Guidelines for Education Students
With Traumatic Brain Injury (TBI)/ Concussions
A Collaborative Project of the Texas Education Agency and Low Incidence Statewide Leadership

Purpose

This document has been developed as a resource to educators and families who are providing support to students who have experienced a traumatic brain injury/concussion and are returning to school. Specifically, this document will answer the following questions:

- What is a TBI and how does it differ from a concussion?
- What are the consequences of a TBI?
- What is the process for reentry to school following a TBI?
- What are the cognitive/behavioral/physical changes that might occur and what are the accommodations and strategies that might be helpful?
- What type of form could be used by schools to document occurrences of head injury in a student’s health record?

Students who have experienced a TBI/concussion may exhibit a diverse range of physical, cognitive, behavioral and social needs. A team effort is required to effectively address and respond to these needs. The student, the family, schools and service providers must collaborate to ensure the student receives the support necessary to successfully reenter school. This resource document is aimed at sharing information to assist in promoting the importance and value of an integrated delivery of services.
What is a TBI?

The Center for Disease Control and Prevention (CDC) defines a TBI as a disruption in the normal function of the brain that can be caused by a **bump, blow or jolt** to the head or a penetrating head injury (Centers for Disease Control and Prevention, 2014). A disruption in the normal functioning occurs when any **one** of the following symptoms occurs:

- Any period of loss of or decreased consciousness;
- Any loss of memory for events immediately before or after the injury;
- Neurologic deficits such as muscle weakness, loss of balance or coordination, disruption of vision, change in speech and language, or sensory loss;
- Any alteration in mental state at the time of injury such as confusion, disorientation, slowed thinking, or difficulty with concentration. (Centers for Disease Control and Prevention, 2014)

A TBI can be classified as mild, moderate or severe, depending on the extent of damage to the brain. A mild traumatic brain injury is known as a **concussion**. However, the term “mild” can be deceiving. Even a concussion can have long-term effects, especially if additional concussions occur. The effects can be cumulative. With any TBI, symptom manifestations can be delayed or intensified as the student ages and reaches the next developmental level, where cognitive tasks become more complex. For this reason, many times parents and educators may not associate the student’s academic struggles or behavioral changes with a traumatic brain injury that occurred years before.

When a child sustains a brain injury, his/her educational and emotional needs are often very different than before the injury. As a result some children, but not all, may require special education services. Both federal law and state rules define TBI as a special education eligibility category and are as follows:
Federal Definition:

Individuals with Disabilities Act (IDEA) 2004
34 Code of Federal Regulations (CFR)
§300.8 Child with a Disability
(c)(12)

Traumatic brain injury means an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child’s education performance. Traumatic brain injury applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. Traumatic brain injury does not apply to brain injuries that are congenital or degenerative or to brain injuries induces by birth trauma.

State (Texas) Definition:

Texas Commissioner’s Rules
19 Texas Administrative Code
§89.1040 Eligibility Criteria
(c)(11)

Traumatic Brain injury: A student with a traumatic brain injury is one who has been determined to meet the criteria for traumatic brain injury as stated in 34 CFR, §300.8©(12). The multidisciplinary team that collects or reviews evaluation data in connection with the determination of a student’s eligibility based on a traumatic brain injury must include a licensed physician, in addition to the licensed or certified practitioners specified in subsection (b)(1) of this section.

Additional State Law Related to Concussions

The Texas Legislature passed HB 2038 and it was signed into law in 2011. HB 2038 defines a concussion as “a complex pathophysiological process affecting the brain caused by a traumatic physical force or impact to the head or body, which may: a) include temporary or prolonged altered brain function resulting in physical, cognitive, or emotional symptoms or altered sleep patterns and b) involve loss of consciousness.” It mandates that each school district have a concussion oversight team which designs and implements the protocol for the diagnosis, treatment and return to play of any student athlete who sustains a concussion. Texas Education Code (TEC) Section 38.151 – 38.160 clarifies expectation for school districts. The University Interscholastic League (UIL) has developed guidance for compliance.
What are the consequences of a TBI?

