Send Home with Student (Optional)

Send Home with Student (Optional)

Use the links below to jump to a specific section.

**CDC Flyer for Families**
Basic concussion and return to school information

**CDC Concussion Fact Sheet for Parents**
CDC HEADS UP Program - focuses on athletes. Good to give out at sports physicals and clinics; has some prevention and identification

**Tennessee TBI Service Coordination Program Brochure**
Only for patients with injuries that require case management (help with appointments, finding funding, etc.)


**Driving After Traumatic Brain Injury (English / Spanish)**
Tips, concerns, and steps for returning to driving from the TBI Model Systems Knowledge Translation Center

**Brain Injury and Mental Health from the BIA of Virginia (English / Spanish)**

**A Guide to Possible Changes After Brain Injury**
A tool to help watch for changes that may follow brain injury

- **For Young Children Ages 7 and Under (English)**
- **For School-Aged Children and Adults (English / Spanish)**

**Resilience and the Brain Fact Sheet**
This material is great for people of all ages who are looking to learn more about resilience, helping themselves and/or others. Building resilience supports brain health, mental health, physical health and ultimately longevity.
Parents and families play a crucial role in helping children return to school and activities after a Traumatic Brain Injury (TBI).

Most of the recovery process happens after your child leaves the medical setting. The more you know about TBI, the more you can help make sure your child is feeling well, and is successful at school.

WHAT IS A TBI?

A Traumatic Brain Injury disrupts the normal functioning of the brain. A bump, a blow, or a jolt to the head can cause a TBI. With the brain still developing, a child is at greater risk for long-term effects after a TBI. These injuries range from mild to severe. Mild TBI, referred to as mTBI or concussion, is most common.

CDC’s Report to Congress outlines current gaps in TBI care, and provides clear opportunities for action to improve the management and outcomes of TBI in children.

COORDINATION IS KEY

Children recovering from a TBI need ongoing monitoring with coordinated care and support for best outcomes. Parents and families are often the ones taking care of children as they grow and develop.

COMMUNICATE

- Talk with your child’s healthcare provider regularly, and attend all follow-up appointments.
- Notify your child’s school about the TBI, and share updates from their healthcare provider.
- Communicate with the school about the need to monitor your child, and inform you about changes in your child’s behavior or school work.

MONITOR

- Observe your child’s symptoms and school work. Report concerns to your child’s healthcare provider and school staff.
- Keep records about your child’s head injuries, recovery, and recommendations from your doctor about services for your child, such as speech therapy.
- Watch for signs of changes in your child’s behavior or school performance, as these may not show up right after a TBI.
- Keep track of the number of brain injuries your child has experienced, and consider this when making decisions about participation in activities like contact sports.
Help Your Child Return to School

Most students who return to school after a TBI benefit from a short-term plan that includes individualized accommodations, such as:

- Physical rest
- Extra time on tests
- Reduced homework load
- More frequent breaks
- Individualized help at school

Students who have learning or behavioral challenges after a TBI may be eligible for special education services, including individualized instruction, speech-language therapy, physical therapy, or educational support. Regardless of the available services, maintaining frequent communication with your child’s teachers can be one of the most important actions you can take in your child’s recovery process.

FIND SUPPORT FOR YOUR FAMILY

Understanding the effects of a TBI on your child, and finding the right services to meet their needs can be a gradual process. It also may be important to find care for yourself through support groups or other services available in your community.

CONNECT

Support groups provide encouragement and valuable help for parents and caregivers.

- Parent Training Information Centers (PACER Family-to-Family Health Information Centers: [www.pacer.org/about/PACERfacts.asp](http://www.pacer.org/about/PACERfacts.asp))
- Brain Injury Association of America (BIAA): [www.biausa.org](http://www.biausa.org)
- United States Brain Injury Alliance (USBIA): [www.usbia.org](http://www.usbia.org)
- National Association of State Head Injury Administrators (NASHIA): [www.nashia.org](http://www.nashia.org)

LEARN

Educational resources can help inform your child’s recovery.

- www.cdc.gov/TraumaticBrainInjury
- www.cdc.gov/HEADSUP/parents
- www.brainline.org

ENGAGE

Problem-Solving Therapy (PST) can help families and children cope with a TBI. In PST, families receive training in:

- Staying positive
- Step-by-step problem-solving
- Family communication skills
- Education about the effects of a TBI

LEARN MORE

TBI: [www.cdc.gov/TraumaticBrainInjury](http://www.cdc.gov/TraumaticBrainInjury)
HEADS UP: [www.cdc.gov/HEADSUP](http://www.cdc.gov/HEADSUP)
WHAT IS A CONCUSSION?

A concussion is a type of traumatic brain 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.

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

WHAT ARE THE SIGNS AND SYMPTOMS OF CONCUSSION?

