



# KENTUCKY

## Special Emphasis Report: Traumatic Brain Injury 2013

### Understanding TBI

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

### Impact and Magnitude of TBI

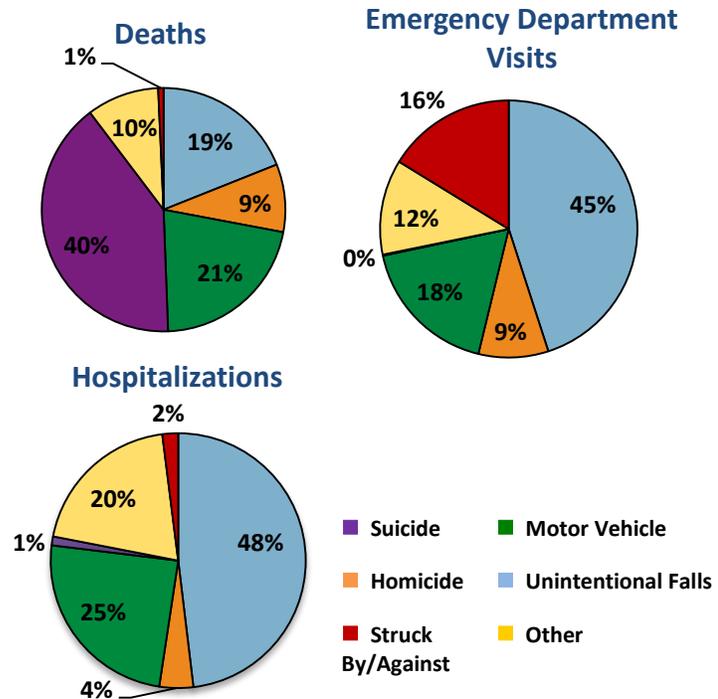
During 2013, a TBI was sustained by 34,041 people in Kentucky. Among those injured, 844 (18.5 per 100,000) died where TBI was reported as a cause of death on the death certificate, another 3,098 (67.3 per 100,000), were hospitalized with a TBI, and an additional 30,099 (700.4 per 100,000) were treated and released from emergency departments with a TBI. 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. Suicide was the leading cause of injury among those who died where TBI was reported as a cause of death on the death certificate. Falls were the leading cause of injury among those who were hospitalized with a TBI or who were treated and released from emergency departments with a TBI.

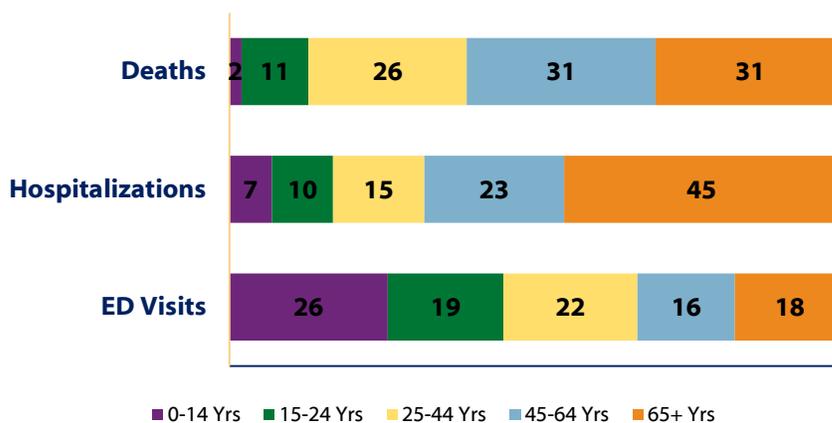
*Notes: Firearm-related injuries were reported but excluded from the etiology graphic due to overlap with multiple categories (e.g., homicide/assault, suicide). Firearms were related with 46.9% of deaths, 1.5% of hospitalizations, and 0.1% of emergency department visits. Completeness of external-cause 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 Kentucky, 2013**



Data sources: Kentucky Death Certificates Files [2013]; Kentucky Inpatient Hospitalization Claims and Outpatient Services Claims Files [2013]. Note: the 2013 files were provisional at the time of this report.

**Figure 2: Percentage of Annual TBI-Related Deaths,\* Hospitalizations,\*\* and Emergency Department Visits,\*\* by Age, in Kentucky, 2013**



### TBI by Age

The highest number of TBI-related deaths\* were among persons ages 45-54. Among those with TBI-related hospitalizations,\*\* persons ages 75-84 were most affected. Persons ages 15-24 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



Data sources: Kentucky Death Certificates Files [2013]; Kentucky Inpatient Hospitalization Claims and Outpatient Services Claims Files [2013]. Note: the 2013 files were provisional at the time of this report.



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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% (28.3 per 100,000) of deaths where TBI was reported as a cause of death on the death certificate, 59% (85.7 per 100,000), of hospitalizations for TBI and 51% (728.1 per 100,000) of emergency department visits for TBI.



### 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** – Provides 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)

### Kentucky TBI Activities

The Brain Injury Alliance of Kentucky (BIAK) provides educational opportunities for professionals who work with persons with brain injury to get continuing education at multiple events. Working in conjunction with other agencies across Kentucky BIAK annually distributes and fits over 1,000 bicycle helmets. BIAK also reaches out to over 640 families each year who have family members with a brain injury and sends out dozens of resource journals in response to telephone and internet inquiries. This information helps families become aware of the programs and services that promote community living.

A request for approval for 303 new slots for the Acquired Brain Injury Waiver program (HB 235) was approved by legislature. Though these new slots are currently unfunded, this continues to be a top priority in the upcoming year.

House Bill 315 passed in 2015 and requires booster seats to be used in motor vehicles by children who are less than eight years old and are between 40 and 57 inches in height. The old law required <7 years old and between 40 - 50 inches. This represents a significant policy improvement for Kentucky.

Senate Bill 133 passed in 2015 and expanded the use of ignition interlocks for people caught driving under the influence of alcohol.