



# NEW HAMPSHIRE

## Special Emphasis Report: Traumatic Brain Injury 2009

### Understanding TBI

Traumatic brain injury (TBI) is a serious public health problem in New Hampshire and 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 2009, 13,546 people sustained a TBI in New Hampshire. Among those injured, 171 (12.1 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 1,069 (77.6 per 100,000) were hospitalized with a TBI alone or in combination with other injuries or conditions, and an additional 12,306 (983.8 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

Unintentional falls were 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. Unintentional falls were also 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 were 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 to 45% of deaths, 0.4% of hospitalizations, and 0.03% of emergency department visits. Completeness of the cause classifications for hospitalizations and emergency department visits.

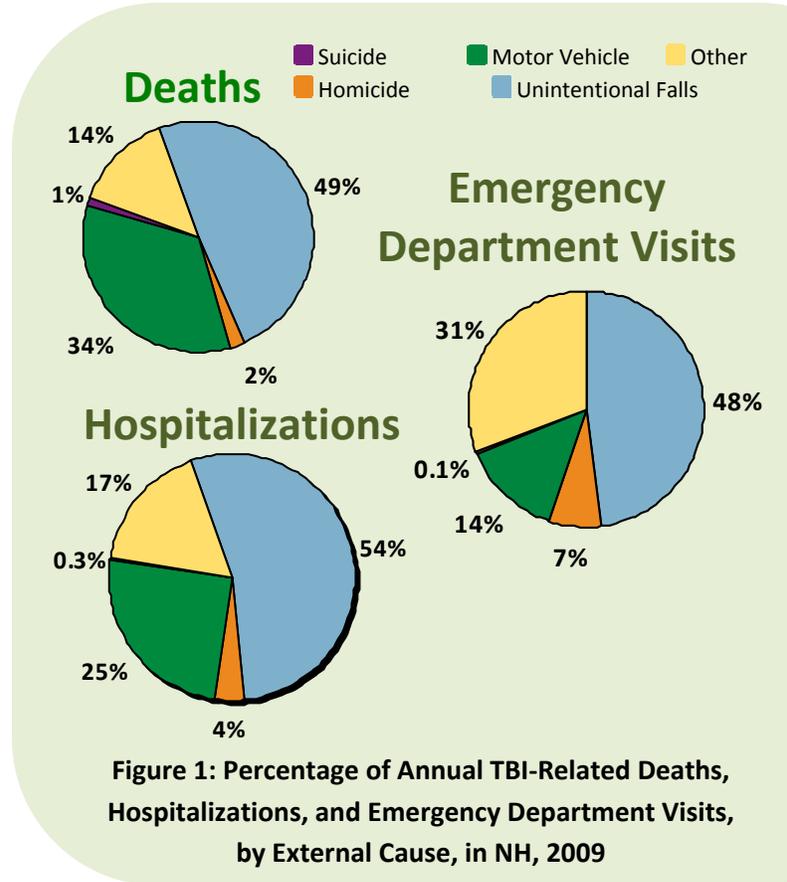


Figure 1: Percentage of Annual TBI-Related Deaths, Hospitalizations, and Emergency Department Visits, by External Cause, in NH, 2009

### TBI by Age

The highest number of TBI-related deaths\* were among persons ages 45 to 54 years old. Among those with TBI-related hospitalizations,\*\* persons ages 75 to 84 years old were most affected. Persons ages 0 to 14 years old 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

