



# OHIO

## Special Emphasis Report: Traumatic Brain Injury 2010

### Understanding TBI

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

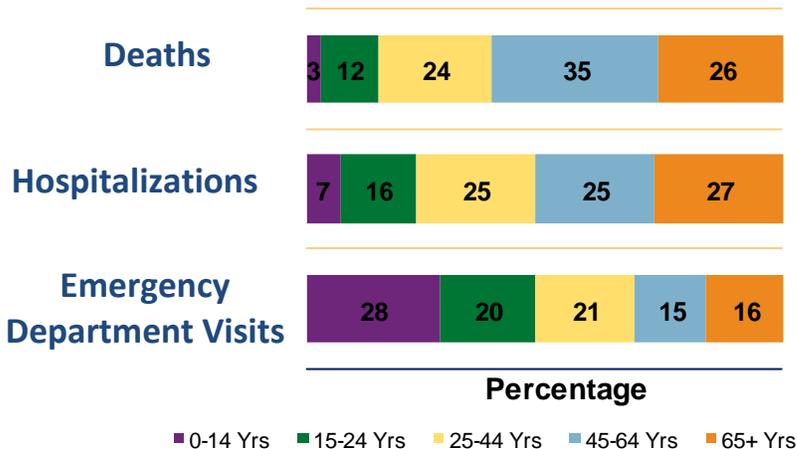
### Impact and Magnitude of TBI

During 2010, a TBI was sustained by 103,690 people in Ohio. Among those injured, 2,103 (18 per 100,000) died where TBI was reported as a cause of death alone or in combination with other injuries or conditions, another 7,858 (68 per 100,000), were hospitalized with TBI, and an additional 93,729 (813 per 100,000) were treated and released from emergency departments (EDs) with a TBI. An unknown number of individuals sustained TBIs that were treated in other settings or went untreated.

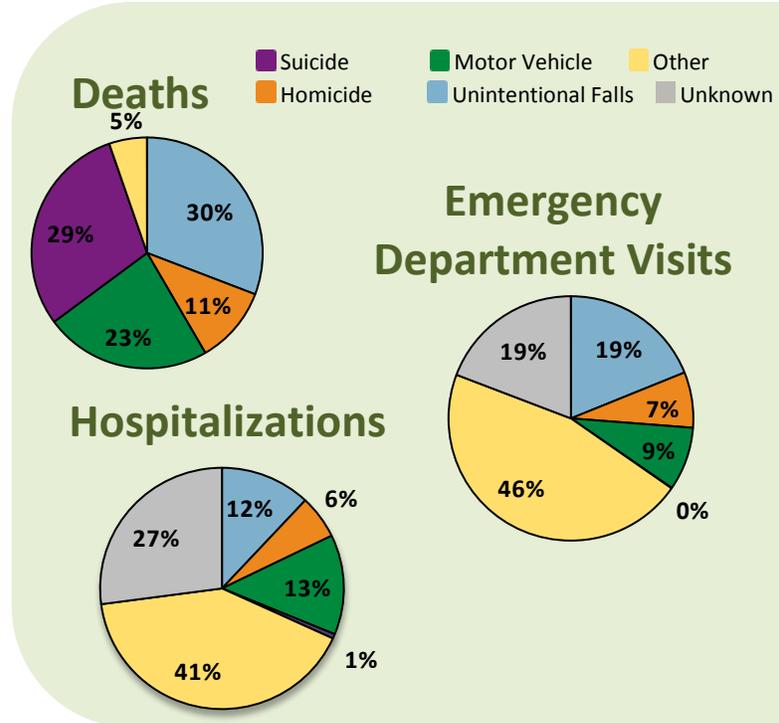
### Causes of TBI

Cause of injury varies across the three levels of severity. Firearm was the leading cause of injury among those who died where TBI was reported as a cause of death alone or in combination with other injuries or conditions. Motor vehicle traffic crashes was the leading cause of injury among those who were hospitalized with a TBI and unintentional falls was the leading cause of injury among those who were treated and released from EDs with a TBI.

**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 36% of deaths, 1% 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 Ohio, 2010**



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

### TBI by Age

The highest number of TBI-related deaths\* were among persons ages 45-64. Among those with TBI-related hospitalizations,\*\* persons ages 15-24 were most affected. Persons ages 0-14 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





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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 were hospitalized. Men accounted for 72% (27 per 100,000) of deaths where TBI was reported as a cause of death alone or in combination with other injuries or conditions, 64% (89 per 100,000) of hospitalizations for TBI and 52% (870 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)



## OHIO TBI Activities

The Ohio Department of Health's Violence and Injury Prevention Program (VIPP) is engaged in state-level activities to address the burden of traumatic brain injury in Ohio.

### Prevention

- The VIPP funds four [local projects](#) focused on TBI prevention among youth.
- The VIPP coordinates a statewide child safety seat distribution program ([Ohio Buckles Buckeyes](#)) for low income families in all 88 Ohio counties and funds a network of regional youth occupant protection coordinators who provide technical assistance and training to the counties on child passenger safety.
- The VIPP placed full page **Heads Up: Concussion in Youth Sports** prevention messages in the 2012 official team yearbooks for the Cleveland Indians and the Cincinnati Reds.

### Surveillance

The VIPP conducts [statewide TBI surveillance](#) through death certificate, inpatient hospitalization and ED data.

### Partnerships

The VIPP coordinates the Ohio Injury Prevention Partnership's (OIPP) Child Injury Action Group (CIAG). The OIPP/CIAG is a multi-disciplinary statewide coalition of organizations concerned with the prevention of injury to Ohio children and youth. TBI prevention is a priority area for the CIAG which is working on bicycle/wheeled sports helmets, sports-related concussion and teen driving. Visit the [CIAG site](#) for more information or to join.

## OHIO DEPARTMENT OF HEALTH

<http://www.odh.ohio.gov/sitecore/content/HealthyOhio/default/vipp/injury.aspx>

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