

Nebraska

Special Emphasis Report: Traumatic Brain Injury 2014

Understanding TBI

Traumatic brain injury (TBI) is a serious public health problem and 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.

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Impact and Magnitude of TBI

During 2014, a TBI was sustained by 12,637 of people in Nebraska. Among those injured, 417 (20.8 # per 100,000) died where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions, another 1,563 (76.8 # per 100,000), were hospitalized with a TBI alone or in combination with other injuries or conditions, and an additional 10,657 (557.3 # per 100,000) were treated and released from emergency departments with a TBI alone or in combination with other injuries or conditions. An unknown number of individuals sustained injuries that were treated in other settings or went untreated. #

Causes of TBI

Cause of injury varies across the three levels of severity. Firearm-related was the leading cause of injury among those who died where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions. *Motor vehicle traffic related* was the leading cause of injury among those who were hospitalized with a TBI alone or in combination with other injuries or conditions. And, unintentional falls was the leading cause of injury among those who were treated and released from emergency departments with a TBI alone or in combination with other injuries or conditions.

Notes: Firearm-related injuries were reported but excluded from the etiology graphic due to overlap with multiple categories (e.g., homicide/assault, suicide). Firearms were related with 25% of deaths, 2% of hospitalizations, and <1% of emergency department visits. Completeness of external-cause coding for TBI-related cases can impact the accuracy of the cause classifications for hospitalizations and emergency department visits.

Figure 2: Percentage of Annual TBI-Related Deaths,* Hospitalizations, and Emergency Department Visits,** by Age, in Nebraska, 2014**

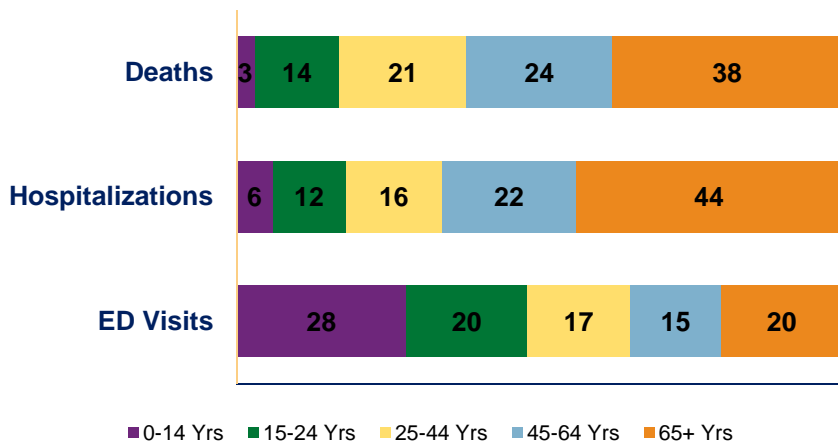
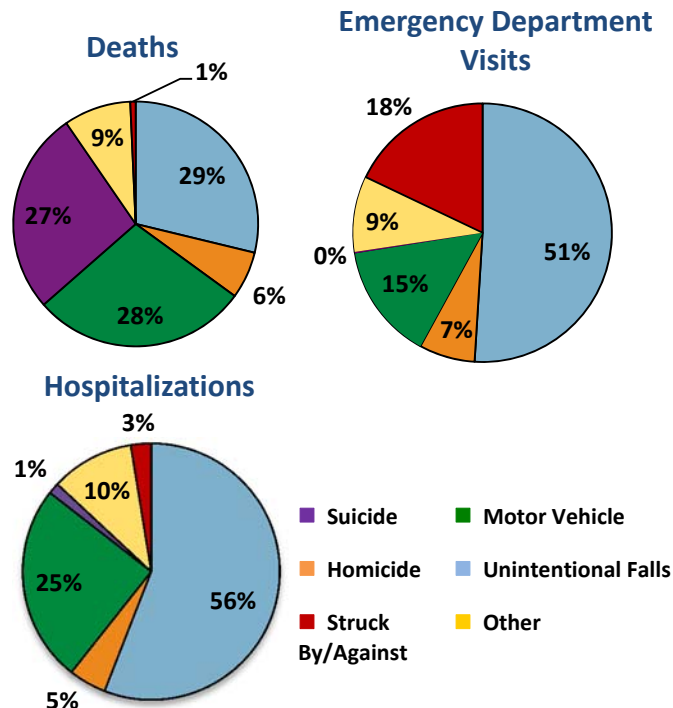


Figure 1: Percentage of Annual TBI-Related Deaths, Hospitalizations, and Emergency Department Visits, by External Cause, in Nebraska, 2014



TBI by Age

The highest number of TBI-related deaths* were among persons ages 65+ years. Among those with TBI-related hospitalizations,** persons ages 65+ years were most affected. Persons ages 0-14 years 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



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TBI by Gender

Men were more likely to sustain a traumatic brain injury than women. The magnitude of this difference was greatest among those who *died*. Men accounted for 74% (33 *per 100,000*) of deaths where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions, 62% (102 *per 100,000*), of hospitalizations for TBI alone or in combination with other injuries or conditions and 51% (582 *per 100,000*) of emergency department visits for TBI alone or in combination with other injuries or conditions.



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.

- **State Injury Prevention Programs** - The Injury Center's Core Violence and Injury Prevention Program (Core VIPP) funds state health departments to estimate the impact of TBIs and define the groups most affected. www.cdc.gov/injury
- **Heads Up** – Injury Center campaigns with free tools for health care providers, school administrators, nurses, teachers, coaches, and parents to help them recognize and respond to a TBI. www.cdc.gov/traumaticbraininjury
- **Motor Vehicle Safety** – Motor vehicle crashes are a leading cause of death, injury and TBI in the US. CDC's primary prevention focuses on child passenger safety, seat belt use and reducing impaired driving.

www.thecommunityguide.org/mvoi

www.cdc.gov/motorvehiclesafety

Nebraska TBI Activities

Prevention

- Training, along with fact sheets and resources, are available to athletes, coaches, parents and health care providers on the Nebraska Injury Prevention website.
- Partner with local health departments to implement Tai Chi and Stepping On to prevent falls in older adults.
- Partners continue to work to improve policies that would reduce motor-vehicle related TBIs.

Surveillance

- Monitor the rates of TBI in Nebraska and the rates of sports-related concussions among youth.
- Conduct surveys of coaches, athletic directors, and youth who sustained sports-related concussions to evaluate the implementation of the concussion law.

Partnerships

- Partners include the Brain Injury Alliance, the Nebraska State Athletic Trainers Association, Nebraska School Activities Association, Department of Education, Safe Kids, the University of Nebraska Center for Brain Biology and Behavior and other community organizations to raise awareness about the Concussion Awareness Act and the symptoms, management and consequences of concussions.
- Local public health, Area Agency on Aging, and other community partners implemented Tai Chi.

Accomplishments/Successes

- On July 1, 2012, the Concussion Awareness Act became law in Nebraska. Effective July 1, 2014, the law was amended to include a Return to Learn Provision.
- As a result of the law, the Nebraska School Activities Association has made coaches' training mandatory for all schools in Nebraska. The percent of schools that have developed Return to Learn protocols for students returning to the classroom following a concussion increased from 6% to 71%.

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Nebraska Department of Health and Human Services
Injury Prevention Program dhhs.ne.gov/injuryprevention

Released October, 2016