While each brain injury is unique, changes in cognitive ability, behavior and physical abilities are common. Frequently reported problems may include:

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<tr>
<th>Cognitive/Learning Changes</th>
<th>Social/Emotional &amp; Behavioral Changes</th>
<th>Physical/Sensory Changes</th>
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<td>• Concentration</td>
<td>• Anxiety</td>
<td>• Speech production</td>
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<td>• Attention</td>
<td>• Agitation</td>
<td>• Swallowing</td>
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<tr>
<td>• Communication</td>
<td>• Mood swings</td>
<td>• Seizure disorder</td>
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<tr>
<td>• Writing skills</td>
<td>• Depression</td>
<td>• Vision</td>
</tr>
<tr>
<td>• Memory</td>
<td>• Self-centeredness</td>
<td>• Fatigue</td>
</tr>
<tr>
<td>• Problem-solving</td>
<td>• Impulsivity</td>
<td>• Motor skills</td>
</tr>
<tr>
<td>• Reading/math skills</td>
<td>• Grief/loss</td>
<td>• Sensory impairment</td>
</tr>
<tr>
<td>• Insight</td>
<td>• Low self-esteem</td>
<td></td>
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<tr>
<td>• Perception</td>
<td>• Restlessness</td>
<td></td>
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<tr>
<td>• Planning</td>
<td>• Lack of motivation</td>
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<td>• Judgment</td>
<td>• Lack of inhibition</td>
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<td>• Sequencing</td>
<td>• Vulnerability</td>
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<tr>
<td>• Orientation</td>
<td>• Changes in peer relationships</td>
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<td>• Organization</td>
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What is the Process for Reentry to School Following a TBI?

To effectively serve students with a TBI, families, schools and service providers must collaborative to ensure that the transition to school is seamless and addresses the unique, diverse and changing needs of the student. Schools need to establish a plan of action prior to the student’s return to school.

The student may be returning to school from a hospital, cognitive rehabilitation unit, a residential placement, a Texas Juvenile Justice Department facility or detention facility. Regardless of the environment that the student is returning from, there are certain considerations. The checklist below is provided to ensure the proper support for the student as he/she transitions back to school:

- As soon as you know a student has been diagnosed with TBI, designate a school contact person to receive and provide information to the team (i.e. family, school staff, residential staff, Texas Juvenile Justice Department facility/detention center staff, etc.)
- Obtain parental consent for release of confidential information between discharging facility and school
- Identify a medical contact person at the discharging facility (e.g., care coordinator or social worker)
- Access updates on progress and need
- Educate family and school staff regarding student’s condition
- Arrange for hospital visits for school staff
- Establish and communicate follow-up and reevaluation schedule
- Request a school reentry meeting before discharge
- Find out date of discharge
  - Discharge planner/social worker/parents notified of discharge date in order for everyone to have input in the transition plan
- Secure discharge summary – (brain injury screening results, relevant psychological/psychiatric evaluations and notes, treatment plan)
  - Should include necessary information/recommendations from doctor to inform 504 committee or admission, review and dismissal (ARD) committee
- Section 504
  - Identify cognitive and behavioral interventions used in treatment
  - What cognitive improvement/decline has been experienced
  - Review therapies/services (i.e. speech, occupational therapy, physical therapy, cognitive therapy, counseling, etc.) being provided
  - Identify all areas of deficits: vision, seizures, hearing, medical, communication, cognitive, fine and gross motor, emotional, behavioral, comprehension, psychiatric, functional limitations, etc.
  - Define behavior/academic needs
  - State accommodations/modifications in place for academic as well as for extra-curricular activities
  - Identify assistive technology being provided and discuss transfer of devices, if necessary

✓ Establish a plan to determine medical benchmarks/medical milestones
✓ Identify community resources (CRCG), support groups
What are the cognitive/behavioral/physical changes that might occur and what are the accommodations and strategies that might be helpful?

Programming issues for students with TBI must focus on educational implications beyond the traditional curriculum. The following areas of functioning that are often affected as a result of a TBI and may interact with one another making it difficult to describe and to provide intervention. The age of the student, the time since the onset of the injury, and the demands of the academic setting also may affect how each deficit impacts performance and may change as the student recovers.

Although these cannot be easily isolated, difficulties in any one or more of the following areas may result in inappropriate classroom behavior and academic problems. These may be misinterpreted as voluntary misbehavior or lack of ability or effort. This is not always the case. The limitation should be addressed as part of programming considerations. The listing below of possible manifestations and accommodations is not meant to be exhaustive, but is provided to serve as an example of some of the deficits and possible accommodations that would support the student. Please use a team approach and individualize according to the needs of your student.