If your child has experienced a bump or blow to the head during a game or practice, look for any of the following signs of a concussion:

SYMPTOMS REPORTED BY ATHLETE:

• Headache or “pressure” in head
• Nausea or vomiting
• Balance problems or dizziness
• Double or blurry vision
• Sensitivity to light
• Sensitivity to noise
• Feeling sluggish, hazy, foggy, or groggy
• Concentration or memory problems
• Confusion
• Just not “feeling right” or is “feeling down”

SIGNS OBSERVED BY PARENTS/GUARDIANS:

• Appears dazed or stunned
• Is confused about assignment or position
• Forgets an instruction
• Is unsure of game, score, or opponent
• Moves clumsily
• Answers questions slowly
• Loses consciousness (even briefly)
• Shows mood, behavior, or personality changes

Tennessee Traumatic Brain Injury Program
https://www.tn.gov/content/tn/health/health-program-areas/fhw/vipp/tbi.html
800-882-0611

Tennessee Safe Stars Initiative
https://www.tn.gov/health/health-program-areas/fhw/vipp/safe-stars-initiative.html

Tennessee Disability Coalition / Brain Links
https://www.tndisability.org/brain
DANGER SIGNS

Be alert for symptoms that worsen over time. Your child or teen should be seen in an emergency department right away if s/he has:

- One pupil (the black part in the middle of the eye) 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 a brief loss of consciousness should be taken seriously)

WHAT SHOULD YOU DO IF YOU THINK YOUR CHILD HAS A CONCUSSION?

1. SEEK MEDICAL ATTENTION RIGHT AWAY
   A health care professional will be able to decide how serious the concussion is and when it is safe for your child to return to regular activities, including sports.

2. KEEP YOUR CHILD OUT OF PLAY.
   Concussions take time to heal. Don’t let your child return to play the day of the injury and until a health care professional says it’s OK. Children who return to play too soon - while the brain is still healing - risk a greater chance of having a second concussion. Repeat or later concussions can be very serious. They can cause permanent brain damage, affecting your child for a lifetime.

3. TELL YOUR CHILD’S COACH ABOUT ANY PREVIOUS CONCUSSION.
   Coaches should know if your child had a previous concussion. Your child’s coach may not know about a concussion your child received in another sport or activity unless you tell the coach.

HOW CAN YOU HELP YOUR CHILD PREVENT A CONCUSSION OR OTHER SERIOUS BRAIN INJURY?

- Ensure that they follow their coach’s rules for safety and the rules of the sport.
- Encourage them to practice good sportsmanship at all times.
- Make sure they wear the right protective equipment for their activity. Protective equipment should fit properly and be well maintained.
- Wearing a helmet is a must to reduce the risk of a serious brain injury or skull fracture.
  - However, helmets are not designed to prevent concussions. There is no “concussion-proof” helmet. So, even with a helmet, it is important for kids and teens to avoid hits to the head.

HOW CAN I HELP MY CHILD RETURN TO SCHOOL SAFELY AFTER A CONCUSSION?

Children and teens who return to school after a concussion may need to:

- Take rest breaks as needed
- Spend fewer hours at school
- Be given more time to take tests or complete assignments
- Receive help with schoolwork
- Reduce time spent reading, writing, or on the computer

Talk with your child’s teachers, school nurse, coach, speech-language pathologist, or counselor about your child’s concussion and symptoms. As your child’s symptoms decrease, the extra help or support can be removed gradually.

JOIN THE CONVERSATION ➔ www.facebook.com/CDCHeadsUp

TO LEARN MORE GO TO >> WWW.CDC.GOV/CONCUSSION

Content Source: CDC’s Heads Up Program. Created through a grant to the CDC Foundation from the National Operating Committee on Standards for Athletic Equipment (NOCSAE).
Tennessee Traumatic Brain Injury Service Coordination Program

Assisting people with brain injuries, their families and professionals

Service Coordination Contact Information

CHATTANOOGA
Chattanooga Area Brain Injury Association
Contact: Lisa Morgan
(423) 602-7246
chattanoogabraintinjury@gmail.com

MEMPHIS
Regional One Health
Contact: Carolyn Chambers
(901) 545-8487
cchambers@regionalonehealth.org

NASHVILLE
Brain Injury Association of Tennessee
Contact: Angela Pearson
(615) 955-0673
apearson.biat@gmail.com

SOUTH CENTRAL
Disability Rights Tennessee
Contact: Holland Camara
(629) 702-7729
HollandC@disabilityrightstn.org

UPPER CUMBERLAND
Disability Rights Tennessee
Contact: Rick Hall
(629) 702-7727
RickH@disabilityrightstn.org

KNOXVILLE
Patricia Neal Rehabilitation Center
Contact: Patty Cruze
(865) 331-1499
PCruze@CovHlth.com

JACKSON AREA
West Tennessee Rehabilitation Center
Contact: Jimmie Lee Morris
(731) 541-4941
Jimmie.Morris@WTH.org

JOHNSON CITY AREA
Crumely House
Contact: Fredda Roberts
(423) 257-3644 x 6
fredda@crumleyhouse.com

*T Please note that service coordinators do not have access to your medical information.

Tennessee Department of Health
Traumatic Brain Injury Program
1-800-882-0611

Tennessee Traumatic Brain Injury Service Coordination Program

1-800-882-0611
What is Service Coordination?
The service coordinator's role is to work with people with brain injury and their families to assess needs and coordinate resources and services within the community. Service coordinators have a clear understanding of brain injury and are knowledgeable of the resources available in their community. The service coordinator:

- develops a comprehensive plan of care;
- provides referrals to available resources;
- coordinates services for individual client advocacy; and
- bridges gaps in the service delivery system.

