

Traumatic Brain Injury in the School-Aged Child

Traumatic brain injury (TBI) is a serious public health problem in the United States. Each year, TBIs contribute to a substantial number of deaths and cases of permanent disability. Recent data shows that, on average, approximately half a million children (0-14) sustain a traumatic brain injury annually. This includes:

- 473,900 emergency department visits.
- 35,000 hospitalizations.
- 2,100 deaths.

(U.S. Department of Health and Human Services Centers for Disease Control and Prevention, "Traumatic Brain Injury in the United States 2002-2006")

Causes

Major causes of brain injury include falls, motor vehicle crashes, sports-related concussions, diseases and family violence.

Symptoms

- Headache or "pressure" in head.
- Nausea or vomiting.
- Balance problems or dizziness.
- Blurred or double vision.
- Sensitivity to light.
- Sensitivity to noise.
- Feeling sluggish, hazy, foggy or groggy.
- Difficulty concentrating.
- Confusion.

Children's brain injuries are different

Research shows that a child's brain injury has a more severe effect than an adult's injury. This is because a child's brain is still developing. Children's greatest challenges are changes in their abilities to think, learn and behave.

Concussion in Children

A concussion is a type of brain injury. It is caused by a bump, fall or blow to the head or body that causes the head and brain to move back and forth quickly. Not all concussions result in loss of consciousness. A concussion is most likely during activities where collisions can occur, such as physical education class, playground time or a sports activity. Approximately 1,300 U.S. children experience severe or fatal head trauma from child abuse every year.

Recognizing and responding to a possible concussion can prevent further injury and help with recovery. Children should NEVER return to sports/recreation activities on the day of the injury, and should delay a return to any physical activity until they are symptom-free and have their physician's clearance.

All children with concussion or suspected concussion should be followed closely by their doctor. A visit after the event allows the doctor to assess the child for ongoing symptoms and allows the family to ask questions and discussion of how to prevent future injury.

Return to School

When a child with TBI returns to school, her needs have often changed. The injury was sudden and traumatic. When she remembers her abilities before the injury, she may be frustrated, angry or sad. The family, friends and teachers often have difficulty adjusting their expectations.

Plan carefully for the student's return to school. The school will need to evaluate him thoroughly to determine his educational needs. Ask about accommodations from Section 504 of the Americans with Disabilities Act, as well as special education services (Individuals with Disabilities Education Act). This information is usually available from the school's principal or special education teacher.

Here are some suggestions:

- Learn as much as you can about TBI. Knowledge will help you and your child.
- Work with the medical team to understand your child's injury and treatment plan. Ask questions. Make suggestions.
- Keep track of your child's treatment. As your child recovers, you may meet with many doctors, nurses and others. Write down what they say. Put it and any paperwork the team gives you in a three-ring notebook or a box. If you are asked to share your paperwork with someone else, make a copy. Always keep the original.

- Talk to other parents whose children have a brain injury. You can share practical advice and emotional support. Check with the Brain Injury Association of Minnesota to find a parent group near you.

Prevention

To reduce the risk of a TBI, parents and caregivers should ensure that:

- Everyone wears a seat belt when riding in a motor vehicle.
- Children ride in booster seats until the lap and/or shoulder belts fit properly, typically when the child is 4'9" tall.
- Children wear helmets that are fitted properly.
- Children use and maintain the right protective equipment.
- A friend, family member or community agency is contacted if you need emotional support and/or have concerns about the safety of your child.
- Windows have guards to keep young children from falling out of open windows.
- Safety gates are at the top and bottom of stairs when young children are around.
- Stairs are clear of clutter.
- Rugs are taped down and rubber mats are used in bathtubs.
- Children do not play on fire escapes or other unsafe platforms.
- Playground surfaces are made of shock-absorbing materials, such as hardwood mulch or sand, and are maintained to an appropriate depth.

Resources used in developing this fact sheet

- Brain Injury Association of Minnesota: <http://www.braininjurymn.org>, (612) 378-2742 or (800) 669-6442.
- Department Of Health and Human Services, Centers for Disease Control and Prevention (CDC) <http://www.cdc.gov/TraumaticBrainInjury/index.html>.