<table>
<thead>
<tr>
<th>Areas of Functioning</th>
<th>Possible Classroom Manifestations of Deficits</th>
<th>Possible Accommodations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention or Alertness</td>
<td>• Falls asleep in class</td>
<td>• It may be necessary to shorten assignments or break tasks down into smaller parts</td>
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<tr>
<td></td>
<td>• Appears to be daydreaming</td>
<td>• Provide breaks between tasks</td>
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<td></td>
<td>• Gets focused on one object or subject; cannot shift</td>
<td>• Provide cue cards or step by step guide</td>
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<td></td>
<td>• Loses train of thought when talking</td>
<td>• Plan to minimize distraction in the student’s auditory/visual space</td>
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<td></td>
<td>• Unable to sit still</td>
<td>• Preferential seating</td>
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<td></td>
<td>• Looks toward any movement or noise</td>
<td>• Student may benefit from taking tests in a quiet area and additional time for tests</td>
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<tr>
<td></td>
<td>• Cannot tune out distractions – visual or auditory</td>
<td>• Schedule difficult tasks to coincide with time greatest alertness</td>
</tr>
<tr>
<td></td>
<td>• Displays other off-task behaviors</td>
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</table>
| Visual Perception | • Omits portions of material when reading or copying  
• Cannot find items on a shelf or in text  
• Skips words or lines when reading  
• Runs into people or objects | • Allow student to record lectures for later playback  
• Provide peer supported reading  
• Exempt the student from reading aloud in front of classmates  
• Explore assistive technology devices to help with orientation and mobility in the environment  
• Provide extra time to move from class to class |
|---|---|---|
| Memory & New Learning | • Cannot recall events of the day or previous day  
• Forgets to do or hand in assignments  
• Loses track of time  
• Gets lost travelling to and from class  
• Recalls information from before the injury, but has difficulty with new information  
• Has difficulty recognizing faces  
• Forgets rules  
• Recalls only parts of directions or assignment | • Use an organizer, assignment book, log of daily activities as an external memory aid  
• Provide a schedule and review daily routines  
• Use timers to help keep track of time  
• Utilize the student’s best modality (visual vs. auditory input)  
• Provide visual cue cards, maps etc.  
• Post visual rules  
• Provide simplified instructions and reduce tasks |
| Speed of Processing | • Takes excessive time to complete assignments, tasks and tests; overloads easily  
• Asks questions about topics already discussed  
• Requests repeated directions  
• Takes excessive time to respond to questions, resulting in long pauses | • Chunk tasks or reduce tasks  
• Provide extra time  
• Modify environment, eliminating distractions  
• Provide directions in different modalities (e.g., written, visual)  
• Provide anticipatory cuing to prepare responses in advance  
• Alternate instruction, activity and rest |
<p>| Verbal Expression | • Can be nonverbal | • Investigate assistive technology |</p>
<table>
<thead>
<tr>
<th>Written Expression</th>
<th>Social</th>
</tr>
</thead>
</table>
| • Uses vague responses or questions  
• Has word finding problems  
• Takes long pauses  
• Seems to have knowledge but cannot express it clearly  
• Has Unintelligible speech  
• Has language delays | • Jokes inappropriately  
• Behaves immaturity  
• Interrupts others  
• Touches others inappropriately  
• Demonstrates poor listening skills  
• Unable to read social cues  
• Chatters inappropriately  
• Displays flat affect  
• Shows little or no emotion |
| supports for speech | • Provide feedback  
• Teach and use signals to gently redirect  
• Provide visuals and supports for rules  
• Use social groups to teach skills, provide feedback  
• Provide supportive counseling |
| • Use open ended statements such as “Tell me about...”  
• Provide processing time  
• Give verbal cues to communicate intent of conversation  
• Use simple, direct language, avoiding abstract terms and sarcasm | • Unable to write legibly  
• Unable to keep up with note taking  
• Makes spelling and grammatical errors  
• Makes organizational errors  
• Lacks organizational skills  
• Composes in simplistic fashion  
• Lacks proofreading skills  
• Unable to express ideas clearly | • Reduce amount of written work (e.g., multiple choice versus essay questions)  
• Use peer note takers  
• Use spell check software  
• Provide assignments and current activities in writing  
• Use large print books with low density on the page |
<table>
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<tr>
<th>Behavior &amp; Emotion</th>
<th>Physical</th>
</tr>
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<tbody>
<tr>
<td>• Has verbal outbursts</td>
<td>• May have related pain</td>
</tr>
<tr>
<td>• Fights</td>
<td>• May have impairments in any of the following:</td>
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<tr>
<td>• Curses</td>
<td>▪ Speech</td>
</tr>
<tr>
<td>• Demonstrates mood swings</td>
<td>▪ Gait</td>
</tr>
<tr>
<td>• Tends to be negatively influenced by peers</td>
<td>▪ Coordination &amp; Dexterity</td>
</tr>
<tr>
<td>• Lacks initiative</td>
<td>▪ Respiration</td>
</tr>
<tr>
<td>• Regarded as egocentric</td>
<td>▪ Feeding</td>
</tr>
<tr>
<td>• Appears apathetic</td>
<td>▪ Vision</td>
</tr>
<tr>
<td>• Lacks awareness of deficits</td>
<td>▪ Hearing</td>
</tr>
<tr>
<td>• Practices poor hygiene</td>
<td>• Be aware of medications and changes in medications and potential side effects</td>
</tr>
<tr>
<td>• Laughs or cries uncontrollably</td>
<td>▪ Consult with experts (e.g., speech therapist, physical therapist, occupational therapist, school nurse)</td>
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<p>| | |</p>
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<tr>
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</thead>
<tbody>
<tr>
<td>• Avoid changes in student’s routine</td>
<td>• Be aware of medications and changes in medications and potential side effects</td>
</tr>
<tr>
<td>• Provide choices and be flexible in expectations</td>
<td>▪ Consult with experts (e.g., speech therapist, physical therapist, occupational therapist, school nurse)</td>
</tr>
<tr>
<td>• Keep a diary and review behavior at the end of the day</td>
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<tr>
<td>• Use social narrative to reteach skills</td>
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</tr>
<tr>
<td>• Provide a time and place for mental and emotional rest/calming station</td>
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<tr>
<td>• Contact the school counselor, social worker, or psychologist for additional assistance in developing coping/problem-solving strategies</td>
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In summary, the educator must understand that each day may look different as the brain recovers and heals. Providing a structured setting, with consistent routines and flexibility in instruction and assessment is a necessity.
What type of form could be used by schools to document occurrences of head injury in a student’s health record?

