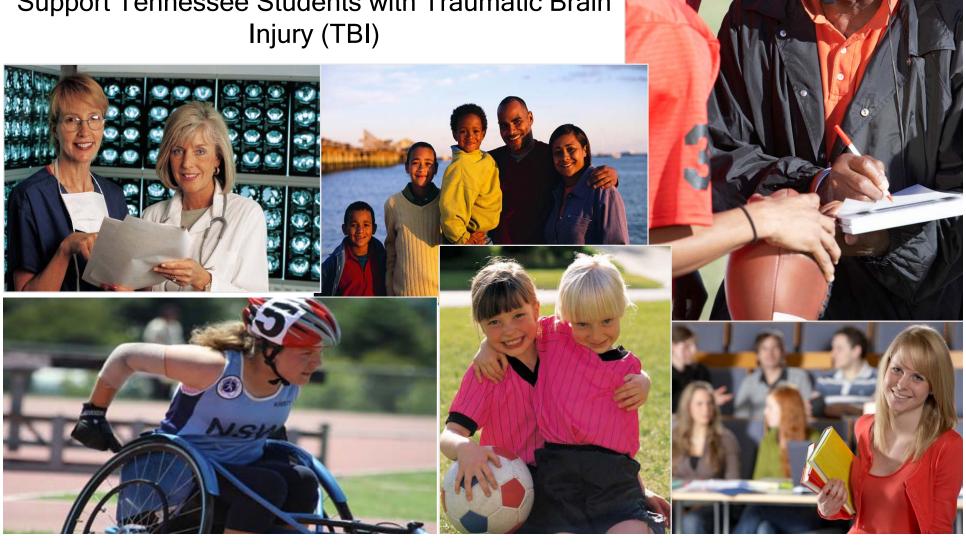
Project BRAIN

A Resource and Training Network for Educators, Families and Healthcare Professionals who Support Tennessee Students with Traumatic Brain Injury (TBI)



