

Traumatic Brain Injury (TBI)

Establishing Eligibility

The Colorado Department of Education (CDE) is committed to supporting students with brain injury and their families. We recognize that the inability to obtain medical documentation for students whose special education eligibility is being determined has led to mis- and under-identification of children with TBI in the state of Colorado. Depending on the situation, it can be difficult or impossible to obtain medical documentation of a brain injury. A study found that 42% of persons who indicate they had incurred a TBI as defined by the Centers for Disease Control and Prevention (CDC) did not seek medical attention (Corrigan & Bogner, 2007). In response, CDE has incorporated an educational identification process for special education eligibility through establishing a significant history of TBI.

The definition of TBI:

A child with a Traumatic Brain Injury (TBI) has an acquired injury to the brain caused by an external physical force resulting in total or partial functional disability or psychosocial impairment, or both. This impairment adversely affects the child's ability to receive reasonable educational benefit from general education. A qualifying Traumatic Brain Injury is an open or closed head injury resulting in impairments in one or more areas, such as cognition, language, memory, attention, reasoning, abstract thinking, judgment, problem-solving, sensory/perceptual/motor abilities, psychosocial behavior, physical functions, information processing, and speech. The term "traumatic brain injury" under this rule does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma. ECEA 2.08(10)

Elements of Eligibility

There are two important elements to the eligibility criteria that **MUST** be met for qualification:

1. Evidence of TBI (established through medical documentation or educational identification)
2. A display of educational impact most probably and plausibly related to the TBI.

Evidence of TBI: Medical Documentation & Educational Identification

Medical Documentation: Best practice is to document a traumatic brain injury via medical documentation or hospital records from a doctor who has knowledge of the Centers for Disease Control and Prevention (CDC) requirements for TBI.

When medical documentation either cannot be obtained or when the individual did not seek medical attention, the following elements and considerations will help school personnel when collecting evidence for these criteria to establish a significant and credible history of TBI.

Educational Identification/Significant History: Reported incident(s) of one or more traumatic brain injuries **reported by a reliable and credible source and/or corroborated by numerous reporters.**

There must be a reported incident (or multiple incidents of TBI) as well as ongoing symptoms/ behaviors that persist beyond the incident (Corrigan & Bogner, 2007).

- ▶ In determining whether an incident occurred, certain questions should be asked in specific ways. (Have you ever hurt your head or neck in a car or bike accident? Have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Have you ever been in a fight or have been hit so hard that you were dazed or had a gap in memory? Have you ever been knocked out?) *Note: losing consciousness is not necessary for TBI to occur.
- ▶ Details of the incident should be clear and consistent. The description of the injury should not vary widely from report to report, or from reporter to reporter (if there are multiple reporters of the same incident).
- ▶ If there are multiple brain injuries, specifics about each incident and injury should be well-detailed and consistent.

Comprehensive Health & Family History

The "gold standard for determining a significant history of TBI is a self/parent report as determined by a structured or in-depth interview" (Corrigan & Bogner, 2007).

Appendix B: Traumatic Brain Injury Eligibility

- ▶ Gathering a comprehensive health and family history requires an in-depth interview format. A comprehensive health history form may serve as a template by which a school nurse, social worker or psychologist can interview and ask questions of a student, parent or caretaker. A school district may choose to use their own district health and family history interview form as long as there are multiple questions about brain/head injuries and/or neurological concerns. CDE has developed a form for use: www.cde.state.co.us/healthandwellness/snh_specialeducation.
- ▶ It is recommended that a face-to-face approach is followed to ensure an in-depth interview with appropriate follow up questions. A health history form is not intended to be given to a student or parent/caretaker for independent completion and return.
- ▶ Establishing a significant and credible history requires a skilled interviewer with knowledge of acute, short-term and long-term symptoms associated with TBI. For each incident, questions should include: Where, when, and how the injury occurred? What types of medical interventions were sought at the time of injury, later, or through the recovery process? (Obtain contact information and releases for health care providers.) Are the details medically plausible? A consult with the school nurse may be helpful. **Be aware of assumptions – for example, the report of a “scalp laceration” or “head injury” does not automatically designate a “brain injury.”*
- ▶ Multiple interviewers (psychologist, social worker, nurse) are utilized to ask similar questions to multiple interviewees (mom, dad, student, sibling, and/or grandparent) about an incident. This information is shared with the team to determine clear and corroborated accounts of each incident.
- ▶ Screening and structured interviews need to incorporate more than two areas of impact related to TBI (Corrigan & Bogner, 2007). The interviewer should be familiar with the acute symptoms related to TBI at the time of the injury. These symptoms may include, but are not limited to:
 - ▷ Physical symptoms (headaches, nausea, dizziness or balance issues, neck pain, noise or light sensitivities).
 - ▷ Cognitive symptoms (memory, processing speed, attention or concentration).
 - ▷ Emotional symptoms (unable to regulate emotions or inhibit impulses, easily overwhelmed).
 - ▷ Sleep/fatigue symptoms.
 - ▷ Social skill deficit symptoms (depression or anxiety, loss of friends, easily agitated, makes inappropriate comments, disregard for clothing or hygiene).