Professionals can receive technical assistance, resource information and education to better understand the unique needs of people with brain injuries.

Why is Service Coordination Needed?
Traumatic brain injury, or TBI is a major cause of death and disability in the United States each year.

- Approximately 2.87 million TBI-related emergency department visits, hospitalizations and deaths occur each year.
- An average of 155 people in the United States die each day from injuries that include a TBI.
- Approximately 5.3 million Americans live with a TBI-related disability.
- Each year approximately 6,000 Tennesseans are hospitalized with a TBI.

Whether a brain injury is mild, moderate or severe, the effects can include a variety of cognitive, behavioral and emotional complications.

Those who survive a TBI can face effects that last a few days or a lifetime. The return home from a hospital or rehabilitation facility can result in a host of new challenges. Getting back to work or school, locating housing, securing transportation or even engaging in social activities may be difficult. Service coordinators collaborate and coordinate with available resources and services within the community and help to build a practical, community-oriented plan for a productive and independent life.

Service Coordination Goal
The goal of service coordination is to improve the quality of life for people with brain injury and their families.

Scope of Services
All traumatic brain injury service coordinators provide the following services:

- offer information and education on traumatic brain injury;
- locate community-based resources;
- refer clients to qualified services;
- assist clients in applying for and accessing services;
- advocate in the area of individual/client rights and benefits;
- develop support groups; and
- assist or consult in the development of new programs and services.
Driving is an important part of a person’s independent lifestyle and integration into the community. Because we take our driving skills for granted, it is easy to forget that driving is the most dangerous thing we do in our everyday lives. A brain injury can affect the skills needed to drive safely. If and when an injured person may safely return to driving should be addressed early in recovery. The injured person, family members, and health professionals should all be included in this important decision. If anyone has concerns that that driving may put the injured person or others in danger, health professionals may recommend pre-driving testing.

How can a TBI affect driving ability?

A brain injury can disrupt and slow down skills that are essential for good driving, such as:

- Ability to maintain a constant position in a lane.
- Having accurate vision.
- Maintaining concentration over long periods of time.
- Memory functioning, such as recalling directions.
- Figuring out solutions to problems.
- Hand-eye coordination.
- Reaction time.
- Safety awareness and judgment.

Studies indicate that even mild thinking difficulties, which may not be recognized by the injured person, may add to increased risks while driving.

Warning signs of unsafe driving

- Driving too fast/slow.
- Not observing signs or signals.
- Judging distance inaccurately when stopping or turning.
- Slow to make decisions.
- Becoming easily frustrated or confused.
- Having accidents or near misses.
- Drifting across lane markings into other lanes.
- Getting lost easily, even in familiar areas.
How often do individuals with TBI return to driving?

Between 40 and 60 percent of people with moderate to severe brain injuries return to driving after their injury. To lessen the risk of crashes, people with TBI may place limitations on their driving habits. They may drive less frequently than they did before the injury or drive only at certain times (such as during daylight), on familiar routes, or when there is less traffic. Having experienced a seizure after the TBI may be a barrier to driving. States often require that a person be free of seizures for a period of time, such as 6 months, before resuming driving. People who want to return to driving need to check with the laws in their state.

Driving evaluations and training

A driving evaluation is a crucial step in determining a person’s ability to drive following recovery from a TBI. Research studies indicate that most TBI survivors are not thoroughly evaluated for driving skills before they begin driving after the injury, and this may put TBI survivors at risk for a crash.

While there is no standardized assessment test or process, a typical driving evaluation has two parts:

- Preliminary Evaluation: A review of cognitive (thinking) abilities, including reaction time, judgment, reasoning and visual spatial skills. Recommendations regarding the need for adaptive equipment and additional skills training are based on the results of the evaluation.

- On-the-Road: A test of the mechanical operation of a vehicle, either using a driving simulator or driving a vehicle on the roadway in the presence of the evaluator. This evaluation is used to assess safe driving skills in various traffic environments, as well as basic driving skills while a client uses the appropriate adaptive driving equipment.

Current research indicates that many individuals with TBI can become competent, safe drivers when given the proper training. Training serves to improve specific driving skills. Sometimes this involves practicing driving under the supervision of a driving evaluator. In some cases a training program might focus on specific skills such as rapid understanding of visual information.

Evaluations and training are often provided by professionals certified through the Association for Driver Rehabilitation (ADED). A list of certified professionals may be found on the ADED website, www.driver-ed.org.

Vehicle modifications

If an individual with TBI has physical disabilities but has well-preserved cognitive functions, the individual may be able to resume driving with adaptive equipment and/or other modifications to the vehicle.

Recommendations for adaptive equipment and modifications could include:

- Hand-controlled gas and brake systems.
- Spinner knobs for steering.
- Left foot accelerator.
- Lifts for entering and exiting the vehicle.

Legal and insurance considerations

A person who wishes to resume driving must have a valid driver’s license. In some states there must be a formal evaluation performed by a licensing bureau before resuming driving after a brain injury. Insurance may also be required. The person should check local regulations relating to licenses and insurance.