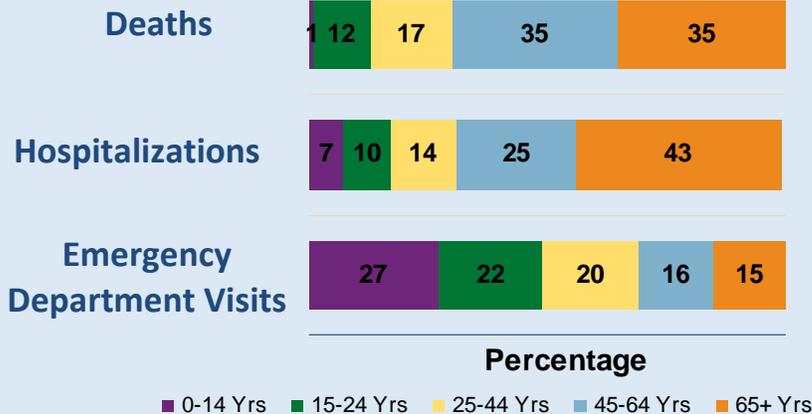


Figure 2: Percentage of Annual TBI-Related Deaths,\* Hospitalizations,\*\* and Emergency Department Visits,\*\* by Age, in NH 2009



This document was produced in conjunction with CDC's Core Violence and Injury Prevention Program under Cooperative Agreement 11-1101.





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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 73% (8.8 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, 59% (46.2 per 100,000) of hospitalizations for TBI alone or in combination with other injuries or conditions, and 53% (531.6 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](http://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](http://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](http://www.thecommunityguide.org/mvoi) [www.cdc.gov/motorvehiclesafety](http://www.cdc.gov/motorvehiclesafety)

### New Hampshire TBI Activities

**Prevention:** New Hampshire has a variety of TBI prevention initiatives. Some of the programming includes:

- Think First: Young adult survivors with long-term TBI disabilities share their stories with schools and communities to encourage prevention. For more information contact the Brain Injury Association of New Hampshire at [www.bianh.org](http://www.bianh.org).
- The New Hampshire State Advisory Council on Sport Related Concussion provides guidance to high schools regarding the identification, treatment, and return to play issues of concussions. For more information contact the Brain Injury Association of New Hampshire at [www.bianh.org](http://www.bianh.org).
- Safe Kids New Hampshire is dedicated to the prevention of unintentional injuries in children and adolescents. This group supports low and no-cost helmets of all kinds (multi-sport, bike, ski) statewide as well as fun, family events where the wearing of helmets is required. For more information, go to [http://chad.dartmouth-hitchcock.org/injury\\_prevention/injury\\_center\\_programs\\_childhood\\_safekids.html](http://chad.dartmouth-hitchcock.org/injury_prevention/injury_center_programs_childhood_safekids.html).

**Surveillance:** New Hampshire has access to many different sources of surveillance data. The Injury Prevention Program at the New Hampshire Department of Health and Human Services helps to steward some of this data, such as hospitalizations and emergency department visits. For more information, go to <http://www.dhhs.nh.gov/dphs/bchs/mch/injury.htm>.

**Partnerships:** Partnerships are essential in helping to prevent TBI and make people aware of its consequences.

- The Injury Prevention Program Advisory Council (IPAC) is made up of agencies statewide that are interested and actively working in the area of injury prevention. For more information, go to <http://www.dhhs.nh.gov/dphs/bchs/mch/injury.htm>.
- The Brain and Spinal Cord Injury Advisory Committee is the State's only legislated group devoted to the identification of the unmet needs of people with brain and spinal cord injuries. Please contact [www.bianh.org](http://www.bianh.org).
- The NH Commission on PTSD and TBI was legislatively established in the Fall of 2011. Their mission is to study the effects of service-connected post-traumatic stress disorder and traumatic brain injury suffered in the line of duty by members of the armed forces and veterans. For more information, please contact the Commission Chairman, Jo Moncher at [jamoncher@dhhs.state.nh.us](mailto:jamoncher@dhhs.state.nh.us)

**Accomplishments/Successes** Several policy successes include:

- RSA: Title XXI-Rules of the Road-Chapter 265, Section 265:144: This law mandates the use of bicycle helmets for anyone 16 and under while riding on a public way.
- SB402: This bill was signed into law by the Governor effective August 17, 2012. It encourages local school districts to properly identify and manage concussions.

NEW HAMPSHIRE DEPARTMENT OF HEALTH AND HUMAN SERVICES

Division of Public Health Services, Injury Prevention Program

[Http://www.dhhs.nh.gov/dphs/bchs/mch/injury.htm](http://www.dhhs.nh.gov/dphs/bchs/mch/injury.htm)

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