

## **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.

### Impact and Magnitude of TBI

During 2014, a TBI was sustained by 176,007 *of people in* Florida. Among those injured, 3,852 (17.1 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 21,081 (92.6 per 100,000), were hospitalized with a TBI alone or in combination with other injuries or conditions, and an additional 151,058 (775.5 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**

Cause of injury varies across the three levels of severity. Firearmrelated injury 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. Unintentional falling was the leading cause of injury among those who were hospitalized or 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 46% of deaths, 1% of hospitalizations, and 0.09% 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,\*\*



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



# **TBI by Age**

The highest number of TBI-related deaths\* were among persons ages 85+. Among those with TBIrelated 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



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



## **TBI by Gender**

Men were more likely to sustain a TBI than women. The magnitude of this difference was greatest among those who died. Men accounted for 73 percent (27.0 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 percent (120.6 per 100,000), of hospitalizations for TBI alone or in combination with other injuries or conditions and 49 percent (799.9 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. Visit <u>www.cdc.gov/injury</u>.
- *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. Visit <u>www.cdc.gov/traumaticbraininjury</u>.
- 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. Visit
  www.thecommunityguide.org/mvoi and www.cdc.gov/motorvehiclesafety.

## **Florida TBI Activities**

#### Prevention

The Florida Department of Health (DOH), Brain and Spinal Cord Injury Program (BSCIP) provides eligible Florida residents, who sustain TBI or spinal cord injuries (SCI), an opportunity to obtain the services needed to enable them to return to their community. The program funds education, prevention, and research activities by providing funding for organizations such as; the Brain Injury Association of Florida, the Florida Spinal Cord Injury Resource Center, the Florida Disabled Outdoors Association, the University of Florida's McKnight Brain Institute and the University of Miami's Miami Project to Cure Paralysis.

#### Surveillance

The Florida Injury Surveillance System (FISS) provides statewide access to centralized hospital and emergency department discharge data and multiple cause-of-death vital statistics data. The FISS is accessed, maintained, and analyzed by the DOH, Injury Prevention Section (IPS). Information provided from the FISS is used to monitor the frequency of fatal and nonfatal injuries, determine risk factors, provide information to Florida's violence and injury prevention community, and support strategies within the Florida Injury Prevention Strategic Plan. Information dissemination is primarily through the injury data section of the IPS website, which provides state and county injury profiles, injury-specific fact sheets (including a Traumatic Brain Injury Fact Sheet), and the ten leading causes of injury charts.

### Florida Department of Health

http://www.floridahealth.gov/programs-and-services/prevention/injury-prevention/index.html