Other transportation options

Accessible and reliable transportation is the most critical part of community integration following a TBI. If a person is not able to drive, there may be other options for transportation. Family members can provide transportation, and public transportation such as buses can be used. Some communities provide public transportation specifically for disabled riders.
Step-by-Step: Should you be driving?

1. Discuss your ability to drive with your doctor and/or health professionals, family members.
2. Get a professional evaluation to determine your driving ability.
3. Based on your evaluation you may be allowed to drive, need training or vehicle modification before returning to driving, or will need to use other transportation options.

Recommended resources

- Brain Injury Association of America. www.biausa.org
- State Vocational Rehabilitation Offices. www.jan.wvu.edu
- Association for Driver Rehabilitation Specialists. www.driver-ed.org
- National Mobility Equipment Dealers Association. www.nmeda.org

Reference


Disclaimer

This information is not meant to replace the advice from a medical professional. You should consult your health care provider regarding specific medical concerns or treatment.

Source

Our health information content is based on research evidence whenever available and represents the consensus of expert opinion of the TBI Model Systems directors.

Authorship

Driving after TBI was developed by Thomas Novack, PhD and Eduardo Lopez, MD in collaboration with the University of Washington Model Systems Knowledge Translation Center. Portions of this document were adapted from materials developed by the University of Alabama TBI MS and JFK Johnson Rehabilitation Institute TBI MS and from Driving After Brain Injury reprinted with written permission from the Brain Injury Association of America, Inc. ©2007.
El conducir después de una lesión cerebral traumática

Conducir es una parte importante del estilo de vida independiente y la integración de una persona en la comunidad. Debido a que damos por sentado nuestras destrezas para conducir, es fácil olvidar que conducir es una de las cosas más peligrosas que hacemos en nuestro diario vivir. Una lesión cerebral puede afectar las destrezas que necesitamos para conducir de manera segura. Cuándo y si una persona puede volver a conducir es algo que se debe considerar temprano en el proceso de recuperación. La persona lesionada, los familiares y los profesionales de la salud deben ser incluidos en esta importante decisión. Si alguien tiene alguna preocupación de que el conducir pudiera poner en peligro a la persona lesionada o a otras personas, los profesionales de la salud pudieran recomendar una prueba previa antes de conducir.

¿Cómo una lesión cerebral traumática afecta la capacidad de conducir?

Una lesión cerebral puede interrumpir y retardar destrezas que son esenciales para conducir bien, como:

- Habilidad para mantener una posición constante en un carril.
- Tener visión certera.
- Mantener concentración por periodos largos de tiempo.
- Funcionamiento de la memoria, como recordar indicaciones.
- Descifrar soluciones para problemas.
- Coordinación visomotora.
- Tiempo de reacción.
- Tener conciencia sobre seguridad y buen juicio.

Estudios indican que dificultades leves de pensamiento, que tal vez no son reconocidas por la persona lesionada, pudieran contribuir a mayores riesgos cuando se conduce.

Señales de aviso que indican que se conduce peligrosamente

- Conducir muy rápido/lento.
- No seguir los avisos o señales.
- Calcular distancias incorrectamente cuando se detiene o se da un viraje.
- Lentitud para tomar decisiones.
- Frustrarse o confundirse con facilidad.
- Tener accidentes o estar a punto de tener accidentes.
- Salirse de las marcas del carril e invadir otros carriles.
- Perderse con facilidad, aun en áreas familiares.

¿Con qué frecuencia vuelven a conducir las personas con una lesión cerebral traumática?

Entre un 40 y un 60 por ciento de las personas con lesiones cerebrales moderadas o severas vuelven a manejar después de una lesión. Para reducir el riesgo de accidentes, las personas con una lesión cerebral traumática (TBI, por sus siglas en inglés) tal vez establezcan límites a sus hábitos de conducir. Tal vez conduzcan con menos frecuencia que antes de tener la lesión o manejen solamente a ciertas horas (como durante el día), en rutas familiares o cuando hay menos tráfico. Haber tenido una convulsión después de TBI pudiera ser un obstáculo para conducir. Con frecuencia, estados requieren que una persona no haya tenido convulsiones por un periodo de tiempo, como por 6 meses, antes de volver a conducir. Personas que quieren volver a conducir deben consultar las leyes en su estado.

Evaluaciones y adiestramiento para conducir

Una evaluación para conducir es un paso crucial para determinar la habilidad que la persona tiene para conducir después de recuperarse de una TBI. Estudios de investigación indican que la mayoría de los sobrevivientes de TBI no son evaluados a fondo para determinar las destrezas de conducir después de la lesión, y que esto puede poner a los sobrevivientes de una TBI a riesgo de tener un accidente.

