

Childhood Traumatic Brain Injury

Guide for School Staff
By: Pooja Patel



Traumatic Brain Injury (TBI) is the most common cause of death and disability of children in the United States.¹ It can make it harder for children to do well in school because it may affect their memory, attention, planning, language skills, and ability to control their behavior.² Children with TBI often have lower self-esteem and more difficulty adjusting to everyday situations.³ They may also show more challenging behaviors, such as acting out. Every brain injury is unique, and it is important to remember that the path to recovery is not dependent on the person. In cases of severe brain injury, a full recovery is often not possible, even if the person is highly motivated to improve.⁴

Common Misconceptions

Myth: It is obvious when a student has brain damage because they look different from students who don't have brain damage.

Fact: Brain damage can be invisible. One may not see them struggling with memory, processing, or fatigue, even if they do appear recovered.

Myth: A student's personality should not change after a brain injury.

Fact: Brain injuries can often cause a student to become angrier, sadder, depressed, and/or hopeless. "It is common for a child's personality to change after a brain injury".⁴

Myth: Students who have survived a brain injury usually show a good understanding of their problems because they experience them every day.

Fact: Students may not recognize that they are struggling with memory, attention, or behavior due to reduced self-awareness.

Myth: Recovery from a brain injury usually is complete in 5 months.

Fact: Recovery timelines vary depending on age and injury severity. For some, recovery can last a lifetime.

Myth: Once a child recovering from a brain injury feels 'back to normal', the recovery process is complete.

Fact: Fatigue, slower processing speed, attention difficulties, and executive functioning challenges may persist even when the student reports feeling fine. Children's brains are still developing, so new challenges may appear years later when academic or social demands increase.²

Myth: How quickly a child recovers depends mainly on how hard they work at recovering.

Fact: TBI recovery is not a matter of willpower, and suggesting this can increase stigma.

Myth: TBI only affects the physical body.

Fact: TBI can affect many areas of functioning, including cognition, emotion, behavior, social functioning, and physical functioning.

What is Traumatic Brain Injury?

Definition: A traumatic brain injury (TBI) is an injury to the brain caused by an external force. It can occur when a person experiences a strong bump, blow, or jolt to the head or body. However, not every hit to the head results in a TBI. A TBI can also happen when an object penetrates the skull and enters brain tissue. TBIs are sometimes referred to as brain injuries or head injuries.⁵

Depending on the severity, a TBI can cause short-term difficulties with brain functioning. These may include challenges with thinking, understanding, memory, movement, communication, behavior, or emotional regulation. More severe TBIs can result in long-lasting or permanent disabilities and, in some cases, can be life-threatening.⁵

Severity Levels: There are 3 primary severity levels for TBI: mild, moderate, and severe. It's based on factors such as the length of unconsciousness, level of confusion, brain imaging results, and the extent of cognitive and physical impairment. Mild TBIs (including concussions) typically cause temporary symptoms, and severe TBIs result in significant, and sometimes permanent, neurological impairment.

Stigma

Students with traumatic brain injuries (TBI) often face unfair judgments from others and may feel ashamed, especially because their challenges aren't always visible. Teachers and peers might mistakenly think they are lazy or unmotivated, unaware of the difficulties they face. This can lead to students feeling left out, being bullied, or struggling more in school. Children with TBI often need extra support and effort from the people around them, including those at school, at home, and in their community.⁶

When everyone works together, it can help these students feel more supported and encouraged to do their best. Most importantly, we want them to feel safe, included, and like they truly belong at school.

Common Causes: Anyone can get a TBI. The leading causes of TBI include: Falls, Trauma Accidents, Vehicle-related Injuries, Assaults, and Violence.



Common Symptoms⁵

- Headache
- Nausea
- Mood swings
- Lack of motor coordination
- Sensitivity to light/noise
- "Brain fog"
- Irritability or anxiety
- Fatigue
- Lack of energy
- Dizziness

Severe Symptoms⁵

- Severe headache or nausea
- Slurred speech
- Memory difficulties
- Unconsciousness
- Seizures
- Trouble communicating
- Hearing or vision impairment

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Most general and special education teachers will have at least one student who has experienced a brain injury.¹ However, TBI is often seen as rare, so it isn't covered much in teacher training. Because of this, many teachers may have misunderstandings or limited knowledge about how TBI affects students.⁷ While it's important to plan supports carefully, teachers also need to stay flexible. Once the student is in the classroom, it may become clear that some strategies aren't working, and adjustments will be needed to better support the student's needs.