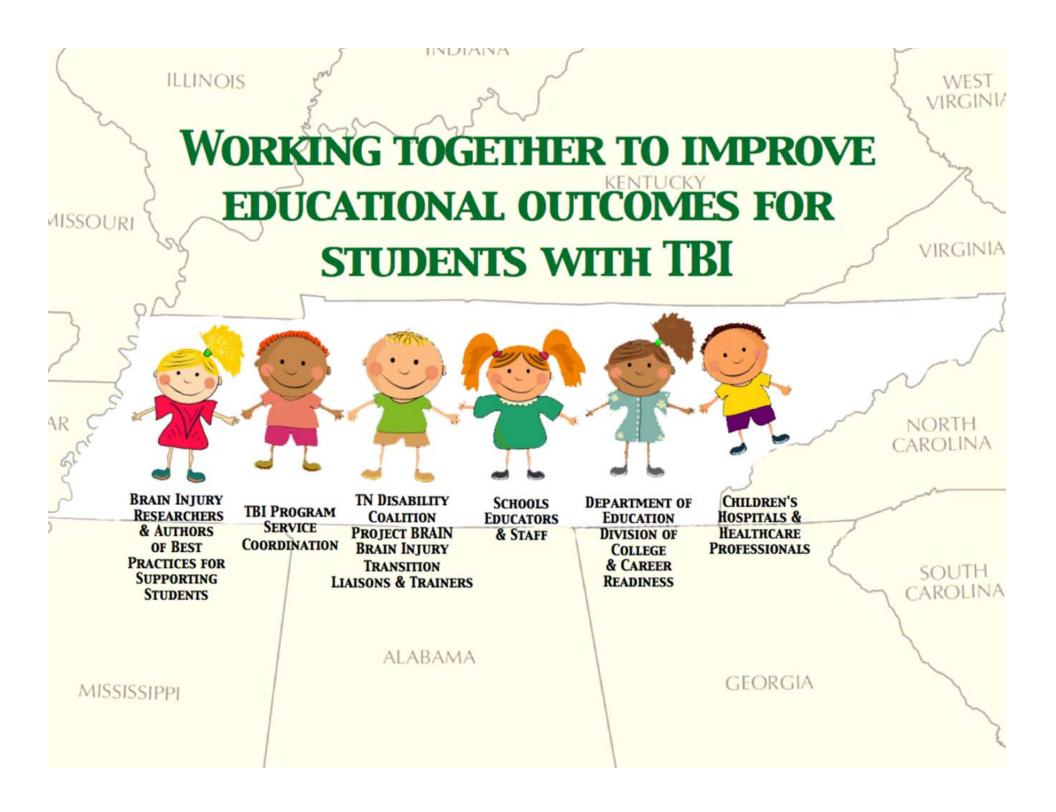


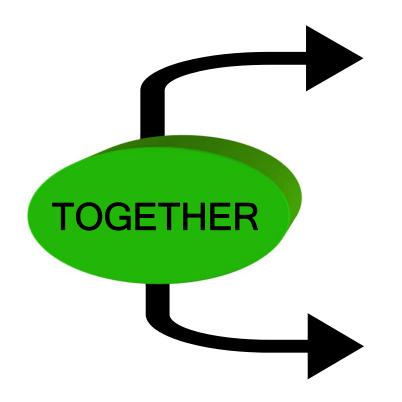


Project BRAIN is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under Grant No. H21MCO26923, Traumatic Brain Injury Implementation Partnership Grants for \$250,000 and in part by TN Departments of Health and Education, Division of Special Populations. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

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Project BRAIN is a program of the Tennessee Disability Coalition www.tndisability.org





Identify students who may experience a variety of changes after sustaining a head injury.

Provide appropriate & timely education, follow-up & intervention throughout the transition from hospital to home to school...into the future.

Understanding the Dilemma



Concussion is TBI

TBI is under-identified and often goes unreported

We need more education and awareness, prevention and follow up

REALITY



- Family may hear the term "TBI" for the first time from 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

WHO IS MORE AT RISK?

Males or Females?

What about...

Previous head injury?

Individuals who have already sustained one or more concussions?

Let's Talk About It...

What sport is most susceptible to brain injury?

What sport is the second leading cause of brain injury?

TN Concussion Law (2014)

- Requires administrators, coaches, parents and youth athletes to be <u>educated</u> about concussion.
- Any athlete who displays the symptoms of a concussion required to be <u>removed</u> from competition.
- Athlete with a concussion can not return to play or practice until <u>cleared</u> by a doctor.





Tennessee Secondary School
Athletic Association Concussion
Policy (2010)
http://tssaa.org/

- 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



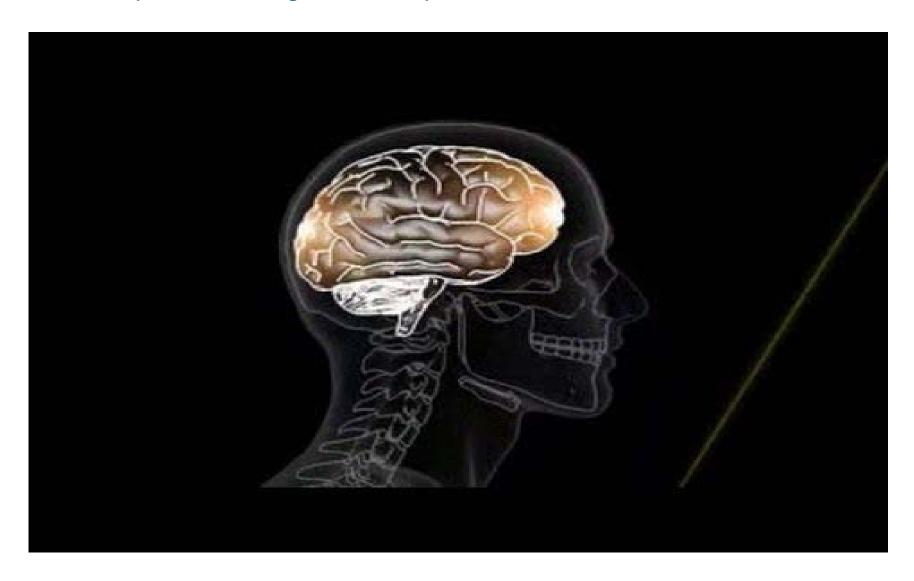
Concussions Can Happen During Everyday Activities.

All Concussions Are Serious!



