Pediatric Brain Injury Resources

Project BRAIN
Brain Injury and Information Network
What is Project BRAIN?

Project BRAIN is a resource & information network for educators, families & healthcare professionals.
What is a Traumatic Brain Injury (TBI)?

... 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 educational performance.

Individuals with Disabilities Education Act (IDEA)
Approximately 2.8 million TBIs Reported in 2013

Approximately 2.5 million emergency department visits related to TBI, 282,000 hospitalizations related to TBI, and 56,000 deaths related to TBI.

Traumatic Brain Injury-Related Emergency Department Visits, Hospitalizations, and Deaths — United States, 2007 and 2013

[Link to CDC Report](https://www.cdc.gov/mmwr/volumes/66/ss/ss6609a1.htm?s_cid=ss6609a1_w)
Concussion & Our Kids
What happens when they go back to school?

Schools, Sports & Families

“Concussion” OR “Minor Head Injury” both mean that someone has experienced a type of Traumatic Brain Injury (TBI).

TBI is a leading cause of death and disability among children in the United States (Centers for Disease Control & Prevention).

Falls, accidents, motor vehicle crashes and sports are the leading causes of TBI for our kids.

Families need help understanding their child’s injury, potential long-term effects & how to communicate with the school, sports and health care teams.

Schools need help preparing to understand and meet student needs after injury.

Sports programs need help training coaches, volunteers and families on what to do about concussion.

Return to Learn & Play

In 2013, Tennessee’s Governor signed a sports concussion law designed to reduce youth sports concussions and increase awareness of traumatic brain injury. Now it is our turn to educate schools, sports programs and families about the importance of creating and implementing guidelines around the student “returning to learn and play” after injury.

For more information contact Project BRAIN
A program of the Tennessee Disability Coalition
phone: 615-383-9442 email: tbi@tndisability.org
What is a concussion?

http://www.cdc.gov/headsup/basics/concussion_whatis.html
Concussion is a Traumatic Brain Injury (TBI)

Understanding the Dilemma

Concussion is a Traumatic Brain Injury (TBI)

TBI is under-identified and often goes unreported

We need more education and awareness, prevention and follow up
Common Symptoms of TBI

Cognitive/Communication
- Feeling dazed or in fog
- Problem Solving
- Slowed information processing

Emotional/Behavioral
- Irritability
- Quick to anger
- Decreased motivation

Physical
- Headaches
- Changes in vision
- Sleep disturbance
- Fatigue
- Balance/Dizziness
- Sensitivity to light/sounds
Reality

Family may hear the term “TBI” for the first time when they receive the State TBI Program’s Registry Letter.

Educators are often the last to learn that an injury occurred.

Academic & behavior changes may not immediately be linked to the injury.
Statewide Infrastructure

- TN Department of Health
- Department of Education, Office of Coordinated School Health
- TN Disability Coalition
- Comprehensive Regional Pediatric Centers

Map showing locations of:
- Monroe Carell Jr. Children’s Hospital at Vanderbilt
- Methodist Le Bonheur Children’s Hospital
- Children’s Hospital at Erlanger
Project BRAIN Resource Specialists
2000 - 2018

• Educational resource to support families, schools, and healthcare professionals
• Provided ongoing professional development trainings across Tennessee on pediatric brain injury to:
  – All school disciplines
  – School and community based athletic organizations
  – Community education and outreach
Brain Injury Transition Liaison (BITL) Process 2011 - 2018

• Derived from best practice models as an effective communication link between the hospital, home, & school
• Hospital connected families to BITL process after identifying a child with head injury, including concussion/brain injury
• Within a hospital setting, BITL served as an educational resource to families and hospital staff

• With permission, BITLs provided follow-up through
  – Family calls
  – Daycare/School letters
  – Engaged program’s Resource & Education Specialists
  – Referred to TBI Service Coordination and community resources
Education Specialist  
2017 - 2018

• Provided clinical expertise & brainstormed solutions for families, schools, and healthcare professionals

• Designed and implemented classroom strategies and interventions for unique needs of students with TB, such as:
  – 504 & IEP development
  – Professional development trainings
Available Training

• Brain Injury 101 – Supporting Students with TBI in the Classroom

• Partners in Communication: Supporting Student Transitions, Hospital to Home to School

• Concussion Within Our Community
What do I need to know?

Concussion is an epidemic that is often under-identified and under-managed

Every concussion must be treated individually

Recovery time varies from days to weeks, months, or for some, even longer
A compilation of 4 brief videos to help families learn what they need to know before leaving the hospital.

Tennessee TBI Program

Statewide Service Coordination Program

8 TBI Service Coordinators serving all Counties at no charge

Toll-Free Hotline: 1-800-882-0611

TBI Registry

Resource Services Directory

https://www.tn.gov/health/health-program-areas/fhw/vipp/tbi.html
Family Voices of Tennessee

Families supporting families of children with special healthcare needs, chronic illnesses or disabilities.

http://www.familyvoicestn.org/
STEP (Support and Training for Exceptional Parents)

Our mission is to empower parents through information, training and support to become effective partners with professionals in planning appropriate educational programs for their children.

http://www.tnstep.org
Falls are the leading cause of traumatic brain injury in children between 0 and 4 years.

