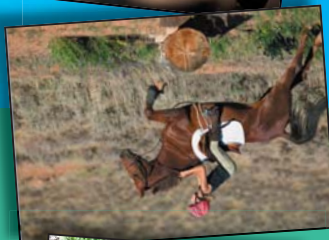


# ABOUT TRAUMATIC BRAIN INJURY

*“Traumatic brain injury is the most misunderstood, misdiagnosed, underfunded public health problem our nation faces”*

*Susan Connors*  
PRESIDENT  
Brain Injury Association of America



Courtesy of Rose Saldek

## What Is A Traumatic Brain Injury?

Montana is second in the nation for the per capita number of traumatic brain injury-related deaths, according to the Center for Disease Control (CDC). An estimated 19,000 Montanans need lifelong help of daily living due to a traumatic brain injury.

The Brain Injury Association of America defines a Traumatic Brain Injury (TBI) as a blow or jolt to the head or a penetrating head injury that disrupts brain function. Not all blows to the head result in a TBI. The severity of such an injury may range from mild or a brief change in mental status or consciousness to severe or an extended period of unconsciousness or amnesia after the injury.

### COSTS OF TBI

Direct medical costs and indirect costs such as lost productivity of TBI totaled an estimated \$60 billion in the United States in 2000.



#### Studies show:

- at least half of those charged with a crime or who are in prison have a history of TBI.
- TBI is linked with substance abuse and psychiatric disorders.
- TBI negatively effects productivity in terms of work and education.

Based on extrapolation made from a seven-state study by the CDC. Traumatic Brain injury in the United States: A Report to Congress, 2003: <http://www.cdc.gov/doc.do/id/0900f3ec800101e6>.

## Montana Statistics

- There were 2,198 TBI-related deaths in MT between 1999 and 2006.
- Approximately 275 people die each year in MT from TBI and many more who are injured and seen in the hospital, emergency department, and doctor's offices.
- 845 patients were admitted to MT hospitals and diagnosed with a TBI in 2006.

Based on statistics from Mt Vital Statistics and Mt Hospital discharge data.

## National Statistics

(From the CDC Website)

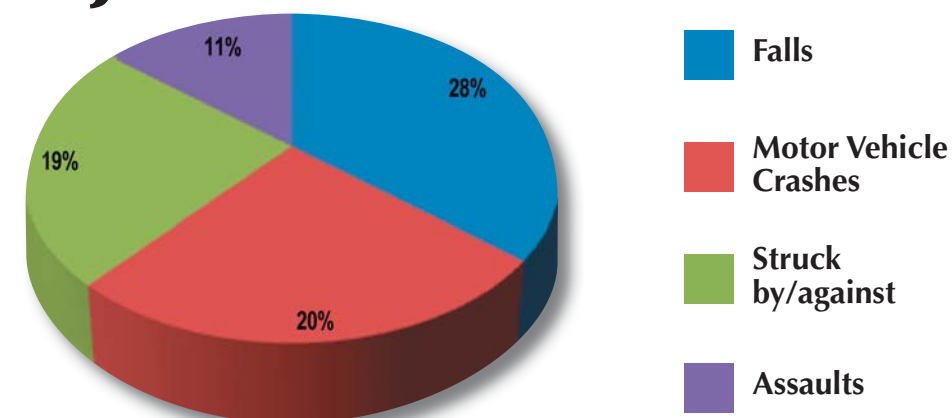
- About 1.4 million people in the U.S. sustain a TBI each year, ranging from mild to severe according to hospital and emergency room data.
- There are an unknown number of people with TBI who are not seen in a hospital.
- About 5.3 million people, or 2% of the population, currently live with disabilities resulting from TBIs in the U.S.

Based on extrapolation made from a seven-state study by the CDC. Traumatic Brain injury in the United States: A Report to Congress, 2003: <http://www.cdec.gov/doc.do/>

## Who Is At Highest Risk For Traumatic Brain Injuries?

- Males are about 1.5 times more likely than females to sustain a TBI.
- The two highest risk age groups for TBI are 0 to 4 and 15 to 19 year olds.
- Certain military duties increase the risk of sustaining a TBI, and 19% of returning active duty veterans of the Iraq and Afghanistan wars have TBIs from blasts, motor vehicle accidents, helicopter crashes or gunshot wounds.
- In Montana, Native Americans have the highest death rate.

## Major Causes of Traumatic Brain Injuries In The U.S. For 2006



Langlois JA, Rutland-Brown W., Thomas, KE. Traumatic brain injury in the United States: Emergency department visits, hospitalizations, and deaths. Atlanta (GA): Centers for Disease Control and Prevention, National Center for injury Prevention and Control.

