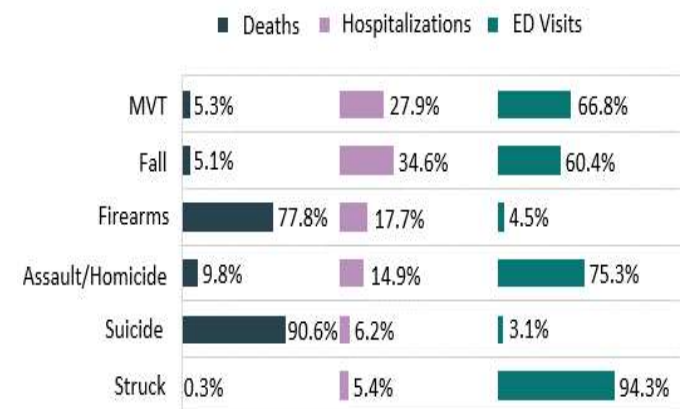


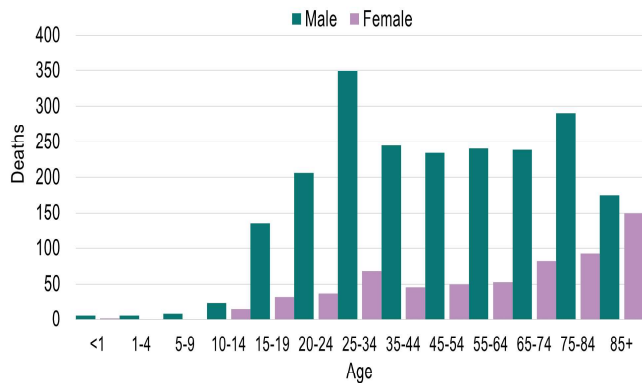
Figure 2: Causes of TBI-Related Deaths by Rate per 100,000 in 2021

Cause	Count	Rate per 100K People
1. Firearms	824	6.4
2. Fall	779	5.1
3. Suicide	581	4.4
4. MVT (Motor Vehicle Traffic)	310	2.4
5. Assault/Homicide	275	2.3
6. Struck	11	*

* Data does not meet standards of reliability and has been suppressed.

Special Emphasis Report: Traumatic Brain Injury

Figure 3: TBI-Related Deaths by Age and Sex in 2021



TBI Prevention Strategies

The Centers for Disease Control and Prevention’s (CDC) National Center for Injury Prevention and Control is committed to protecting people against preventable TBI by putting science into action.

To Help Older Adults: Make CDC’s STEADI part of every medical practice.

STEADI (Stopping Elderly Accidents, Deaths, and Injuries) is a toolkit to help health care providers incorporate fall risk assessment and individualized fall interventions (e.g., exercise, medication management, and Vitamin D supplementation) into their practice. Learn more at www.cdc.gov/STEADI.

To Help Young Athletes: Get a HEADS UP on Creating a Culture of Concussion Safety in Sports.

HEADS UP educational materials are designed to support individuals (such as coaches and health care providers) and organizations (such as schools and sports programs) with their concussion safety efforts. Learn more at www.cdc.gov/HEADSUP.

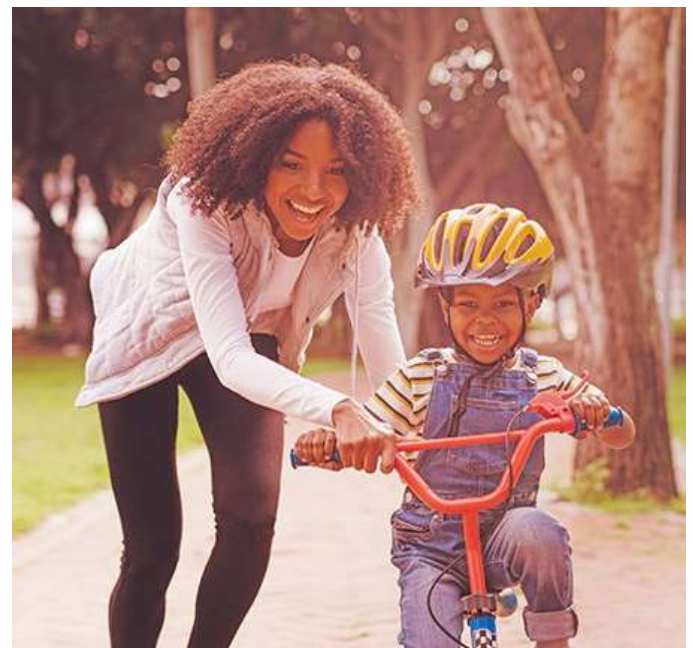
To Help Parents and Teen Drivers: “Parents Are the Key” to Teen Driver Safety.