The interviewer should also be familiar with symptoms that later emerge, develop, or morph. These are often related to ongoing, chronic physical conditions (headaches) or to behaviors that look like learning, behavior, and/or emotional issues, social skill deficits, and executive function deficits.

- ▶ The interviewer should drill down into a comparison between the student’s PRE-injury versus POST-injury status.
 - ▷ Are there changes in all/some areas?
 - ▷ Has there been skill regression since the injury?
 - ▷ Has there been a change in the student’s personality? Learning skills? Social skills? Executive function skills? Behavioral skills?

Confirmation of History

If the team agrees that the comprehensive health and family history interview yields an indication of significant and credible history, CDE recommends confirming this finding with the Brain Check Survey. This survey, developed and validated through Colorado State University, provides a more specific screen of the TBI. The Brain Check Survey is located online at Colorado State University's Life Outcomes After Brain Injury Research Program website and can be downloaded and given directly to the parent/caretaker for written completion.

The Brain Check Survey can be used qualitatively for data collection. There is a scoring component. However, a cut-off of eight only indicates positive screen for brain injury, does not equate with eligibility determination. Confirmation of significant and credible history alone is not enough to meet the eligibility requirements for special education determination; educational impact is also necessary (see Display of Educational Impact section below.)

Display of Educational Impact

If medical documentation and/or a screen or in-depth interview suggests there has been a TBI, a full and comprehensive evaluation is required to determine whether there is educational impact most probably and plausibly related to the traumatic brain injury. A screen or in-depth interview is not enough to determine TBI and its impact on education.

Appendix B: Traumatic Brain Injury Eligibility

Educational impact means that the impairment adversely affects the child’s performance and the ability to receive reasonable benefit from general education. Due to the broad definition of “educational performance,” the impairment must adversely affect the child even if he/she has not failed or been retained in a course or grade and is advancing from grade to grade. Educational performance may include areas such as academics, social interactions or the ability to build and maintain friendships, behavior regulation, accessing the physical surroundings, etc.

An important consideration for TBI is that symptoms might not appear until well after the injury. It is important to document a probable TBI in the student’s record to ensure that a complete record is accessible if symptoms manifest in the future. IEP teams must gather current functioning data across the domain areas identified in the criteria (see below) to determine educational impact.

The Traumatic Brain Injury, as described above, prevents the child from receiving reasonable educational benefit from general education as evidenced by one or more of the following criteria: (check those that apply) ECEA 2.08(10)(b)		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	A limited ability to sustain attention and/or poor memory skills, including but not limited to difficulty retaining short-term memory, long-term memory, working memory and incidental memory.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	An inefficiency in processing, including but not limited to a processing speed deficit and/or mental fatigue.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Deficits in sensory-motor skills that affect either one, or both, visual or auditory processing, and may include gross motor and/or fine motor deficits.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Delays in acquisition of information including new learning and visual-spatial processing.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Difficulty with language skills, including but not limited to receptive language, expressive language and social pragmatics.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Deficits in behavior regulation, including but not limited to impulsivity, poor judgment, ineffective reasoning and mental inflexibility.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Problems in cognitive executive functioning, including but not limited to difficulty with planning, organization and/or initiation of thinking and working skills.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Delays in adaptive living skills, including but not limited to difficulty with activities of daily living (ADL).
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Delays in academic skills, including but not limited to reading, writing, and math delays that cannot be explained by any other disability. They may also demonstrate an extremely uneven pattern in cognitive and achievement testing, work production and academic growth.

School teams may want to access the web-based Building Blocks of Brain Development framework on the [Colorado Kids with Brain Injury](http://ColoradoKidswithBrainInjury.com) website for a collection of formal and informal, school-based assessments intended for collecting data in each of these areas.

For more information and to download the *Brain Injury in Children and Youth: A Manual for Educators*, go to: www.cde.state.co.us/cdesped/sd-tbi.asp or www.cokidswithbraininjury.com