**MONTANA**  
Department of Public Health & Human Services  
Senior and Long Term Care Division  
P.O. Box 4210  
Helena, Montana 59604

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## PREVENTION-TBIs Can Be Reduced



### Support Groups

There are local support groups across Montana for those with traumatic brain injuries or for friends and family members of those with TBI.

Towns served include Billings, Bozeman, Crow Agency, Eureka, Fort Peck, Great Falls, Helena, Kalispell, Lame Deer, Libby, Missoula, Troy, Whitehall, and others.

For a current time & meeting contact:

**Ian Elliot**  
**TBI Project Coordinator**  
**MT Center on Disabilities**  
**MSU-Billings**  
 1500 University Avenue  
 Billings, MT 59101  
 (406) 657-2172 or  
 (888) 866-3822.  
 ielliot@msubillings.edu.

Once a TBI has been sustained, it is extremely important to guard against a second one because consequences of another TBI are more severe.

- Wear a seat belt every time you drive or ride in a motor vehicle
- Buckle children in the car using child safety seats, booster seats or seat belts
- Wear a helmet and make sure your children wear helmets that are fitted and maintained properly when: riding a bicycle, motorcycle, snowmobile, scooter or all-terrain vehicle; playing a contact sport such as football, ice hockey or lacrosse; using in-line skates or riding a skateboard; playing baseball or softball; riding a horse; or skiing, sledding, or snowboarding
- Do not resume playing once a known or suspected TBI occurs until an appropriate health care professional evaluates you and gives permission to return to play
- Support TBI prevention education
- Educate new parents about the effects of shaking a baby and how to protect the baby from falls
- Teach senior citizens and families fall prevention strategies



**Buckle children in safety seats and wear a seat belt every time you drive or ride in a motor vehicle to reduce the incidence of TBI.**



### TBI - Long-term Consequences

The CDC estimates that at least 5.3 million Americans currently have a long-term or lifelong need for help to perform activities of daily living as a result of a TBI. One study found 40% of those hospitalized with a TBI had at least one unmet need for services one year after their injury. The most frequent unmet needs were:

- improving memory & problem solving
- managing stress & emotional upsets
- controlling tempers
- improving job skills

TBI can cause a wide range of functional changes affecting thinking, language, learning, emotions, behavior, and/or sensation. It can also cause epilepsy and increase the risk for Alzheimer's or Parkinson's and other brain disorders that become more prevalent with age.



### Circle The "Y"

The 2003 Montana State Legislature passed House Bill 698 creating a fund to provide public information and prevention education about traumatic brain injury. People registering their vehicles can donate to this fund by circling the "Y" on their registration form and adding \$1 to the total at the bottom of the form.

Many people don't realize they can help in this way.

### TBI Rehabilitation Programs In Montana



**Community Bridges**  
**Community Medical Center**  
 2685 Palmer St., Suite D  
 Missoula, MT 59808  
 406-327-4349

**Headway**  
**St. Vincent Healthcare**  
 1233 North 30th Street  
 Billings, MT 59101  
 406-657-7000

## Resource Facilitation Services (RFS)

Resource Facilitation is a telephone-based, person-centered, community-based initiative linking individuals with TBI and their families to local information, resources, service providers and natural supports. It is a collaborative process that respects and encourages the involvement and choices of individuals with brain injury and their family members.

RFS differs from other information and referral systems because staff proactively contact individuals who may have a TBI rather than simply respond to calls received.

BIAMT developed the Montana RFS in partnership with the Department of Public Health and Human Services, Senior and Long Term Care Division, after Montana received a TBI Demonstration Grant from Health Resources and Services Administration (HRSA) in 2001.

In 2007, the Montana Legislature appropriated \$100,000 to continue the services. As of December 31, 2008, 563 individuals have enrolled in RFS.

## NATIONAL & STATE Traumatic Brain Injury Resources

**Brain Injury Association of America**  
[www.biausa.org](http://www.biausa.org)  
 1608 Spring Hill Road, Suite 110  
 Vienna, VA 22182  
 Phone: 800-444-6443 Fax: 703-761-0755

**Brain Injury Association of Montana**  
[www.biamt.org](http://www.biamt.org)  
 1280 South 3rd Street W. Suite #4  
 Missoula, Montana 59801  
 Office: (406) 541-6442 Toll-free in-state: (800) 241-6442

**PARENTS LET'S UNITE FOR KIDS (PLUK)**  
[www.pluk.org](http://www.pluk.org)  
 800-222-5585

**For information on State programs, visit:**  
[www.dphhs.mt.gov/sltc](http://www.dphhs.mt.gov/sltc)  
 Call: 406-444-4077