Aunque no hay una prueba o proceso estandarizado de evaluación, una evaluación típica para conducir tiene dos partes:

- Evaluación preliminar: Un repaso de habilidades cognitivas (pensamiento), inclusive tiempo de reacción, juicio, razonamiento y destrezas visual-espacial. Las recomendaciones sobre la necesidad de usar equipo adaptivo y destrezas adicionales se basan en los resultados de la evaluación.
- En la carretera: Una prueba de la operación mecánica de un vehículo, usando un simulador para conducir o conduciendo un vehículo en la carretera en presencia de un evaluador. Esta evaluación se usa para evaluar destrezas seguras para conducir en varios ambientes de tráfico, así como destrezas básicas para conducir mientras el cliente usa el equipo adaptativo para conducir que es adecuado.

Investigaciones recientes indican que muchas personas con una TBI pueden convertirse en conductores competentes y seguros cuando reciben adiestramiento adecuado. El adiestramiento sirve para mejorar destrezas específicas para conducir. A veces esto conlleva practicar cómo conducir bajo la supervisión de un evaluador para conducir. En algunos casos, un programa de adiestramiento podría enfocarse en destrezas específicas tales como comprensión rápida de información visual.

Frecuentemente, profesionales certificados a través de la Association for Driver Rehabilitation (ADED) ofrecen evaluaciones y adiestramientos. Se puede hallar una lista de profesionales certificados en el sitio web de la ADED, www.driver-ed.org.

Modificaciones del vehículo

Si una persona con una TBI tiene discapacidades físicas, pero tiene bien preservadas las funciones cognitivas, la persona pudiera volver a conducir con equipo adaptivo y/u otras modificaciones en el vehículo.

Las recomendaciones para equipo adaptivo y modificaciones pudieran incluir:

- Acelerador y sistema de frenos controlado con las manos.
- Botones de control del acelerador.
- Acelerador para el pie izquierdo.
- Rampas para entrar y salir del vehículo.
Consideraciones legales y de seguro

Una persona que desea volver a conducir debe tener una licencia de conducir válida. En algunos estados debe hacerse una evaluación formal de una agencia que otorga licencias antes de volver a conducir después de una lesión cerebral. Tal vez se requiera seguro. La persona debe consultar las regulaciones locales concernientes a licencias y seguro.

Otras opciones de transporte

Transportación accesible y fiable es la parte más crítica para la integración a la comunidad después de una TBI. Si una persona no puede conducir, pudiera haber otras opciones de transporte. Familiares pueden proveer transporte, y se puede usar transporte público como autobuses. Algunas comunidades proporcionan transporte público específicamente para usuarios discapacitados.

Paso a paso: ¿Debiera usted conducir?

1. Hable con su médico y/o profesionales de la salud, familiares sobre su capacidad para conducir
2. Reciba una evaluación profesional para determinar su capacidad para conducir
3. Basado en su evaluación, tal vez le permitan conducir, requiera adiestramiento o requiera modificar el vehículo antes de volver a conducir, o tal vez requiera usar otras opciones de transporte

Recursos recomendados (en inglés)
- Brain Injury Association of America. www.biausa.org
- State Vocational Rehabilitation Offices. www.jan.wvu.edu
- Association for Driver Rehabilitation Specialists. www.driver-ed.org
- National Mobility Equipment Dealers Association. www.nmeda.org

Fuente

El contenido de nuestra información de salud está basado en evidencia investigativa y/o consenso profesional, y ha sido revisado y aprobado por un equipo editorial de expertos de TBI Model Systems.

Autoría

El conducir después de una lesión cerebral traumática fue desarrollado por Thomas Novack, PhD y Eduardo López, MD en colaboración con el with the Model System Knowledge Translation Center. Porciones de este documento fueron adaptadas de materiales desarrollados por University of Alabama TBI MS y JFK Johnson Rehabilitation Institute TBI MS y de Driving After Brain Injury (reimpreso con permiso por escrito de parte de Brain Injury Association of America, Inc. ©2007).
Mental Health & Brain Injury

The relationship between brain injury and mental health is strong, but still under-researched. What we do know is while sometimes brain injury is an entirely separate issue to mental health, brain injury can lead to new mental health issues developing, and mental health issues can make brain injury symptoms worse. The effects of brain injury and mental illness can look very similar, which is why understanding the relationship between the two is important for individuals to advocate for themselves and for medical professionals to make accurate diagnoses.

What are the differences between mental health disorders and brain injuries?

While many symptoms of a brain injury overlap with those of a mental health disorder, not all mental health issues that develop after a brain injury are severe enough to be considered “disordered.” However, this does not mean the mental health issues an individual experiences are not real, important, or cause challenges. Talking about mental and emotional struggles with medical professionals can help determine whether or not they are related to a brain injury.

What are the similarities?

There are many symptoms caused by a brain injury that are also typical for different types of mental health disorders (see chart on next page). If a mental health issue or disorder is already present for an individual, a brain injury can also make those symptoms worse, creating more challenging problems. Tracking symptoms (like emotions and mental state) in a journal and trying to identify when they first started and compare that timeline to when the brain injury occurred can help the individual and medical professionals determine the root cause and best treatment options.
How do substance abuse disorders impact brain injuries and vice versa?

Substance abuse and addiction to drugs and alcohol is considered a mental disorder, and can be intertwined with the effects of a brain injury. Being under the influence of substances that impair judgment, motor functions, and memory increases the likelihood of being injured. The symptoms of a brain injury also increase chances of developing a substance abuse disorder. In fact, individuals with a brain injury are 11 times more likely to die of an overdose than people without a brain injury. This means substance abuse can be both a cause and a symptom of brain injury, making it especially important to be aware of.

