

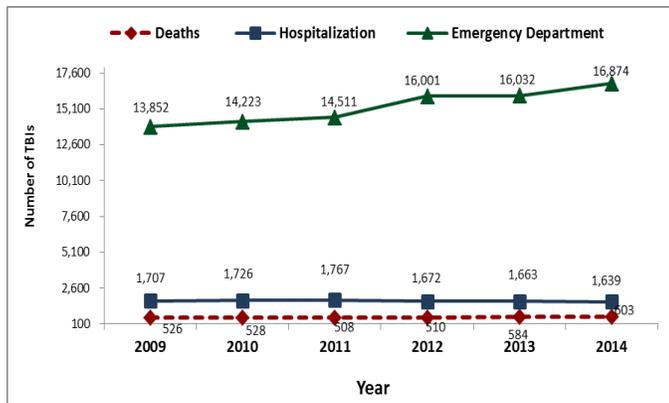
## TBI Annual Brief

Traumatic Brain Injury (TBI) is an important public health issue in Iowa. TBI occurs when an individual experiences a bump, blow, or jolt to the head or a penetrating injury to the head that results in abnormal function of the brain. Many TBIs occur as a result of falls, assaults, blunt trauma to the head, and motor vehicle-related crashes. TBI is the leading cause of death and disability among young children aged 0-4 and older adults aged 75 and older.<sup>1</sup> In Iowa, falls is the leading cause of TBI among young children and older adults.

The general public may not be aware of how TBI affects health. Globally, TBI is often referred to as the “silent epidemic” because the complications from TBI, which include changes to individuals’ thinking, language, or even general emotions, are often missed. TBI may increase individuals’ risk for epilepsy, Parkinson’s disease, and other brain disorders.

In 2014, more than 16,000 individuals were seen in emergency departments compared with 13,852 emergency department visits in 2009.<sup>2</sup> In the same year, nearly 1,639 TBI-related hospitalizations were reported.<sup>2</sup> TBI-related hospitalizations have significantly decreased from 1,707 hospitalizations in 2009 to about 1,639 hospitalizations in 2014.<sup>2</sup> The number of TBI-related hospitalizations was significantly higher in 2011 compared to the other years.<sup>2</sup> TBI-related deaths have been increasing in the past six years. TBI was associated with nearly 603 deaths in Iowa in 2014 compared to 526 deaths in 2011.<sup>2</sup>

**Figure 1:** Estimated number of Traumatic Brain Injuries for emergency department visits, hospitalizations, and deaths, Iowa, 2009-2014



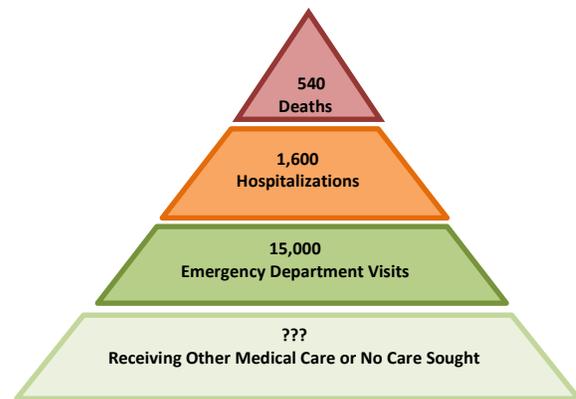
In Iowa, an estimated average annual number of 9,551 TBIs occurred among males compared to 7,937 among females. Overall, approximately 1.2 times as many TBIs in Iowa occurred among males as among females.

**Figure 2:** Estimated average annual number of Traumatic Brain Injury-related emergency department visits, hospitalizations, and deaths, Iowa, 2009-2014

Sex	Emergency Department visits	Hospitalizations	Deaths	Total
Male	8,154	1,010	387	9,551
Female	7,095	686	156	7,937

An estimated 17,000 TBIs occur in Iowa annually. Of those TBIs occurring each year, about 88 percent were emergency department visits, 9 percent were hospitalizations, and 3 percent were deaths.<sup>2</sup> These numbers could have been a lot higher if the data for individuals receiving “other medical care or no care sought” were included (approximately 25 percent of all mild and moderate cases of TBI).

**Figure 3:** Estimated average annual number of Traumatic Brain Injury-related emergency department visits, hospitalizations, and deaths, Iowa, 2009-2014



### When to Seek Medical Attention:

Contact health care professional or emergency department immediately if you or someone you know receive a bump, blow or jolt to the head or body, and have the following signs:

#### TBI Signs in Adults

- Slurred speech
- Repeated vomiting or nausea
- Persistent or worsening headaches
- Numbness, weakness or decreased coordination

#### TBI Signs in Children

- Excessive crying
- Slurred speech
- Repeated vomiting or nausea
- Numbness, weakness or decreased coordination
- Child unable to eat

For information or to learn about prevention and resources available, contact Maggie Ferguson, MS, CRC, CBIS at [maggie.ferguson@idph.iowa.gov](mailto:maggie.ferguson@idph.iowa.gov) or visit <http://idph.iowa.gov/brain-injuries>

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#### References

1. Centers for Disease Control and Prevention. (2015). Retrieved from [http://www.cdc.gov/traumaticbraininjury/get\\_the\\_facts.html](http://www.cdc.gov/traumaticbraininjury/get_the_facts.html)
2. Iowa Department of Public Health, Division of Behavioral Health. (2009-2014). Data available upon request.