



Guide to Writing About **Traumatic Brain Injury** in News and Social Media



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Traumatic brain injury (TBI) is a leading cause of injury-related death and disability in the United States.

As a writer, you may cover a story about an athlete, celebrity, or veteran who has a TBI. This guide can help you with the facts and suggest areas you may want to cover to help raise awareness in your community. It has been created to help media writers, editors, and bloggers craft compelling stories and highlight ways to help prevent TBIs, from all causes, to help safeguard the health of all Americans.



The What and Why

TBI is a Preventable Public Health Issue

TBI is an injury that can change the way your brain normally works and is caused by an external force to the head. The severity of TBI may range from “mild” (i.e., a brief change in mental status or consciousness) to “severe” (i.e., an extended period of unconsciousness or amnesia after an injury). Mild traumatic brain injury (mild TBI) accounts for nearly 75 percent of all TBIs.ⁱ Health care professionals may describe a concussion as a “mild” brain injury because most concussion symptoms typically resolve in days to weeks, but all TBIs—mild, moderate, or severe—are serious injuries and have the potential for long-term consequences.

TBI Statistics

- In 2010, 2.5 million emergency department (ED) visits, hospitalizations, or deaths were related to TBI, either alone or in combination with other injuries.ⁱⁱ
- TBI-related ED visits for sports- and recreation-related injuries increased 62 percent from 153,375 in 2001 to 248,418 in 2009 among persons aged 19 or younger.ⁱⁱⁱ
- The total cost of ED visits, hospitalizations, and deaths related to TBIs, either alone or in combination with other injuries, exceeds \$82 billion annually— this includes medical and work loss costs.^{iv}

TBI May Potentially Affect:

- Cognitive function (e.g., impaired attention or memory);
- Motor function (e.g., extremity weakness or poor coordination and balance);
- Sensation (e.g., loss of hearing, vision, perception, or touch); and
- Emotion (e.g., depression, anxiety, aggression, loss of impulse control, or personality changes).

Causes of TBI

Falls, motor vehicle crashes, being struck by or against an object, and assaults are four commonly reported causes of TBI:

- **Falls:** Falls are the leading cause of TBI (40 percent) in the United States. They cause more than half (55 percent) of all TBIs among children aged 0–14 years and 81 percent of all TBIs among adults aged 65 years and older.ⁱⁱ
- **Being Struck by or Against an Object or Person:** This type of TBI occurs from being struck (hit) or crushed, or colliding with a moving or stationary object or person. These events account for 16 percent of all TBIs and are the second leading cause of TBI among children aged 0–14 years (24%).ⁱⁱ Sports-related TBIs are one type of TBI that are the result of being struck by or against an object or person.
- **Motor Vehicle Traffic Incidents:** Among all age groups, motor vehicle crashes and traffic-related incidents are the third leading cause of TBI (14%) and result in the largest percentage of TBI-related deaths (26%).ⁱⁱ

- **Assault:** Assaults are the cause of 10 percent of TBIs in the general population; they account for 3 percent of all TBIs among children aged 0–14 years and 1 percent among adults aged 65 years and older.ⁱ Assaults include injuries inflicted by another person with intent to injure or kill, such as fights, child maltreatment (e.g., shaken baby or abusive head trauma), and intimate partner violence or elder abuse.

http://www.cdc.gov/traumaticbraininjury/get_the_facts.html

Shaken Baby Syndrome is a form of abusive head trauma and is a preventable and severe form of physical child abuse. It results from violently shaking an infant by the shoulders, arms, or legs. More information is available at <http://www.cdc.gov/concussion/HeadsUp/sbs.html>.



TBI Signs and Symptoms

You can include this list of signs and symptoms in your stories about TBI to educate readers.

- Call your health care professional right away if you or someone you know has an injury to the head and you notice ANY of the items on this list.

- **Observable TBI Signs**
 - Appearing dazed or stunned
 - Forgetting an instruction
 - Moving clumsily
 - Answering questions slowly
 - Losing consciousness (*even briefly*)
 - Showing mood, behavior, or personality changes
 - Being unable to recall events *prior* to and/or *after* a hit or fall
- **Symptoms Reported by Persons with TBI**
 - Headache or “pressure” in head
 - Nausea or vomiting
 - Balance problems or dizziness
 - Double or blurry vision
 - Sensitivity to light or noise
 - Sensation of feeling sluggish
 - Concentration or memory problems
 - Confusion
 - Not “feeling right” or “feeling down”
 - Mood changes, such as irritability, sadness, nervousness, anxiety, or acting more emotional than normal
 - Changes in sleep patterns^{vi}



The Who

The most common subjects mentioned in articles about TBI are professional athletes, followed by other athletes or participants in recreational activities, veterans, and teens. However, young children and older adults are at highest risk for TBI.ⁱ Consider writing about these other groups at risk to counter the impression that TBI is only a concern for athletes. Additionally, persons who are in a position to prevent TBI, such as parents, health care providers, school professionals, and coaches can be featured in articles.

