



NEBRASKA

Special Emphasis Report: Traumatic Brain Injury 2010

Understanding TBI

Traumatic brain injury (TBI) is a serious public health problem in the United States and Nebraska. 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 2010, a TBI was sustained by 11,415 of people in Nebraska. Among those injured, 336 (17.3 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 1,509 (78.4 per 100,000), were hospitalized with a TBI alone or in combination with other injuries or conditions, and an additional 9,570 (517.5 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

The top leading cause of injury did not vary across the three levels of severity. Unintentional fall was the leading cause of injury among those who were hospitalized and those treated in an emergency department with a TBI alone or in combination with other injuries or conditions. Unintentional fall was the leading cause of death where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions, however, suicide and motor vehicle injuries were close top causes of deaths as well.

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 28.0% of deaths, 0.6% of hospitalizations, and 0.1% 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.

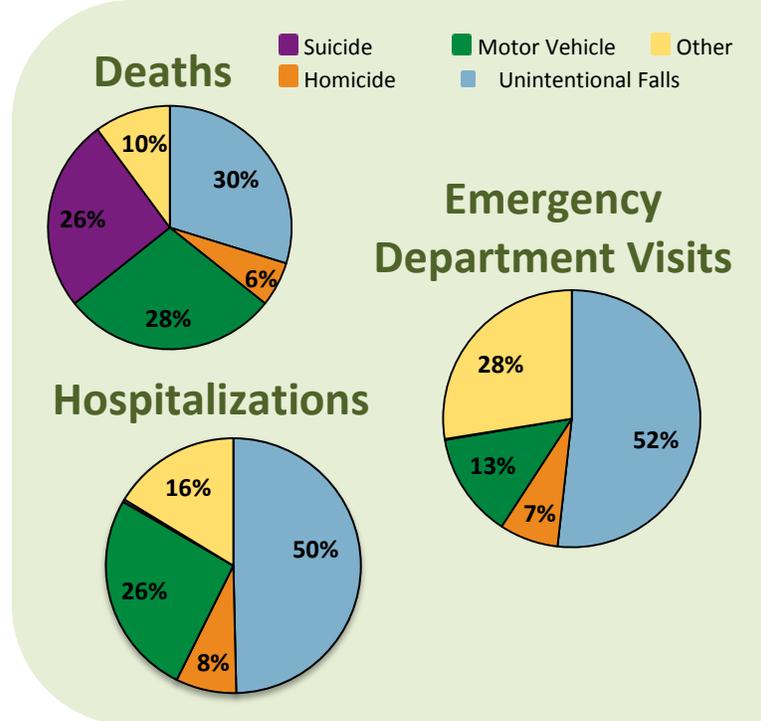


Figure 1: Percentage of Annual TBI-Related Deaths, Hospitalizations, and Emergency Department Visits, by External Cause, in Nebraska, 2010

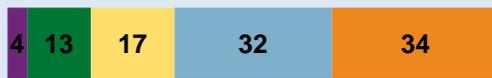
TBI by Age

The highest number of TBI-related deaths* were among persons ages 65 and older. Among those with TBI-related hospitalizations,** persons ages 65 and older were also the most affected age group. Persons ages 0 to 14 made the most TBI-related emergency department visits.**

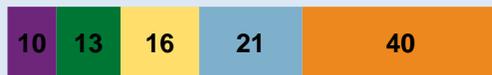
*TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions

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

Deaths



Hospitalizations



Emergency Department Visits



Percentage

■ 0-14 Yrs ■ 15-24 Yrs ■ 25-44 Yrs ■ 45-64 Yrs ■ 65+ Yrs

Figure 2: Percentage of Annual TBI-Related Deaths,* Hospitalizations, and Emergency Department Visits,** by Age, in Nebraska, 2010**

Department of Health & Human Services





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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 67% (24.7 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, 58% (98.7 per 100,000), of hospitalizations for TBI alone or in combination with other injuries or conditions and 54% (570.5 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 campaign offers 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:

- Make concussion training available to coaches, athletic trainers, nurses, athletes, parents and other relevant parties. Trainings, fact sheets and resources are posted on the Nebraska Injury Prevention and Control website.
- Develop and implement public service announcements to raise awareness about the symptoms and consequences of concussions. Print ads and radio, television, and social sites are being used.
- Participate in the Heads Up Nebraska Campaign, a collaborative effort to raise awareness about head safety.

Surveillance:

- Monitor the rate of sports-related concussions among youth.

Partnerships:

- The Injury Prevention and Control Program partners with the Brain Injury Association, the Nebraska State Athletic Trainers Association, Nebraska School Activities Association, Department of Education, Bryan Health Systems, Safe Kids and other community organizations to raise awareness about the Concussion Awareness Act and the symptoms, management and consequences of concussions.

Accomplishments/Successes:

- On July 1, 2012, the Concussion Awareness Act became law in Nebraska. This law requires that education be made available to coaches, youth athletes and their parents, that youth athletes with suspected concussion be removed from play, and that concussed youth athletes can return to play only after they are cleared by a licensed health professional. This legislation aims to keep young athletes safe while engaging in athletic activities and emphasizes the importance of the issues surrounding sports concussions.
- Heads Up Nebraska – twitter posts by former University of Nebraska athletes that direct followers to concussion information.

Note: TBI-related cases were identified by first limiting the datasets to injury cases based on external cause of injury (deaths), primary diagnosis (hospitalizations), or both (emergency department visits). All fields were then searched for TBI diagnostic codes. Reference to any commercial entity or product or service on this page should not

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Injury Prevention and Control Program

http://dhhs.ne.gov/publichealth/Pages/hew_hpe_injury_index.aspx

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