What Is A Concussion

http://www.cdc.gov/headsup/basics/concussion_whatis.html



Predicting the Unpredictable

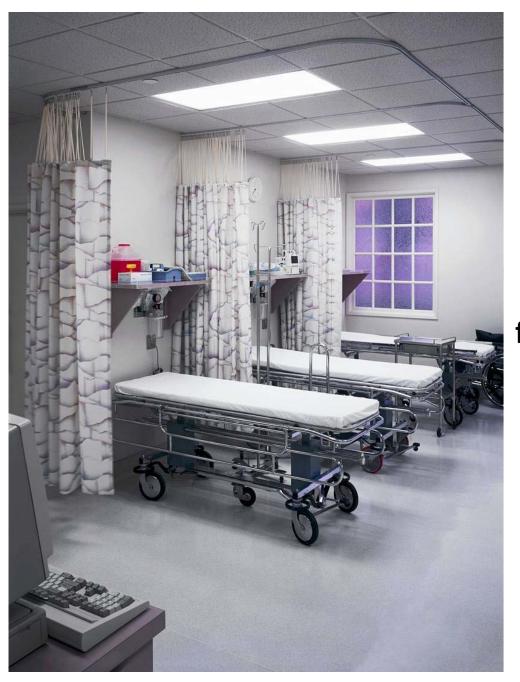
Amnesia is a more important symptom than loss of consciousness

Duration of concussion symptoms is more important to a person's outcome than the initial severity of symptoms

An early return to play puts students at greater risk for developing Post Concussion or Second Impact syndromes.

In more severe cases, students may need to be put on bed rest.

adapted from cbirt.org/tbi-education/concussion/concussion/concussion-and-sports-know-your-game/



Any injury to the head has the potential to affect a student's educational performance.

Physical recovery can happen faster, giving a false sense that the brain is healed.

CT Scans are often normal.

Second Impact Syndrome can be devastating.



Elementary/Middle School Student's Story

Injured in school bus crash

Treated and released

Headaches, memory, organization, behavior

School saw changes as intentional poor choices

IEP, training for staff

Service Coordinator working with family/school

TRAININGS

Brain Injury 101:

Supporting Students with TBI in the Classroom

A 2-hour training created for educators, families, healthcare professionals and others interested in TBI.



Partners In Communication:

Supporting Student Transitions, Hospital to Home to School

Designed specifically for healthcare professionals.

Concussion Within Our Sports Community

This workshop is specially geared for school & community coaches, athletic trainers, athletes, parents and others.

All Project BRAIN trainings & resources are provided at no charge! http://www.tndisabiity.org/brain



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

tn.gov/health/topic/tbi



Tennessee TBI Registry



Hospital medical records databases retrieve all TBI data sorted by injury codes.

The code classifications are determined by the Centers for Disease Control and Prevention.

Admitted & stay in hospital longer than 24 hours

Since 1996, the Tennessee Brain Injury registry sends a letter to everyone who has been hospitalized (admitted) for treatment of a brain injury.



Traumatic Brain Injury/Concussion Information for Families: A compilation of 4 brief videos to help families learn what they need to

know before leaving the hospital.



http://tndisability.org/article/concussion-and-traumatic-brain-injury-information-families

Signs and Symptoms Handout

When Your Child's Head Has Been Hurt:



A head injury can happen to anyone in every day 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.

HEALTH PROBLEMS • If your child reports any symptoms of concussion, or if you notice the symptoms yourself, seek medical attention right away.

(Adapted from the Centers for Disease Control Heads up www.cdc.gov/Concussion)

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



- bothered by smells
- changes in taste or smell
- appetite changes
- · feels too cold
- · doesn't feel temperature at all



- ringing in the ears
- hearing loss
- bothered by noises
- can't handle background noise

If your child has any of these problems, see a doctor right away.

- disoriented: loss of memory/amnesia
- nausea or vomiting that returns
- one pupil larger than the other

A concussion

is a type of

traumatic

brain injury (TBI).

All concussions

are serious.

- · 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

Sleep Problems

For infants and toddlers:

· all items already listed

· will not stop crying,

can't be consoled

· will not nurse or eat

- 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



- blurry vision
- seeing double
- · hard to see clearly (hard to focus)
- -bothered by light



When Your Head Has Been Hurt



Many people who hurt their heads get well and have no long-term changes. Some individuals have changes that might not be noticed right away. You may see differences over the next several months that concern you. This card lists some common signs that you - or someone you know - may have a mild brain injury. If you notice any of the problems on the list - AND THEY DO NOT GO AWAY - see the "What to Do" box on the back of this sheet.