Groups at Risk for TBI

While a TBI can happen to anyone, males and the youngest and oldest Americans are at greatest risk.

- Males
 - In every age group, TBI rates are higher for males.ⁱ
 - Males aged 0–4 years have the highest rates of TBI-related ED visits.ⁱⁱ
- Young children (aged 0–4 years)
 - Rates of ED visits were highest for children aged 0–4 yearsⁱⁱ
- Teens and young adults
 - Teens and young adults have the highest rates of motor-vehicle-related TBIs.
 - Approximately 71 percent of sports- and recreation-related TBI ED visits are among persons aged 10–19 years.ⁱⁱⁱ

Group-Specific TBI Information

- Health care professionals:
 - <http://www.cdc.gov/concussion/clinician.html>
 - http://www.cdc.gov/concussion/HeadsUp/physicians_tool_kit.html
- Service members and veterans: http://www.cdc.gov/traumaticbraininjury/pubs/congress_military.html
- Older adults: <http://www.cdc.gov/TraumaticBrainInjury/seniors.html>
- Youth sports athletes, coaches, and parents: <http://www.cdc.gov/concussion/headsup/index.html>

- Older adults
 - Adults aged 75 years and older have the highest rates of TBI-related hospitalization and death.ⁱ
 - Among older adults, rates of fall-related TBI hospitalization increase with age, with the rate for persons aged 85 or older more than twice that of persons aged 75–84 years and six times that of persons aged 65–74 years.^{vii}

Information for Sports Writers

TBI is mentioned most commonly in the sports section. You have a great opportunity as a sportswriter to reach a broader sports reader base with more prevention messages. Currently, most sports articles lack detail about TBI prevention, recognition, clinical management, and response. You can help broaden the content and impact of your stories by incorporating prevention tips along with compelling health data and information.

Awareness

TBI can occur in *any* sport or recreational activity. Therefore, all parents, school professionals, caregivers, coaches, athletes, and participants in recreational sports need to learn TBI signs and symptoms and what to do if one occurs. Recognizing and properly responding to TBI symptoms when they first occur can help prevent further injury or even death.

When writing about concussion and mild TBI, be sure to let your readers know that while most injuries are considered mild and occur without loss of consciousness, all TBIs are serious injuries—they are brain injuries.

Return to Play

By the end of 2013, all 50 states and the District of Columbia had passed laws to address concussion management in school athletics, often called return-to-play laws. You may want to include information about your state's law, if applicable, in your articles. More information is available at <http://www.childrenssafetynetwork.org/publications/state-lawsconcerning-sport-related-concussions-among-youth>.

The requirements of return-to-play laws vary but typically include some combination of the following:

- Mandatory removal from play if a concussion or other TBI is suspected
- Medical clearance requirement before returning to play
- Required training or educational materials for coaches, parents, and athletes
- Participation consent forms for parents and athletes

Download the guide, *Implementing Return to Play: Learning from the Experiences of Early Implementers*, to learn more about return to play policies at http://www.cdc.gov/concussion/policies/rtp_implementation.html.

Return to School

Concussions don't just affect athletes on the playing field. You can highlight that while most athletes with a concussion feel better within a couple of weeks, some will have symptoms for months or longer. Getting extra help or support as an athlete returns to school can help them get back to their regular school routine. For example, athletes may need:

- rest breaks;
- fewer hours at school;
- more time to take tests or complete assignments;
- help with schoolwork; and/or
- less time spent reading, writing, or on the computer.

You can get more tips and information on helping athletes return to school after a concussion at <http://www.cdc.gov/HeadsUp>.



The When and How

Tips for Accurate Reporting and Story Development

Writing about TBI involves more than just informing the public about an athlete who is unable to play due to a concussion. There are other ways to incorporate TBI information into the news.