Overall, the symptoms* of some mental health disorders and brain injuries overlap in many ways:

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<th>Concussion</th>
<th>Anxiety</th>
<th>Depression</th>
<th>Substance Abuse</th>
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<td>Irritability</td>
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<td>Poor memory</td>
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<td>Fatigue</td>
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<td>Poor sleep</td>
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<td>Nausea</td>
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*For a comprehensive list of mental health disorder and brain injury symptoms, please consult with a medical professional.

What does treatment and recovery look like?

There is no “cure” for brain injury or mental health disorders. However, there are many effective treatment options like cognitive-behavioral therapy and medication to help decrease symptoms and manage challenges. Be aware not all doctors who treat brain injury are mental health experts and vice versa, which is why being as honest as possible about your difficulties is key.

The TN Traumatic Brain Injury Program can help you better understand brain injury and consult with you about your personal situation. We can then direct you to services you might need in your area. Our services are confidential and free.

To get in touch: 1-800-882-0611
Visit the TN TBI Program
https://www.tn.gov/health/health-program-areas/fhw/vipp/tbi.html
Contact Brain Links for "free" Training & Educational Information at: tbi@tndisability.org

Salud Mental y Lesiones Cerebrales

La relación entre las lesiones cerebrales y la salud mental es fuerte, pero aún falta investigación. Lo que sabemos es que aunque algunas veces las lesiones cerebrales son un asunto totalmente aparte de la salud mental, las lesiones cerebrales pueden llevar a que se desarrollen nuevos problemas de salud mental y los problemas de salud mental pueden hacer que los síntomas de lesiones cerebrales empeoren. Los efectos de una lesión cerebral y una enfermedad mental pueden parecer muy similares, por tal motivo, entender las relaciones entre ambas es importante para que las personas abojuen por sí mismas y para que los profesionales de la medicina hagan diagnósticos exactos.

¿Cuáles son las diferencias entre los desórdenes de salud mental y las lesiones cerebrales?

Aunque muchos síntomas de una lesión cerebral se traslapan con los de un desorden de salud mental, no todos los problemas de salud mental que se desarrollan después de una lesión cerebral son lo suficientemente severos como para ser considerados “desordenados”. Sin embargo, esto no significa que los problemas de salud mental que una persona experimente no sean reales, importantes o desafiantes. Hablar acerca de las luchas mentales y emocionales con los profesionales médicos puede ayudar a determinar si dichos problemas son o no relacionados a una lesión cerebral.

¿Cuáles son las similitudes?

Hay muchos síntomas causados por una lesión cerebral que también son típicos para diferentes clases de desórdenes de salud mental (consulte el gráfico en la siguiente página). Si un problema o desorden de salud mental ya está presente para una persona, una lesión cerebral también puede hacer que empeoren esos síntomas, creando más problemas desafiantes. Registrar los síntomas (como emociones y estado mental) en un diario y tratar de identificar cuándo aparecieron por primera vez y comparar esa línea de tiempo al momento en que ocurrió la lesión cerebral puede ayudar a la persona y a los profesionales médicos a determinar la causa raíz y las mejores opciones de tratamiento.
¿Cómo impactan los desórdenes de abuso de sustancias a las lesiones cerebrales y vice-versa?

El abuso de sustancias y la adicción a las drogas y al alcohol se consideran un desorden mental, y pueden entrelazarse con los efectos de una lesión cerebral. Estar bajo la influencia de sustancias que deterioran el juicio, las funciones motrices y la memoria, incrementan la probabilidad de ser lesionado. Los síntomas de una lesión cerebral también pueden incrementar la probabilidad de desarrollar un desorden de abuso de sustancias. De hecho, las personas con una lesión cerebral son 11 veces más propensas a morir de una sobredosis que una persona sin una lesión cerebral. Esto significa que el abuso de sustancias puede ser tanto una causa como un síntoma de lesión cerebral, haciendo que sea especialmente importante estar conscientes e ello.

En general, los síntomas* de algunos desórdenes de salud mental y lesiones cerebrales se traslan en muchas formas:

<table>
<thead>
<tr>
<th></th>
<th>Conmoción cerebral</th>
<th>Ansiedad</th>
<th>Depresión</th>
<th>Abuso de sustancias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolores de cabeza</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Somnolencia</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Irritabilidad</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Memoria deficiente</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Fatiga</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sueño deficiente</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Náuseas</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Mareos</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visión borrosa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Para una lista minuciosa de desórdenes de la salud mental y síntomas de lesiones cerebrales, favor de consultar con un profesional médico.

¿Cómo son el tratamiento y la recuperación?

No hay “cura” para la lesión cerebral o los desórdenes de salud mental. Sin embargo, hay muchas opciones de tratamientos efectivos como la terapia cognitiva-conductista y medicamentos para ayudarle a reducir los síntomas y manejar los desafíos. Tenga presente que no todos los doctores que tratan lesiones cerebrales son expertos en salud mental y vice-versa, razón por la cual, es un punto clave ser tan honesto como sea posible acerca de sus dificultades.