Play safely: Make sure playground equipment is properly designed and maintained, and have a safe, soft landing surface in case a child falls.

Make home safety improvements: Install stair gates, guard rails, and guards on windows above ground level.

Keep sports safe: Make sure your child wears a helmet when bike riding, skating, or playing active sports.

Supervision is key: Always supervise a young child around stairs and playground equipment.

Brain injury looks different in every child. Have a doctor examine your child if any of the following changes persist after a blow to the head:
- decreased strength or coordination
- changes in sucking or swallowing
- decreased appetite
- decreased smiling, vocalizing or talking
- frequent rubbing of the eyes or head
- decreased ability to focus the eyes
- unequal pupil size
- increased sensitivity to light or sound
- extreme irritability

Sustaining multiple concussions is particularly dangerous to young children.

Even when a blow to the head seems minor, a second equally-minor injury can have devastating results. One injury is bad enough; a second can be catastrophic.

Keep a record of any injuries to the head that your child sustains. Symptoms of an early brain injury may not appear until a child reaches late elementary or middle school years.

Knowing how to prevent brain injuries helps keep children safe.

Brain injury lasts a lifetime.

For more information:
TN Traumatic Brain Injury Program
http://www.tn.gov/health/topic/tbi
Brain Injury Association of America
http://www.biausa.org
Project BRAIN
http://www.tndisability.org/brain

Project BRAIN is supported in part through the Federal TBI Program/HRSA the TDOE, Division of Special Populations and the TN Department of Health, TBI Program.
Project BRAIN adapted this resource with permission from the Nebraska Brain Injury Advisory Council’s Task Force on Children and Youth.

Funded in part by TBI Implementation Grant #HuMC06998 from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration, Maternal and Child Health Bureau. Contents are the responsibility of the authors and do not necessarily represent the official views of HHS.

Adapted with permission from the Nebraska Brain Injury Advisory Council’s Task Force on Children and Youth.
When Your Child's Head Has Been Hurt:

A head injury can happen to anyone in everyday life: at home, at school or in sports. Many children who hurt their heads get well and have no long-term problems.

- You can't see a concussion. Signs and symptoms of concussion can show up right after the injury or may not appear or be noticed until days or weeks after the injury.
- Concussions are caused by a bump or blow to the head. Even a "ding," "getting your bell rung," or what seems to be a mild bump or blow to the head can be serious.
- If your child reports any symptoms of concussion, or if you notice the symptoms yourself, seek medical attention right away.

HEALTH PROBLEMS

Headaches
- headache that keeps coming back
- pain in head/neck
- pain below the ear
- pain in the jaw
- pain in or around the eyes

Balance Problems
- dizziness
- trouble with balance

Sensory Changes
- feels too hot
- feels too cold
- doesn't feel temperature at all
- ringing in the ears
- hearing loss
- bothered by noises
- can't handle background noise
- blurry vision
- seeing double
- hard to see clearly (hard to focus)
- bothered by light

If your child has any of these problems, see a doctor right away.
- disoriented: loss of memory/ amnesia
- causes or vomiting that returns
- one pupil larger than the other
- headache that does not go away or get better
- seizures: eyes fluttering, body going stiff, staring into space
- hands shake, tremors, muscles get weak, loss of muscle tone

For Infants and toddlers:
- all items already listed
- will not stop crying, can't be consoled
- will not nurse or eat

Sleep Problems
- can't sleep through the night
- sleeps too much
- days and nights get mixed up

Pain Problems
- neck and shoulder pain that happens a lot
- other unexplained body pain

A concussion is a type of traumatic brain injury (TBI). All concussions are serious.
CDC website materials

• Online Training
• Fact Sheets
• Survivor Stories
• Heads up for coaches
• Heads up for clinicians
• ABCs of Concussion
  – School Nurses
  – School Professionals
  and much more
School-wide Concussion Management

http://brain101.orcasinc.com/1000

Oregon Research Center for Applied Science
This project was supported, in part by grant number 90TBSG0003, from the U.S. Administration for Community Living, Department of Health and Human Services, Washington, D.C. 20201. Grantees undertaking projects under government sponsorship are encouraged to express freely their findings and conclusions. Points of view or opinions do not, therefore, necessarily represent official Administration for Community Living policy.

The contents are the sole responsibility of the authors and do not necessarily represent the views of DHHS. This is in the public domain. Please duplicate and distribute widely.

Project BRAIN is a program of the Tennessee Disability Coalition
www.tndisability.org
Project BRAIN
Tennessee Disability Coalition
955 Woodland Street
Nashville, TN 37206
615-383-9442
tbi@tndisability.org

http://tndisability.org/brain