Maximizing Learning in the Classroom

Concentration and Attention: "Difficulties with concentration and attention can interfere with the student's ability to learn, perform tasks, and maintain social relationships. Increased awareness of environmental stimuli, caused by an inability to select and filter incoming sensory information, often makes it difficult for students with TBI to attend to and sustain focus on a task".¹ To help them:

- Allow mini-breaks in the back of the classroom
- Use earplugs when completing assignments
- Break assignments and exams up into smaller components (chunking)

Memory Impairments: Memory deficits have a lasting effect and can lead to difficulties in acquiring and retaining new information. To help them:

- Record assignments and relevant information in a notebook
- Incorporate checklists
- Incorporate daily repetition of tasks in the classroom
- Record lectures

Executive Functioning: Students can find it difficult to plan and organize. To help them:

- Use various organizers (checklists, planners, Google Classroom)
- Color code subjects/activities
- Offer choices

Communication: Communication problems might include difficulty comprehending what others are saying or difficulty finding the right words to respond. It may include difficulties with spelling, sentence structure, severely slowed or incomprehensible speech, and writing difficulties.¹ To help them:

- Provide opportunities for the student to practice oral and written language
- Use assistive technology software for writing and reading
- Encourage the student to think of "substitutes" when they can not think of a specific word

Instructional Strategies¹

- Use a mix of teaching methods, like slides and videos, to explain information and directions.
- Give clear and frequent feedback on how the student is doing, both academically and behaviorally.
- Provide an outline of the lesson ahead of time to help the student follow along.
- Teach strategies that help the student work through challenges and make choices.
- Start each class by reviewing what was already learned and previewing what's coming next. Highlight and repeat the most important ideas often. Build in repetition to help reinforce learning.
- Encourage the student to ask questions. Break big assignments into smaller, more manageable parts.
- Break tasks into step-by-step pieces to support learning and retention.
- Ask the student for their input on how they can improve their learning.
- Use a mix of open-ended and multiple-choice questions to support thinking and independence.
- Simplify more difficult material and use visuals like pictures or diagrams when possible.
- Give helpful reminders or cues when the student needs support.

Resources

Texas Education Agency and Statewide Evaluation for Eligibility in Special Education Leadership at <https://www.hhs.texas.gov/sites/default/files/documents/tbi-resource-document.pdf>. This site provides relevant information about TBI and the re-entry process to the school setting. It also addresses common problems and interventions for students with TBI.

Virginia Department of Education at <https://www.doe.virginia.gov/programs-services/special-education/specific-disabilities/traumatic-brain-injury-tbi>. This site provides resources for educators, persons with brain injury, and family members.

References

1. Keyser-Marcus L, Briel L, Sherron-Targett P, Yasuda S, Johnson S, Wehman P. Enhancing the schooling of students with traumatic brain injury. *TEACHING Exceptional Children*. November 30, 2001. Accessed March 5, 2026. <https://eric.ed.gov/?id=EJ643169>.
2. Linden MA, Braiden H-J, Miller S. Educational professionals' understanding of childhood traumatic brain injury. *Brain Injury*. 2012;27(1):92-102. doi:10.3109/02699052.2012.722262
3. Andrews TK, Rose FD, Johnson DA. Social and behavioural effects of traumatic brain injury in children. *Brain Injury*. 2009;12(2):133-138. doi:10.1080/026990598122755
4. Hooper SR. Myths and misconceptions about traumatic brain injury: Endorsements by School Psychologists. *Exceptionality*. 2006;14(3):171-182. doi:10.1207/s15327035ex1403_5
5. Traumatic brain injury (TBI) | National Institute of Neurological Disorders and stroke. Accessed February 2026. <https://www.ninds.nih.gov/health-information/disorders/traumatic-brain-injury-tbi>.
6. Arroyos-Jurado E, Paulsen JS, Merrell KW, Lindgren SD, Max JE. Traumatic brain injury in school-age children academic and social outcome. *Journal of School Psychology*. 2000;38(6):571-587. doi:10.1016/s0022-4405(00)00053-4
7. Ettl D, Glang AE, Todis B, Davies SC. Traumatic brain injury: Persistent misconceptions and knowledge gaps among educators. *Exceptionality Education International*. 2016;26(1). doi:10.5206/ei.v26i1.7732