El programa para Lesiones Cerebrales Traumáticas de Tennessee puede ayudarle a entender mejor las lesiones cerebrales consultar con usted acerca de su situación personal. Luego, podemos referirlo a los servicios que pueda necesitar en su área.

Para ponerse en contacto:
1-800-882-0611
Póngase en contacto con Brain Links para Capacitación “gratuita” e información educativa al correo: tbi@tndisability.org


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Este proyecto es apoyado [en parte] a través de los fondos generales del estado (Contrato #16-002A) administrado por el Departamento de Servicios para el Envejecimiento y la Rehabilitación de Virginia (Siglas en inglés: DARS).
This guide was designed to help parents and caregivers watch for changes that may follow a brain injury in young children.

Changes after brain injury may happen even years after a child's treatment ends, whether they completed rehabilitation, stayed at the hospital, etc. This guide addresses changes and gives tips for keeping your child's brain healthy throughout their life. Keep this guide handy in case there are questions or concerns. You may never need this, but it will be helpful if your child does develop challenges.

OUTCOMES AFTER BRAIN INJURY REHAB ARE DIFFERENT FOR EVERYONE

THEY WILL DEPEND ON MANY THINGS INCLUDING:

- Injury severity/Types of changes
- Support from family
- Mental health (depression, anxiety)
- Age at the time of injury
- Complications (infections, seizures, other injuries, etc.)
- Funding for rehab/Length of rehab/Willingness or ability to participate in rehab
- Assistance with transitioning from hospital to home and childcare/school
- As they get older: Motivation to improve, ability to adapt to changes and support from friends

There is no cut-off date for brain injury recovery. Improvement happens quickly for some children and more slowly for others. Some children may have negative changes over time as they develop. The choices you make for your child today can prevent some of those. Positive changes can continue throughout life.

THINGS TO WATCH FOR IN YOUNG CHILDREN - First weeks or months after injury

Expect the best, plan for the best...but be armed with knowledge.

Once your child comes home, their physical injuries may heal quickly, but they may continue to struggle in other areas like remembering and learning. Changes in these other areas can be hard to see if you don't know what to look for. Your young child can't tell you areas where they need help. Watch for changes in thinking, behavior and slower development.
Consider whether the following types of problems may be related to the injury. Be sure to tell your child’s doctor if they have any of these symptoms:

<table>
<thead>
<tr>
<th>Changes</th>
<th>Watch for these Changes Since Injury</th>
<th>Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotions/Feelings</td>
<td>Irritable/fussy, crying or tantrums, sad/depressed, more nervous, change from happy to tantrum quickly, have trouble calming themselves, upset and you can’t tell why, hard to adjust to new situations, feeling overwhelmed or alone</td>
<td>Counselor, Psychologist</td>
</tr>
<tr>
<td>Sleep</td>
<td>Sleeps more or less than usual, tired during day, trouble falling asleep, wakes often at night, wets the bed, nightmares</td>
<td>Pediatrician, Neurologist</td>
</tr>
<tr>
<td>Appetite/Food</td>
<td>Eats more or less since injury, stomachaches</td>
<td>Pediatrician</td>
</tr>
<tr>
<td>Cognitive/Thinking</td>
<td>Thinks slowly and reacts slowly, has trouble putting things in order, harder to concentrate, forgetting</td>
<td>Neuropsychologist, Speech Language Pathologist, Occupational Therapist</td>
</tr>
<tr>
<td>Development/Progress</td>
<td>Struggling to learn new skills, needs to relearn skills like: using a spoon, tying a shoe, potty training, counting, handwriting, typing</td>
<td>Occupational Therapist, Physical Therapist, Neuropsychologist</td>
</tr>
<tr>
<td>Play</td>
<td>Less interested in toys or books, can’t stay on task playing, struggles with how to use/play with toys, doesn’t pretend play like other children their age</td>
<td>Speech Language Pathologist, Occupational Therapist</td>
</tr>
<tr>
<td>Social/Friends/Behavior</td>
<td>More hitting, pushing, taking toys, less sharing, harder to make friends, withdrawn, clingy</td>
<td>Speech Language Pathologist, Counselor, Behavior Specialist</td>
</tr>
<tr>
<td>Flexibility/Changes</td>
<td>Upset by changed routine, schedule or people</td>
<td>Behavior Specialist, Neuropsychologist</td>
</tr>
<tr>
<td>Language/Talking</td>
<td>Difficultly naming objects, understanding directions, telling stories. Using shorter sentences than before injury.</td>
<td>Speech Language Pathologist</td>
</tr>
<tr>
<td>Physical</td>
<td>Headaches, dizziness, head or neck pain, tightness, weakness, balance, visual problems, reduced stamina, fatigue, sensitive to lights and sounds, seizures</td>
<td>Pediatrician, Physical Therapist, Neurologist, Chiropractor, Neuro-Ophthalmologist</td>
</tr>
</tbody>
</table>

**THINGS TO WATCH FOR AS THEY GROW**

Watch for any problems as your child grows and goes through preschool, elementary, middle school and high school. Of course, all children have difficulties at some point. Not all will be caused by the injury. In adults, it can be easy to see changes, but it can be harder to notice problems in a child because they are still changing and developing. Brain injury can affect new learning and skills during brain development. It is still important to remind the child’s school and doctor about the injury every time a problem arises and to be aware that the injury may be causing what you see.