You can tell a story about TBI and how it impacts lives. Including personal stories is a great way to bring attention to TBI. CDC has a collection of survivor stories that can be used in your articles. These are available at <http://www.cdc.gov/concussion/sports/stories.html> and http://www.cdc.gov/TraumaticBrainInjury/tbi_stories.html.

In addition, consider writing multiple articles about persons living with TBI. Writing a series of articles about the same person over time will allow you to track the individual's recovery and ways of coping with the injury. This information can give readers an idea of the range of severity and consequences of TBI and details about recovery.

Incorporating Key Prevention Messages to Build Awareness

You can also educate others and increase awareness of TBI by incorporating prevention messages and tips for the reader. You should emphasize that many people have a role in preventing TBI, including parents, caregivers for children and older adults, coaches, sports organizations, and health care providers.

There are several strategies for preventing TBI, and incorporating these prevention strategies and messages into your articles will help build awareness of prevention and can help reduce injury occurrence.



Preventing Falls among Children

Falls are the leading cause of TBI and are responsible for half of all TBIs among children. However, there are several simple ways parents and caregivers can prevent these injuries.^x You can target parents with the following messages that can be incorporated into stories:

- **Supervision is key.** Supervise young children at all times around fall hazards such as stairs and playground equipment, whether you are at home or outside playing.
- **Play safely.** Be sure that the surfaces under playground equipment are soft, well-maintained, and free from hazards.
- **Make your home safer.** Use home safety devices such as guards on windows that are above ground level, stair gates, and guard rails which help keep active kids from taking dangerous falls.
- **Keep sports safe.** Promote good sportsmanship and adherence to rules of play, and make sure your children wear proper protective gear during sports and recreation activities.



Preventing Falls among Older Adults

Falls cause 81 percent of TBIs among adults aged 65 years and older.ⁱⁱ The following are some strategies that can prevent falls among older adults that can be incorporated into stories.^{xi}

- Begin a regular exercise program, especially one that improves your strength and balance.
- Have your health care professional review all of your medications, both prescription and over-the-counter. Some medications can cause sleepiness and dizziness, which can cause falls.
- Have your vision checked annually and update your prescription for eyeglasses. Poor vision increases your chance of falling. Also, improve the lighting throughout your home, especially on stairs.
- Make your home safer. Remove items that can cause you to slip or trip, such as cords and throw rugs. Place frequently used objects where they can be reached easily without using a step stool. Install grab bars both inside and outside your tub or shower. Consider using a shower chair if you are having difficulties with balance.

http://www.cdc.gov/traumaticbraininjury/get_the_facts.html

There also are strategies that health care professional can use to prevent falls among older adults.^{xii}

- Screen older patients for fall risk. Evaluate their gait, lower body strength, and balance. Address identified deficits through treatment or referral to a community exercise program.
- Review and manage medications, conduct a visual acuity check, discuss footwear, and recommend vitamin D +/- calcium.
- Conduct a focused physical exam and address modifiable fall risk factors.
- Educate patients about their fall risk and how they can prevent falls.

More information on fall prevention is available in CDC's STEADI Took Kit for Health Care Providers at <http://www.cdc.gov/homeandrecreationalafety/Falls/steady/>.

Staying Safe on the Road

Motor vehicle crashes and traffic-related incidents are the second leading cause of TBI. When writing about these types of injuries, include information about how people can stay safe on the road.^{xiii}

- Use your seat belt. Using a seat belt every time is important, no matter how short the trip.
- Make sure children are properly buckled up. Children should be in a seat belt, booster seat, or car seat, whichever is appropriate for their age, height, and weight.

- Wear a helmet when riding a motorcycle, scooter, or bicycle.
- Know your state's Graduated Driver's License system. These licensing systems help keep teens safe on the road. More information is available at <http://www.iihs.org/iihs/topics/laws/graduatedlicenseintro?topicName=teenagers>
- Do not drive impaired. Choose not to drink and drive and help others do the same.
- Obey traffic laws. Do not speed, and slow down in the rain or snow.

Preventing Sports Injuries

Athletes, coaches, parents, and others can take steps to lessen the risk of TBI, all of which can be highlighted in media stories.^{xiv}

- Ensure that athletes follow their coaches' rules for safety and the rules of the sport.
- Encourage athletes to practice good sportsmanship at all times.
- Make sure athletes wear the right protective equipment for their activity. Protective equipment should fit properly and be well maintained.
- When appropriate for the sport or activity, teach athletes that they must wear a helmet to lower the chance of the most serious types of brain or head injury. However, there is no "concussion-proof" helmet. So, even with a helmet, it is important for children and teens to avoid hits to the head.