Parents Are the Key materials helps parents, pediatricians, and communities keep teen drivers safe on the road. Parents Are the Key includes evidence-based strategies and can be customized with an organization’s logo. Learn more at www.cdc.gov/ParentsAretheKey.

TBI by Race/Ethnicity

Certain populations have higher rates of TBI and may need special prevention measures. The highest rates per 100,000 residents were among Non-Hispanic Black and Non-Hispanic White.

Race/Ethnicity	Count	Rate
1. Black-Non Hispanic	5,450	282
2. White-Non Hispanic	18,416	227
3. Non-Hispanic Other	2,093	217
4. Hispanic	3,738	177



Special Emphasis Report: Traumatic Brain Injury

TBI Surveillance Activities and TBI-related Resources

TBI Surveillance Activities

TBI-related data publications can be found on the IDPH Injury-Related Data web page (link below), including data within the data book and infographics. TBI-related data also can be found on the IDPH Public Health Community Map (link below).

TBI-Related Resources

The Brain Injury Association of Illinois (BIA of IL) provides programs and services to individuals who have sustained a brain injury (includes the traumatic injury, acquired injury, and concussion), as well as providing injury prevention programs to prevent additional injuries from occurring. BIA of IL has support groups around the state. BIA of Illinois Information and Resource Call Center has a nationwide toll-free number and educational websites available to provide information, resources, education, and support. Its programs and services address: information and resources; education, injury prevention, advocacy, and support; and therapeutic summer camp. BIA of IL also offers a National Academy of Certified Brain Injury Specialists certification training for professionals. The Illinois High School Association, the Illinois Principals Association, and BIA of IL provide required concussion training for coaches, coaching staff, and officials. Concussion awareness and injury prevention programs are provided within schools, sports, and community settings. BIA of IL also trains community service providers working with veterans who have sustained a brain injury, either diagnosed or undiagnosed, regarding strategies to implement in the clinical/service setting. www.biail.org. www.braininjurytoolbox.com.

Equip for Equality is Illinois' protection and advocacy agency for people with disabilities. It promotes the rights of people with traumatic brain injury by offering legal advocacy and educational services through its TBI Project.

<https://www.equipforequality.org/>.

Illinois Department of Human Services - Division of Rehabilitation Services provides various services to persons who have experienced a brain injury. The Home Services Program (HSP) offers services designed to assist persons with brain injuries to remain in their homes instead of placement in nursing facilities. HSP administers the following Medicaid waiver programs: Persons with Disabilities, Brain Injury, and HIV/AIDS. HSP also administers the Community Reintegration and Money Follows the Person programs. The Vocational Rehabilitation Program provides a variety of services to assist persons with disabilities in obtaining and keeping jobs. <https://www.dhs.state.il.us/page.aspx?item=29727>.

Illinois Joining Forces responds to referrals and inquiries from service members, veterans, their families, and their service providers. IJF's Care Coordination Center is available 24/7/365 by calling 833-INFO IJF (463-6453).

IDPH Violence and Injury Prevention Section is an awardee of the CDC's National Center for Injury Prevention and Control's Core State Injury Prevention Program, which builds infrastructure, data, and partnerships with a focus on preventing Adverse Childhood Experiences (ACEs), traumatic brain injury (TBI), and transportation-related injury.

- IDPH Injury-Related Data webpage - <https://dph.illinois.gov/topics-services/prevention-wellness/injury-violence-prevention/injury-related-data.html>
- IDPH Public Health Community Map - <http://www.healthcarereportcard.illinois.gov/maps>