The following is an example of a form that could be used to document occurrences of a TBI in a student’s school health record.

**Head Injury Questionnaire**

Child’s Name: ___________________________ School: _______________________________________________

Date of Birth: ___________________________ Grade: ___________________________ Today’s Date: ___________________________

**INTRODUCTION:** According to the Center for Disease Control and Prevention (CDC), Traumatic Brain Injury in the United States: Emergency Department Visits, Hospitalizations, and Deaths, 2002-2006, “Traumatic brain injury (TBI) is an important public health problem in the United States. Because the complications that result from TBI, such as impaired cognition and memory, are often not readily apparent, and because awareness about TBI among the general public is limited, it is frequently referred to as the ‘silent epidemic’.”

Please answer the following questions:

1. Has your child had a concussion/blow to the head while playing sports or other activity that was treated by a health care professional?
   - [ ] Yes
   - [ ] No
   - If yes, when? ___________________________

2. Has your child ever been in an accident in which he/she was unconscious, confused or disoriented?
   - [ ] Yes
   - [ ] No
   - If yes, when? ___________________________

3. Has your child ever struck his/her head hard enough in a fall to be unconscious, confused or disoriented?
   - [ ] Yes
   - [ ] No
   - If yes, when? ___________________________

4. Are you aware of any instance in early childhood where, as a baby, he/she was difficult to wake?
   - [ ] Yes
   - [ ] No
   - If yes, when? ___________________________
5. If you answered yes to any of the questions above, please answer the remaining questions:
   a) Approximately how long was your child unconscious, confused or disoriented? ________________________
   b) Did you seek medical attention? ☐ Yes ☐ No
   c) Was your child hospitalized? ☐ Yes ☐ No For how long? ________________________
   d) May we have a Release of Information to obtain records from the hospital and/or doctors who treated your
      child for this head injury?
         ☐ Yes ☐ No

Name and Location of Hospital(s): ________________________________________________________________
Name and Location of Doctor(s): ________________________________________________________________

I understand that the above information will be entered onto my child’s health record and used only for the purpose of aiding in
the creation and maintenance of a comprehensive educational plan. Confidentiality and FERPA laws apply to these documents
which limits access to only personnel working with the student.

Printed Name of Person Completing this Form: ______________________________________________________

Relationship to Child: _______________________________________________________________________

Signature: ___________________________ Date: ___________________________
**Resources**

The following are provided as resources to assist in better understanding of traumatic brain injuries.

**Federal**

**United States Office of Special Education Programs**
This site was created to provide a "one-stop shop" for resources related to IDEA and its implementing regulations.

**Centers for Disease Control and Prevention (CDC)**
A fact sheet for teachers, counselors, and school professionals

**Centers for Disease Control and Prevention (CDC)**
Information on concussions

**The Brain Injury Resource Center**
This site provides a wealth of information, creative solutions and leadership on issues related to brain injury.

**State**

**Department of State Health Services**

**Traumatic Brain Injury Advisory Council**
The Texas Traumatic Brain Injury Advisory Council (TBIAC) was established September 1, 2003 through an act by the 78th Texas Legislature.

**Office of Acquired Brain Injury**
The Office of Acquired Brain Injury in Texas serves as resource for survivors of brain injuries and their families, including returning combat veterans, through referrals and greater coordination of federal, state and local resources.

**Texas Education Agency**
Special Education Rules and Regulations
- **Notice of Procedural Safeguards**
- **Legal Framework**

**Texas Assistive Technology Network**

Texas Education Agency
Education Service Center, Region 3

August 2015
Texas Assistive Technology Network (TATN) is working to ensure that students with disabilities receive assistive technology devices and services when needed to benefit from a free, appropriate public education.

