

Concussions: Information for Parents

The Centers for Disease Control and Prevention (CDC, 2012) estimate that 1.7 million people sustain a traumatic brain injury (TBI) each year. Children from birth to 4 years of age, adolescents aged 15 to 19, and adults aged 65 and older are most likely to sustain a TBI. The highest rates of TBI-related emergency department visits, hospitalizations, and deaths involve males birth through 4 years of age (CDC 2012).

Holcomb, M.J., Davis, A.S., & D'Amato, R.C. (2010) define a traumatic brain injury (TBI) as an injury to the brain that occurred after birth. They are categorized as either open or closed injuries. An open-head injury is usually caused by a penetrating object that fractures the skull and damages brain tissue or the surrounding membranes. A closed-head injury is usually caused by the brain moving within the skull as a result of a fall or crash-type injury (ex. car accident, abuse, sports, etc.).

Approximately 75% of TBIs that occur each year are concussions or other forms of mild TBI. (CDC, 2012). The CDC (2010) indicates concussions are caused by a bump, blow, or jolt to the head. They can also be caused if the head and brain are caused to move rapidly back and forth due to a blow to the body. Concussions cause the brain to change the way it normally works. Most concussions do not include loss of consciousness. Signs and symptoms may show up directly after the injury or may not occur until hours or days after.

The CDC Heads Up to Schools: Know Your Concussion ABCs: A Fact Sheet for Parent reports the following Signs and Symptoms of a Concussion (2010):

<u>Signs Observed by Parents or Guardians</u>	<u>Symptoms Reported By Your Child or Teen</u>
<ul style="list-style-type: none"> • Appears dazed or stunned • Is confused about events • Answers questions slowly • Repeats questions • Can't recall events <i>prior</i> to the hit, bump or fall • Loses consciousness (even briefly) • Shows behavior or personality changes • Forgets class schedule or assignments 	<p>Thinking/Remembering:</p> <ul style="list-style-type: none"> • Difficulty concentrating or remembering • Feeling more slowed down • Feeling sluggish, hazy, foggy, or groggy <p>Physical:</p> <ul style="list-style-type: none"> • Headache or "pressure" in head • Nausea or vomiting • Balance problems or dizziness • Fatigue or feeling tired • Blurry or double vision • Sensitivity to light or noise • Numbness or tingling • Does not "feel right" <p>Emotional:</p> <ul style="list-style-type: none"> • Irritable • Sad • More emotional than usual • Nervous <p>Sleep*:</p> <ul style="list-style-type: none"> • Drowsy • Sleeps <i>less</i> than usual • Sleeps <i>more</i> than usual • Has trouble falling asleep <p>*only ask about sleep symptoms if the injury occurred on a prior day</p>

If, after an injury, your child or adolescent reports or if you notice one or more of the symptoms listed above, the CDC recommends that medical attention be sought.

If any of the following symptoms are seen, the child or teen should be taken to the ER immediately (CDC, 2010):

- One pupil (black part in the middle of the eye) is larger than the other

- Drowsiness or cannot be awakened
- A headache that gets worse and does not go away
- Weakness, numbness, or decreased coordination
- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Difficulty recognizing people or places
- Increasing confusion, restlessness, or agitation
- Unusual behavior
- Loss of consciousness (even if it is brief)

An infant/toddler should be taken to the ER if they will not stop crying and cannot be consoled and/or will not nurse or eat after receiving a bump, blow, or jolt to the head or body (CDC, 2012).

Full recovery from a concussion may take as little as a week or as long as months. Full recovery is different for each individual. Activities should be managed and monitored by a medical professional (CDC, 2010). Mental and physical rest is required for the brain to heal from a concussion. School attendance and activities may need to be limited (Children's Hospital & Research Center Oakland, 2012). Children/adolescents should not text message or play video games during this time. Exercising or activities that involve a lot of concentration may cause concussion symptoms to get worse. Children or adolescents should not return to sports or recreation activities until a health care professional says they are symptom-free and allowed to return. Individuals should never return to sports or recreation activities the same day the injury occurred (CDC, 2010).

When the child or adolescent has been cleared to return to school, talk with your child's school (teachers, nurse, coach, etc.) about the concussions and symptoms experienced. Do not assume that school staff have more information than you do about TBI – school personnel may benefit from what you have learned from the child's medical professional (Holcomb et al., 2010). Some students require rest breaks, shortened school days, additional time to take tests or complete assignments, additional help with their work, and/or reduced time spent reading, writing, or working on the computer (CDC, 2010). Other students may require an environment with less distractions and simple directive language using concrete vocabulary when provided instruction and directions (Holcomb et al., 2010). Some students that experience concussions become upset that they cannot return to their normal activities right away or have difficulty keeping up in class. As the child or adolescent heals, the extra help or support can be removed gradually (CDC, 2010).

As a parent, it is recommended that you keep the documents and records given to you by the variety of professionals you will meet together in a folder, binder, etc. Take notes on specific plans made for your child and keep track of reports describing your child's progress. If anyone asks you for documents, provide them with a copy and keep the original. TBI can result in stress for the whole family. As a parent, it may be beneficial for you to seek out and talk to other parents of children with TBI. Consider support from family and friends. Sometimes the whole family can benefit from talking to a mental health professional (Holcomb et al., 2010).

Traumatic brain injuries should be taken seriously every time they occur. By closely looking for symptoms and following up with medical professionals and rest, your child will have the best opportunity for a successful recovery.

Resources cited in this article:

Centers for Disease Control and Prevention (CDC). (2010). Heads up to Schools: Know Your Concussion ABCs: A Fact Sheet For Parents. Retrieved from

<http://www.cdc.gov/concussion/HeadsUp/schools.html>

Centers for Disease Control and Prevention (CDC): Injury Prevention & Control: Traumatic Brain Injury. (2012). Retrieved from
<http://www.cdc.gov/concussion/index.html>

Children's Hospital & Research Center Oakland: About Concussions: New Findings and Information. (2012). Retrieved from
http://www.childrenshospitaloakland.org/healthcare/depts/sports_medicine/concussion.asp

Holcomb, M.J., Davis, A.S., & D'Amato, R.C. (2010). Traumatic Brain Injury: Information for Parents. Helping Children at Home and School III. National Association of School Psychologists.

Online resources:

<http://www.allabouttbi.com/>

<http://www.cdc.gov/concussion/index.html>

<http://www.mayoclinic.com/health/traumatic-brain-injury/DS00552>

<http://www.nlm.nih.gov/medlineplus/traumaticbraininjury.html>

<http://www.ninds.nih.gov/disorders/tbi/tbi.htm>