HEALTH CONCERNS



Headaches

Including:

- · Headache that keeps coming back
- · Pain in head muscle
- · Pain in head bone (skull)
- · Pain below the ear
- Pain in the jaw
- · Pain in or around the eyes

Balance Difficulties

- Dizziness
- · Trouble with balance

Sensory Changes

- · Bothered by smells
- · Changes in taste or smell
- Appetite changes



- Ringing in the ears
- Hearing loss
- Bothered by noises
- Can't handle normal background noise
- · Feels too hot
- · Feels too cold
- Doesn't feel temperature at all



- Seeing Double
- Hard to see clearly "hard to focus"
- Bothered by light

Continued on Back

These changes don't happen often. If you or someone you know notice any of the difficulties on this list and they don't go away, contact your doctor as soon as possible.

- · Severe headache that does not go away or get better
- · Seizures: eyes fluttering, body going stiff, staring into space
- · You seem to forget everything, amnesia
- · Hands shake, tremors, muscles get weak, loss of muscle tone
- · Nausea or vomiting that returns

Sleep Changes

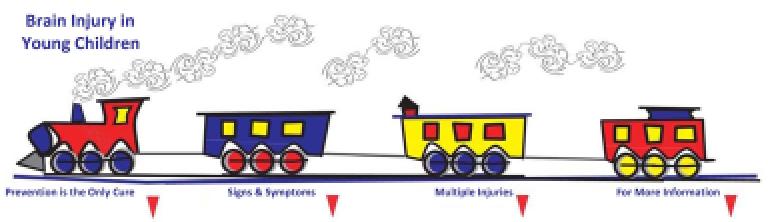
- · Can't sleep through the night
- Sleeps too much
- · Days and nights get mixed up



- · Frequent neck and shoulder pain
- Other unexplained body pain



A New Tennessee Resource



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, skafing, 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 it any of the following changes penist after a blow to the head:

- decreased strength or coordination
- changes in sucking or swallowing.
- decreased appelife
- decreased smiling, vacalising 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 inhability

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 litetime.

For more information:

TN Traumatic Brain Injury Program http://www.tn.gov/health/topic/fbi

Brain Injury Association of America http://www.blausa.org

Protect BRAIN

http://www.inclsability.org/orgin



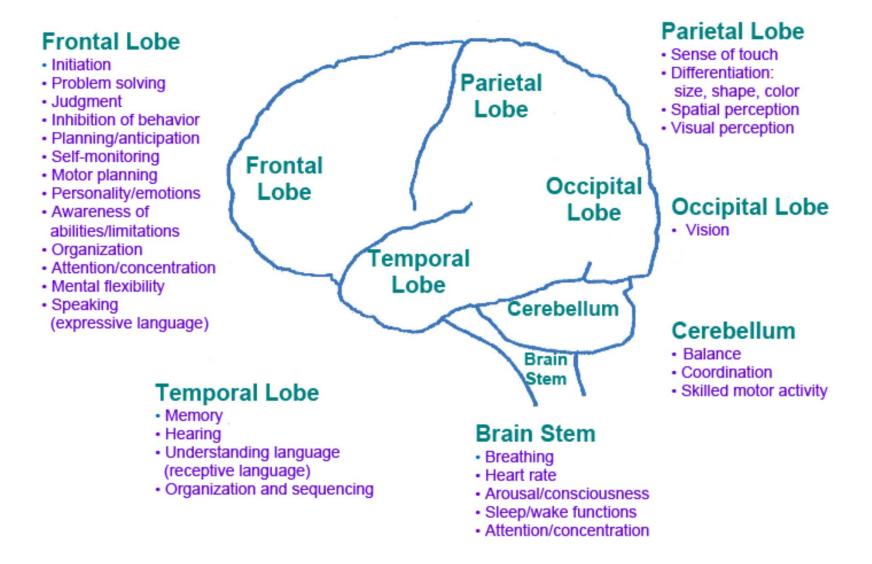
Project BRAIN is supported in part through the Fathers TB Programs IRSAIN TOOS, Division of Special Populations and the Th Department of Facility. TS Programs.

Project BRAIN adapted this resource with premission from the Nebruska Basin Injury Advisory Council's Task Porce on Orbitran and Youth.

