

Special Emphasis Report: Traumatic Brain Injury

2023
Alaska

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 2023, there were approximately 3,373 TBI injuries sustained by people in Alaska. This includes fatal injuries and non-fatal injuries treated and discharged from a hospital or emergency department (ED). TBI may be underestimated because injuries not resulting in death or seen by a hospital or ED are not reported here.

Among those injured, 264 people (37 per 100,000 people) died where TBI was reported as a cause of death.* There were 456 (63 per 100,000) hospitalizations involving a TBI, and 2,653 (364 per 100,000) non-fatal emergency department visits.** In all instances, the TBI could be either the only injury or one of several injuries and/or medical conditions listed as a cause of death.

Causes of TBI

Cause of injury, as measured by rate per 100,000 people, varies by mortality and morbidity outcomes. Firearms (regardless of discharge intent) were the leading cause of TBI related deaths.* Falls were the leading cause of TBI related hospitalizations.** Falls were also the leading cause of TBI related emergency department visits.**

TBI by Age and Sex

The highest number of TBI-related deaths* were among men ages 25-34, as shown in Figure 2. Among those with TBI-related hospitalizations,** people ages 75-84 were most affected. People 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 2023

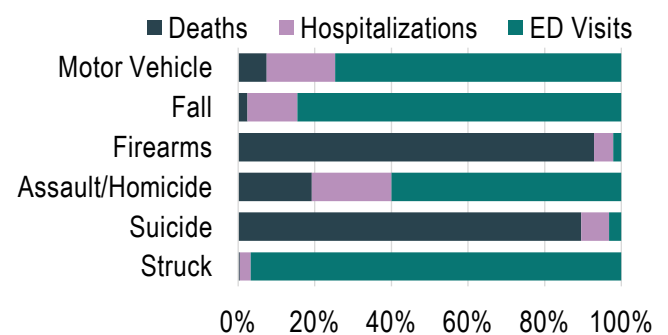


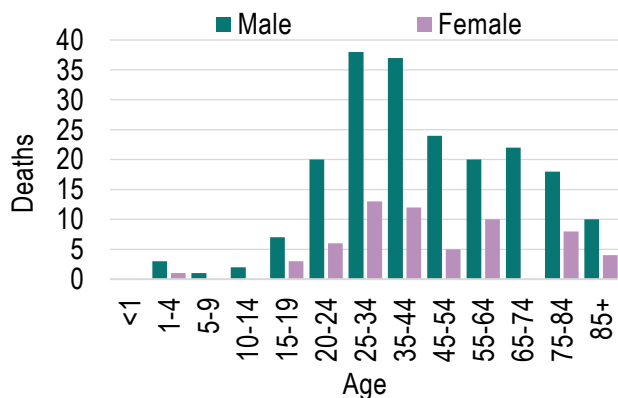
Table 1: Causes of TBI-Related Deaths by Rate per 100,000 in 2023

Cause	Count	Rate
Firearms	130	17
Suicide	111	15
Motor Vehicle	49	7
Fall	34	5
Assault/Homicide	25	4
Struck	2	Statistically Unreliable



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Figure 2: TBI-Related Deaths by Age and Sex in 2023



TBI Prevention Strategies

CDC's National Center for Injury Prevention and Control (Injury Center) 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

Certain populations have higher rates of TBI and may need special prevention measures. By race, the highest rates per 100,000 were among American Indian/Alaska Native people (race alone).

Table 2: TBI Rate per 100,000 by Race in 2023

Race (Alone)	Count	Rate
American Indian/Alaska Native	909	689
Native Hawaiian or Pacific Islander	72	620
White	1,926	417
Black	84	320
Asian	120	242



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TBI Activities

Alaska Injury Prevention and Surveillance Programs

- Alaska Senior and Disability Services, Traumatic and Acquired Brain Injury:
<https://health.alaska.gov/dsds/Pages/tabi/default.aspx>
- Alaska Section of Chronic Disease Prevention and Health Promotion, Injury Prevention Program:
<https://health.alaska.gov/dph/Chronic/Pages/InjuryPrevention/TBI/default.aspx>
- Alaska Section of Epidemiology, Injury Surveillance Program:
<https://health.alaska.gov/dph/Epi/injury/Pages/default.aspx>
- Center for Human Development, Brain Injury State Partnership Program:
<https://www.uaa.alaska.edu/academics/college-of-health/departments/center-for-human-development/brain-injury-partnership-program/index.cshtml>
- Center for Safe Alaskans, Injury Prevention Program:
<https://safealaskans.org/our-work/ideas-in-action/injury-prevention/>

Alaska Injury Reports, Data, and Statistics

- Alaska Section of Epidemiology, EpiBulletins, Traumatic Brain Injury in Alaska:
https://epi.alaska.gov/bulletins/docs/rr2023_02.pdf
- Alaska Health Analytics and Vital Records Section, Death Certificate and Health Facility Discharge Data and Statistics:
<https://health.alaska.gov/dph/VitalStats/Pages/data/default.aspx>
- Alaska Rural and Community Health Systems, Alaska Trauma Registry Data and Statistics:
<https://health.alaska.gov/dph/Emergency/Pages/trauma/registry.aspx>

Mortality data are based on in-state occurrence death certificates from the Alaska Electronic Vital Records System. Morbidity data are based on in-state occurrence non-military hospital and emergency department discharges from the Alaska Health Facilities Data Reporting Program. Rates are age-adjusted using Year 2000 U.S. Standard Population weights. Rates based on less than 20 events are statistically unreliable. Rates based on less than 6 events are not reported. TBIs are identified using International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) codes. Case definitions and the toolkit used to create this report are available online at <https://resources.cste.org/Injury-Surveillance-Methods-Toolkit/Home/SpecialEmphasisReports>.