

Special Emphasis Report: Traumatic Brain Injury (TBI) Wisconsin 2024

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 2024, a TBI was involved in 18,541 medical encounters or deaths in Wisconsin. Among these injuries there were 1,466 (21 per 100,000 population) deaths with TBI as a cause* of death, another 4,657 (66 per 100,000) non-fatal hospitalizations with a TBI**, and an additional 12,418 (216 per 100,000) treat and release emergency department (ED) visits with a TBI**.

Causes of TBI

Accidental falls are the leading cause of ED visits, non-fatal hospitalizations, and deaths. The age-adjusted rate of fall-related TBI hospitalizations among Wisconsin residents has increased from 35 per 100,000 in 2020 to 41 per 100,000 in 2024. Firearms are also a common cause of TBI deaths. 86% of TBI firearm deaths were suicides in 2024.

TBI by age and sex

The highest number of TBI-related deaths* were among males ages 75 to 84, as shown in Figure 3. Persons ages 75 to 84 accounted for the most TBI-related hospitalizations.** Persons ages 15 to 19 made the most TBI-related emergency department visits.**

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

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

Figure 1: Percentage of TBI-related deaths, hospitalizations, and emergency department visits by cause in 2024

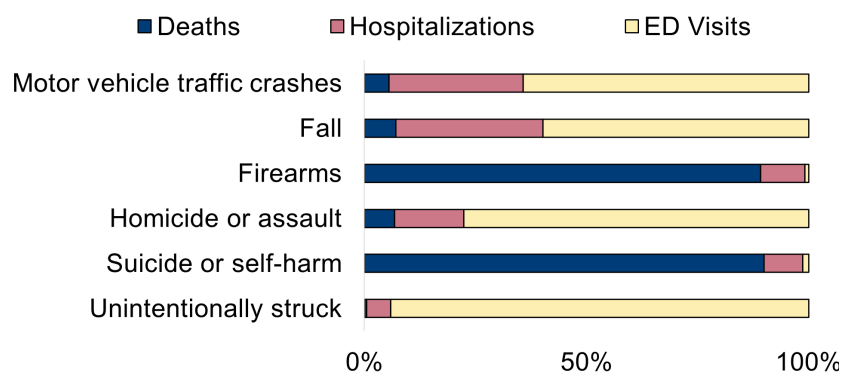


Figure 2: Causes of TBI-related deaths by age-adjusted rate per 100,000 in 2024

Cause	Count	Rate
Unintentional falls	668	8.4
Firearms	510	8.3
Suicide	448	7.1
Motor vehicle traffic crashes	157	2.5
Homicide	75	1.4
Unintentionally struck	17	*

*Count too low to calculate age-adjusted rate.

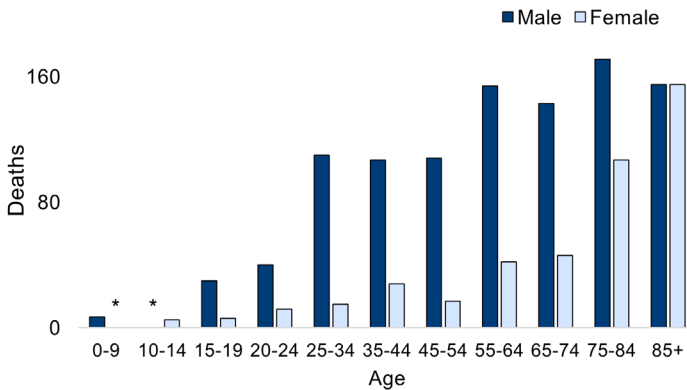
Combined counts in this figure are greater than total number of deaths because cause and intent are not mutually exclusive (for example the firearm death count includes deaths also counted in assault and suicide).

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Figure 3: TBI-related deaths by age and sex in 2024



*Counts less than five are suppressed for confidentiality.

TBI hospitalizations by region

Certain populations have greater TBI burden and may need special prevention measures. The highest age-adjusted TBI hospitalization rate per 100,000 residents in 2024 was in the northern region of Wisconsin.

Region	Count	Hospitalization rate*
Southern	821	58.8
Southeastern	1,845	74.1
Northeastern	893	56.8
Western	618	63.7
Northern	480	76.2

*Rates are age-adjusted.

Data Note: TBI causes are not mutually exclusive for hospitalizations and ED visits, and multiple causes may be indicated based on International Classification of Disease-10-Clinical Modification codes. Firearm rates include all intentions (unintentional, assault or homicide, and suicide or self-harm). Hospitalization and ED visit rates count medical encounters, not individual patients. Counts may vary slightly from other data sources due to differences in methodology. This report used the [CDC TBI Injury Indicator definition](#) as of 2026.

TBI prevention strategies

The National Center for Injury Prevention and Control (Injury Center) at CDC (Centers for Disease Control and Prevention) 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 (for example, exercise, medication management, and Vitamin D supplementation) into their practice. [Learn more about CDC’s STEADI toolkit.](#)

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 about CDC’s HEADS UP materials.](#)

To help parents and teen drivers: “Parents Are the Key” to teen driver safety.

“Parents Are the Key” materials help 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 about the “Parents are the Key” materials and resources.](#)



WISCONSIN DEPARTMENT
of **HEALTH SERVICES**

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TBI Activities in Wisconsin

Brain Injury Association of Wisconsin

The Brain Injury Association of Wisconsin (BIAW) formed in 1982 to support brain injury survivors and their loved ones. BIAW holds an annual spring conference where brain injury professionals and individuals with lived experience come together to learn from each other. BIAW also offers support groups, both virtually and in-person, for those living with a brain injury and their loved ones to build connections and reflect on common experiences. BIAW hosts an annual State Support Group Summit each fall and partners with the University of Wisconsin–Eau Claire to offer a free, week-long intensive comprehensive program, along with two eight week communication and cognition programs. In addition, BIAW offers a variety of supportive resources for people with a new brain injury including information about TBI, additional spaces to find community, and a template log for survivors and caregivers to record the recovery journey.

BIAW recently conducted a statewide needs assessment to identify met, under met, and unmet needs among TBI survivors in Wisconsin. Qualitative interviews of individuals affected by TBI, conducted as part of the needs assessment, have revealed concerns including a need for provider education and training, programming to address financial burdens, transportation, and protections for vulnerable adults with TBI. The quantitative survey identified a lack of awareness of brain injury services and supports, difficulty navigating the system, lack of provider expertise, limited local resources, and insurance coverage gaps. Findings from these studies are intended to guide programming and potential legislation to support individuals with TBI in Wisconsin. Visit the [BIAW website](#) to view their resources and learn more about the organization.

Wisconsin Institute for Healthy Aging

The Wisconsin Institute for Healthy Aging's (WIHA) mission is to improve the health and well-being of all people as they age by disseminating evidence-based programs and engaging in collaborative public health strategies in Wisconsin and beyond. WIHA is the national disseminator of the high-level evidence-based falls prevention programs Stepping On and Pisando Fuerte, which have been proven to reduce falls by 31%. These programs help participants reduce their risk of falls by making practical changes, such as balance and strength exercises and improving home safety. WIHA also coordinates Falls Free Wisconsin, a statewide initiative and cross-sector coalition dedicated to helping Wisconsinites age safely and confidently. Through education, advocacy, and collaboration, Falls Free Wisconsin raises awareness about how we can prevent falls as we age, advocates for policy change, equips professionals with resources and best practices, and tracks state and county-level data to measure impact and drive action. Learn more on the [WIHA website](#) and the [Falls Free Wisconsin website](#).

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