Numbel in yord by TSI Implementation down MicroSchopfficer the I.S. Department of Migdits and Autor Service (MICE, Migdits Recovers and Services Administration, Malamed and Calcin Habits Researc Contents are the responsibility of the authors, and down consequently recovered by MicroSchopf (MICE).

Project/BRAIN 2014

Simplified Brain Behavior Relationships



Brain Injury Transition Liaison

At partnering children's hospitals, when a student receives a diagnosis of TBI:

At discharge, the family is presented with our consent form

If given consent, the Liaison works with the Department of Education to notify the school of the injury

The Liaison provides support to the family through follow up calls



Partnering across Tennessee!



Vanderbilt Children's Hospital
Le Bonheur Children's Hospital
Children's Hospital at Erlanger

PROJECT BRAIN

A Resource and Information Network for families, educators, and healthcare professionals who support students with Concussion/ Traumatic Brain Injury (TBI).

Families simply need more help. We're here to connect you with valuable resources, at no cost! The Brain Injury Transition Liaison is a key resource person for the hospital, home, and school.

After a student receives a diagnosis of Concussion/TBI (mild, moderate, or severe) from a healthcare professional, and with family consent...

The Liaison will provide support through:

FOLLOW UP PHONE CALLS

Discussing available resources including:

- Project BRAIN TRAINING for the student's educators & coaches
- REFERRAL to their local TBI Program's Service Coordinator
- Project BRAIN's SIGNS & SYMPTOMS TOOL to determine if there may be reason for a return doctor visit

For those families with concerns and a need for additional information, these follow ups can make all the difference.

work with Children's Hospitals and Schools to embrace the needs of families living with Concussion/TBI.

Brain Injury Transition Liaisons



A good resource is one that you know of, and can access.



Project BRAIN's Signs & Symptoms Tool

Since May 24, 2011 - December 2015 Over **4400** Families Have Been Supported From this Outreach!

of Schools Contacted: 3171



medical ft education professionals may not realize that some difficulties can be caused by a childhood brain injury. As a result, a child with a TBI might not receive the type of educational help and support they really need."

'Although TBI is very common, many



Assists, Educates and Listens to Families as they navigate public and private health systems and insurance plans. (including TennCare and commercial plans)

www.tndisability.org/familyvoices

Department of Education contacts child's school Principal.

Awareness: not all students with a TBI need any special services.

Large percentage of people fully recover.

Share this information with School Nurse, Educators, Counselor, School Psychologist and Athletic Personnel.

School receives Signs & Symptoms Tool.



BILL HASLAM GOVERNOR

NINTH FLOOR, ANDREW JOHNSON TOWER 710 JAMES ROBERTSON PARKWAY NASHVILLE, TN 37243-0375

CANDICE MCQUEEN

May 27, 2015 Happy Camper, Principal Hometown School 1021 Happy Lane Nashville, TN 37206

Dear Mr. Camper,

The Tennessee Department of Education has been authorized to make you aware that a student at your school, (name of student), has been diagnosed with a traumatic brain injury (TBI) from Monroe Carell Jr. Children's Hospital at Vanderbilt. This type of injury can be mild, moderate or severe, may not always be visibly apparent but may adversely affect this student's academic performance.

The important factor in this communication is for everyone to be aware that an injury occurred, that not all students who have a TBI will need specialized services and that a large percentage recover fully. Having this "Signs & Symptoms" tool and knowing where the school can go to for help will increase opportunities for this student's overall

We need your help in this effort. Please make sure that the classroom teacher, school nurse, school counselor/psychologist and, if applicable, any athletic personnel are aware of this correspondence. The school environment is often first to realize differences in a student after an injury has occurred. Sharing this "Signs & Symptoms" tool with school staff will help them recognize these potential differences.

Additional resources to assist your school with this student's return are available through Project BRAIN, a federally funded TBI Grant Program that is supported by the Tennessee Department of Education, Division of College and Career Readiness. Project BRAIN was created to improve education outcomes for students through their partnership with the Department of Health's statewide Traumatic Brain Injury Program.

Project BRAIN's regional TBI Resource Specialists provide trainings for school personnel on educating students with brain injuries. A training can be scheduled to meet the needs of your particular school. Resources and trainings provided by Project BRAIN are offered free of charge.