CDC HealthCommWorks

CDC has developed a suite of tools called CDC HealthCommWorks (<https://cdc.orau.gov/healthcommworks/>) that may help you develop your stories. MessageWorks (<https://cdc.orau.gov/healthcommworks/MessageWorks/MW>) is a tool that translates years of health communication research and experience into an easy-to-use and accessible way to improve audience impact, professional collaboration, and message effectiveness. It helps you to determine your message's predicted ability to influence health behavioral intentions and actions and to discover which audiences might respond well to a particular message. SocialMediaWorks (<https://cdc.orau.gov/healthcommworks/SocialMediaWorks/SW>) is an additional tool that can help you integrate social media into your communications.



TBI in the News

This matte release is a ready-to-print article that is free to use in any publication. It is an article on TBI that you can use as an example for your own reporting.

The Lystedt Law: A Concussion Survivor's Journey^{xv}

Although most people with a concussion have a good recovery, for some the effects of this injury can last weeks, months, or longer. Concussions, a type of traumatic brain injury, are all serious. That is why the choices we make immediately following a concussion can decide life or death or whether an injured athlete will have a good recovery and return to play. The state of Washington stepped in to help make this choice more clear for coaches, parents, and athletes. In May 2009, the state of Washington passed a new bill called the Lystedt Law, which protects young athletes from the life-threatening or potentially lifelong

consequences that can be caused by returning to the game too soon. The law is named after Zackery Lystedt, a young athlete who, in 2006, was permanently disabled after prematurely returning to a game after sustaining a concussion. It requires any youth showing signs of concussion to be examined and cleared by a licensed health care provider before returning to play.

Zack Lystedt's story, which led to what is sometimes referred to as the "shake-it-off" law, emphasizes why "shaking-it-off" puts players at risk for serious injury. Zack was a gifted athlete who played both offense and defense on his junior high school football team. He was injured at age 13 when his head struck the ground after tackling an opponent. A video of the game shows Zack lying on the ground with his hands clutching both sides of his helmet. The official called a time out, and Zack was sidelined for just three plays before half-time. His father recounts the moments following the injury, "Zack was not knocked out, but he did grab his head and rocked back-and-forth in pain." Despite the blow, Zack shook-it-off and, by the start of the third quarter, was back in the game. "He always wanted to be part of the play," his father recalls.

After a hard-played second half, Zack collapsed on the field and was airlifted to Harborview Medical Center where he underwent emergency life-saving surgery to remove the left and right side of his skull to relieve the pressure from his injured and swelling brain. He experienced numerous strokes and spent 7 days on a ventilator and 3 months in a coma before he awoke to his parents and a new reality. Prematurely returning to the game had resulted in the battle for Zack's young life that included 4 weeks in a nursing home, 2 months in a children's hospital for rehabilitation, 9 months before speaking his first word, 13 months before moving a leg or an arm, and 20 months on a feeding tube. It would be nearly 3 years before Zack would stand, with assistance, on his own two feet, and Washington would pass the Lystedt Law to help protect other young athletes in their state.

"There is no one tougher than my son. Sometimes players and parents wrongly believe that it shows strength and courage to play injured. Battling pain is glamorized. Zack couldn't swallow or hold his head up. Strength is seeing Zack stand up out of his wheel-chair and learning to talk again."

—Victor Lystedt, Zack's Dad

Zack's recovery has been long and difficult by many accounts. He has again proven himself a fierce competitor. CDC, the Brain Injury Association of Washington, and the Seattle Seahawks launched *Washington Heads Up: Concussion in Sports*, a campaign to highlight the effects of concussion and the importance of being evaluated by a medical professional to prevent serious brain injury.

Protect your young athlete. Learn about the symptoms of a concussion and why the brain needs time to heal before your child returns to play at www.cdc.gov/Concussion.

The Where

Resources for More Information



The media can contact the Injury Center by phone: 770-488-4902 or email: injurymedia@cdc.gov.

CDC has up-to-date TBI, violence, and injury prevention resources available free to the public online.