Please contact Paula Denslow: at paula d@tndisability.org or (615) 383-9442 Ext. 8616, and visit Project BRAIN's website at www.tndisability.org/brain for more information. Also visit the TN TBI Program online at http://health.state.tn.us/tbi/index.htm to learn more.

Sincerely,

Alison Gauld Behavior and Low Incidence Coordinator Special Populations Tennessee Department of Education Alison.Gauld@tn.gov

Attachment: Signs & Symptoms Handouts If unable to view attachment, click reply all and put "unable to view attachment" in the body of the email.

<Click "reply all" to confirm receipt of this email>

Sample Document

TEAMWORK

Healthcare Providers communicate to families

- ✓ the importance of careful attention to identify possible changes the student may experience
- ✓ to share information with the school.



TEAMWORK

Home

Family Members communicate to the school

✓ that an injury occurred.

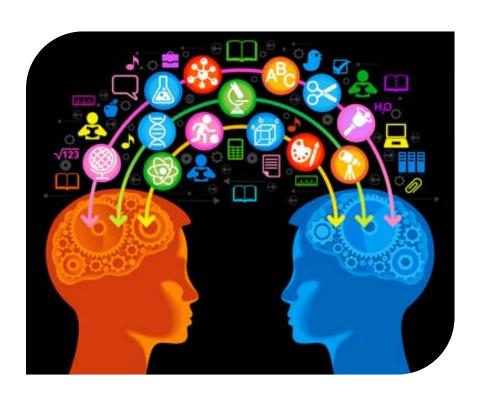
Facilitating a successful transition is possible only when maintaining open dialogue between the family & school, documenting any observed changes within the student.



School & Educators

Communicate regularly with the family & student.





Establish Effective
Educational Supports
when Appropriate

AND

Communicate from the Hospital to Home to School

Written BY Educators





FOR Educators

www.getschooledonconcussions.com

School-Wide Concussion Management Oregon Center for Applied Science



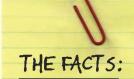
brain101.orcasinc.com

CDC

HEADS Up To Schools

http://www.cdc.gov/head
sup/schools/index.html





- * All concussions are serious.
- * Most concussions occur without loss of consciousness.
- * Recognition and proper response to concussions when they <u>first occur</u> can help aid recovery and prevent further injury, or even death.

To download this fact sheet in Spanish, please visit; www.cdc.gov/Concussion. Para obtener una copia electrónica de esta hoja de información en español, por favor visite; www.cdc.gov/Concussion.

What is a concussion?

A concussion is a type of brain injury that changes the way the brain normally works. A concussion is caused by a bump, blow, or jolt to the head. Concussions can also occur from a fall or blow to the body that causes the head and brain to move rapidly back and forth. Even what seems to be a mild bump to the head can be serious.

How can I recognize a concussion?

To help you recognize a concussion, ask the injured student or witnesses of the incident about:

1. Any kind of forceful blow to the head or to the body that resulted in rapid movement of the head.

-and-

Any change in the student's behavior, thinking, or physical functioning. (See the signs and symptoms of concussion.)

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION







SIGNS AND SYMPTOMS

These signs and symptoms may indicate

SIGNS OBSERVED BY COACHING STAFF	SYMPTOMS REPORTED BY ATHLETE	
Appears dazed or stunned	Headache or "pressure" in head	
Is confused about assignment or position	Nausea or vomiting	
Forgets sports plays	Balance problems	
Is unsure of game, score, or opponent	Or dizziness Double or blurry vision	
Moves clumsily	Sensitivity to light	
Answers questions slowly	Sensitivity to noise	
Loses consciousness (even briefly)	Feeling sluggish, hazy, foggy, or groggy	
Shows behavior or personality changes	Concentration	
Can't recall events	or memory problems	

Can't recall events

after hit or fall

ACTION PLAN

If you suspect that a player has a concussion, you should take the following steps:

- 1. Remove athlete from play.
- 2. Ensure athlete is evaluated by an appropriate health care professional. Do not try to judge the seriousness of the injury yourself.
- 3. Inform athlete's parents or guardians about the known or possible concussion and give them the fact sheet on concussion.
- 4. Allow athlete to return to play only with permission from an appropriate health care professional.

IMPORTANT PHONE NUMBERS

FILL IN THE NAME AND NUMBER OF YOUR LOCAL HOSPITAL(\$) BELOW: Hospital Name:

Hospital Name:

Hospital Phone:

Does not "feel right"

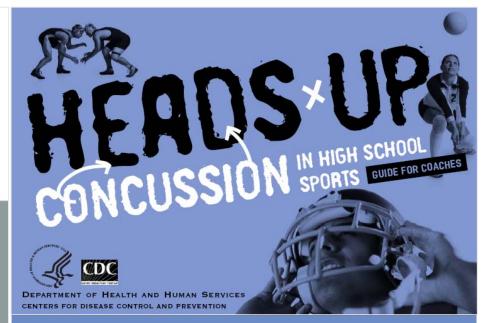
For immediate attention, CALL 911

If you think your athlete has sustained a concussion... take him/her out of play, and seek the advice of a health care professional experienced in evaluating for concussion.

For more information and to order additional materials free-of-charge, visit: www.cdc.gov/ConcussionInYouthSports

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION





DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION



SIGNS AND SYMPTOMS*

These signs and symptoms may indicate that a concussion has occurred.

Signs Observed by Coaching Staff		
Appears dazed or stunned		
Is confused about	Nausea	
assignment	Balance problems or	
Forgets plays	dizziness	
Is unsure of game, score, or opponent	Double or fuzzy vision	
Moves clumsily	Sensitivity to light or noise	
Answers questions slowly	ions slowly	
Loses consciousness	Feeling sluggish	
Shows behavior or personality changes	Feeling foggy or groggy	
Can't recall events prior to hit	Concentration or memory problems	
Can't recall events after hit	Confusion	

*Adapted from: Lovell MR, Collins MW, Iverson GL, Johnston KM, Bradley JP. Grade 1 or "ding" concussions in high school athletes. The American Journal of Sports Medicine 2004;32(1):47-54.

ACTION PLAN

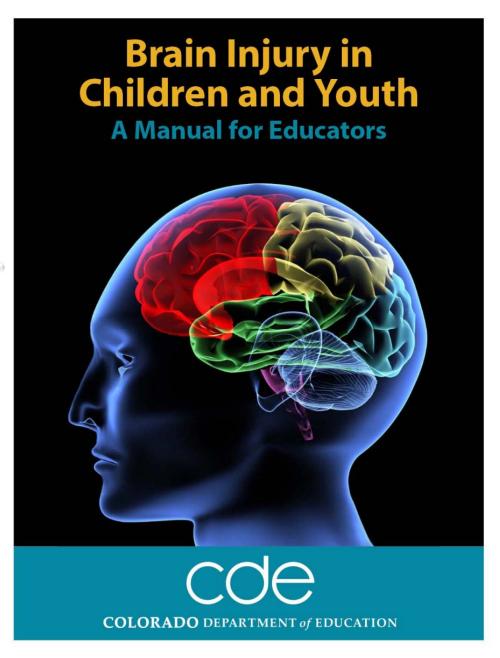
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- 4. Allow athlete to return to play only with permission from an appropriate health care professional.

	IMPORTANT PHONE NUMBERS
Emerge	ncy Medical Services
Name:	
Phone:	
Health	Care Professional
Name:	
Phone:	
School	Staff Available During Practice
Name:	
Phone:	
School	Staff Available During Games
Name:	
Phone	

New from
Colorado Department
of Education

www.cokidswithbraininjury.com



http://cde.state.co.us/cdesped/SD-TBI.asp

Center on Brain Injury Research & Training

Did you know ... this resource offers evidence-based information for people working with students who have a traumatic brain injury?

http://www.cbirt.org/tbi-education



About TBI
Early Childhood TBI
School Reentry
Assessment & Eligibility
504/IEP (Formalized Support)

Instruction Strategies
Assistive Technology
Concussion
Behavior
Executive Functions
Transition to Adult Life

cbirt.org/tbi-education

Resources

Get Schooled On Concussion: Written BY Educators FOR Educators focusing on one page fact sheets for teachers, administrators, school nurses, school mental health, counselors and parents: www.getschooledonconcussions.com

Centers for Disease Control and Prevention

http://www.cdc.gov/TraumaticBrainInjury/index.html

Brainline

http://www.brainline.org/index.html

Brainline Kids

http://www.brainline.org/landing_pages/features/blkids.html





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