For more in-depth information please refer to these resources:

- CDC Traumatic Brain Injury: <http://www.cdc.gov/TraumaticBrainInjury/index.html>
- CDC Heads Up Concussion Educational Campaign: <http://www.cdc.gov/HeadsUp>
- CDC Motor Vehicle Safety: <http://www.cdc.gov/motorvehiclesafety/>
- CDC Violence Prevention: <http://www.cdc.gov/violenceprevention/>

Older Adults:

- CDC Traumatic Brain Injury for Seniors Media Access Guide: http://www.cdc.gov/traumaticbraininjury/pdf/MediaAccessGuide_FINAL.pdf
- CDC Falls Prevention for Older Adults: <http://www.cdc.gov/HomeandRecreationalSafety/Falls/index.html>
- CDC Traumatic Brain Injury for Seniors: <http://www.cdc.gov/traumaticbraininjury/seniors.html>

Children:

- A Journalist's Guide to Shaken Baby Syndrome: A Preventable Tragedy: http://www.cdc.gov/Concussion/pdf/SBS_Media_Guide_508_optimized-a.pdf
- CDC Falls Prevention for Children: <http://www.cdc.gov/HomeandRecreationalSafety/Falls/children.html>

Health Communication and Social Media:

- CDC's Traumatic Brain Injury Social Media: <http://www.cdc.gov/traumaticbraininjury/socialmedia/index.html>
- CDC's Guide to Writing for Social Media: <http://www.cdc.gov/socialmedia/tools/guidelines/pdf/guidetowritingforsocialmedia.pdf>
- CDC HealthCommWorks: <https://cdc.orau.gov/healthcommworks/>

References

- i Centers for Disease Control and Prevention. Traumatic brain injury in the United States: emergency department visits, hospitalizations, and deaths, 2002-2006. Atlanta (GA): CDC; 2010. Available from: http://www.cdc.gov/traumaticbraininjury/pdf/blue_book.pdf
- ii Centers for Disease Control and Prevention. Traumatic Brain Injury in the United States: Fact Sheet [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2015 Jan 12]. Available from: http://www.cdc.gov/traumaticbraininjury/get_the_facts.html
- iii Centers for Disease Control and Prevention. Nonfatal traumatic brain injuries related to sports and recreation activities among persons aged ≤ 19 years – United States, 2001-2009. MMWR. 2011;60:1337-42.
- iv Centers for Disease Control and Prevention. Injury prevention & control: data & statistics (WISQARSTM) [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2013 Aug 29]. Available from: <http://www.cdc.gov/injury/wisqars/index.html>
- v Centers for Disease Control and Prevention. Severe traumatic brain injury [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2012 Sep 21]. Available from: <http://www.cdc.gov/TraumaticBrainInjury/severe.html>
- vi Centers for Disease Control and Prevention. Concussion in sports [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2009 Dec 8]. Available from: <http://www.cdc.gov/concussion/sports/recognize.html>
- vii Coronado VG, Thomas KE, Sattin RW, Johnson RL. Characteristics of persons aged 65 years and older hospitalized with a TBI. J Head Trauma Rehab. 2005;20(3):215-28.
- viii Centers for Disease Control and Prevention. Implementing return to play: learning from the experiences of early implementers [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2013 May 15]. Available from: http://www.cdc.gov/concussion/pdf/RTP_Implementation-a.pdf
- ix Centers for Disease Control and Prevention. A “heads up” on managing return to play [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2011 Dec 15]. Available from: http://www.cdc.gov/concussion/headsup/return_to_play.html
- x Centers for Disease Control and Prevention. Protect the ones you love [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2012 Apr 12]. Available from: <http://www.cdc.gov/safechild/Falls/index.html>
- xi Centers for Disease Control and Prevention. Falls among older adults: an overview [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2012 Sep 20]. Available from: <http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html>
- xii Centers for Disease Control and Prevention. STEADI (Stopping Elderly Accidents, Deaths & Injuries) Tool Kit for Health Care Providers [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2013 Apr 11]. Available from: <http://www.cdc.gov/homeandrecreationalafety/Falls/steadi/>
- xiii Centers for Disease Control and Prevention. Prevention [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2012 Jul 27]. Available from: <http://www.cdc.gov/traumaticbraininjury/prevention.html>
- xiv Centers for Disease Control and Prevention. Concussion in sports [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2013 Apr 15]. Available from: <http://www.cdc.gov/concussion/sports/prevention.html>
- xv Centers for Disease Control and Prevention. The Lystedt Law: a concussion survivor’s journey [Internet]. CDC.gov. Atlanta (GA): CDC; [updated 2011 Feb]. Available from: <http://www.cdc.gov/media/subtopic/matte/pdf/031210-Zackstory.pdf>



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