If your child has special services at school, include him/her in the process as their age allows. Ask them what they need, what could help and encourage them to speak for themselves in planning adjustments. You can learn more from Support and Training for Exceptional Parents: [https://tnstep.org/](https://tnstep.org/).

**Academic (School) Problems:** Falling behind in class, difficulty learning new information, putting off schoolwork, forgetting homework, leaving items behind at school, trouble saying or writing what they mean.

**Social Problems:** Losing friends, difficulty making new friends, not knowing how to act or speak in different situations, not understanding facial cues or social skills (like knowing it is time to end a conversation or that they are making someone uncomfortable), acting younger than their friends, laughing or crying too easily.
**Behavior Problems:** Not acting like themselves, getting into fights, acting without thinking, making poor decisions, making inappropriate sexual comments, using abusive words or tone, letting friends talk them into doing the wrong things, letting others mistreat or abuse them, alcohol or drug problems, taking risks, trouble with the law.

**Physical Problems:** Pain, a physical change from the injury that gets worse, sleep changes, coordination changes like: trouble learning to tie shoes, handwriting, riding a bike or kicking a ball.

**Mental Health Problems:** Becoming depressed or anxious, difficulty coping with change or handling stress, worrying and not sleeping, pushing friends and family away, spending too much time alone, doing things to hurt themself, feeling stuck or unmotivated, developing addictive behaviors like: overeating, overexercising, fasting, drugs or alcohol.

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**Suicide is the second leading cause of death for ages 10-34.**

**Subtle Warning Signs of Suicide in Children:** https://www.psycom.net/children-and-suicide

**General Suicide Warning Signs, TN Dept of Health:** https://bit.ly/3oaBoXn

**Facts About Suicide, CDC:** https://www.cdc.gov/suicide/facts/index.htm

**How to Recognize Signs of Mental Health Problems and Teen Suicides, Kidcentral:** https://bit.ly/3KT0ZOc

**Relationships:** Struggling to keep healthy relationships with family or friends; being very needy; being verbally, physically, emotionally, or sexually abusive in a relationship; being a victim of an abusive relationship.

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**WHAT TO DO IF YOU SEE CHANGES IN YOUR CHILD**

What you do depends on what you see happening.

**Teach A Skill:** The child may just need to learn or relearn how to do the things that are difficult (tying a shoe, starting or stopping a conversation, learning how to do a type of math problem or learning how to use a computer or device). They may need **extra time** to learn, **repetition** of directions or **to be shown** how to do it.

**Teach A Strategy:** A strategy is a way to do something that is hard in a different way. For example: using a thick crayon to help coloring, using a brace to help with pain or weakness, sing a song to remember new information.

**Use All Senses (multisensory):** A child may need to learn using more than one sense (like including vision or touch) to help them do a task. Use a schedule made with pictures, a timer, or picture cues (for example, place pictures for all of the steps to brushing teeth above the bathroom sink).

**Talk To The Daycare Provider:** They should share what works with elementary school teachers and support people (counselor, school nurse). They may have faced the issue your child is having before and they may have suggestions to help.

**Talk To The Teacher:** The teacher can help figure out what to try in the classroom or next steps within the school. Options might be extra help, a tutor, a 504 Plan or an IEP (Individualized Education Program). **If your child does not qualify for services now, it does not mean that they won't in the future.** You can also get help privately if your child does not qualify for services in school. If your child uses or does something at home that helps, share that with the teacher.

**Seek Symptom-Specific Treatment:** Get treatment for your child’s specific symptoms. Treatment can be helpful even years after an injury. Demands in your child’s life can change. These changes can make it a good time to get a “tune-up” and find a new specialist that fits their symptoms. If you are not sure who to go to, you can ask your child’s doctor. Talk about the injury and changes since it occurred. Ask to see a specialist (see chart on previous page). It is best to see someone who understands brain injury.

**Stay Positive:** As your child grows, always help them understand their strengths and weaknesses. When pointing out a weakness, include something positive or show them a way around it. For instance, “I like that you made your bed. I notice that sometimes you forget to put things away, but when you use the check-off list, you do a great job!”

**Check adjustments often to see if they are still working or if they need to be changed.**
COMMUNITY SUPPORT

Get Support: It is important to find support for your child, their siblings and yourself. Start with people who understand brain injury like the school or hospital social worker, school counselor, local counselors and psychologists, and your child's neuropsychologist. They can help you get resources for you and your family.

- Find options for support at Kidcentral TN: https://bit.ly/33TgDJUChildwithDisability
- Disability information and resources at Tennessee Disability Pathfinder: https://www.tnpathfinder.org/

There are also in-person and virtual support groups for specific symptoms like seizures, decreased balance and migraines. It may help to think outside of the box, like looking for a support group for similar types of symptoms or experiences to connect with other children, siblings and parents.

KEEP YOUR CHILD’S BRAIN HEALTHY

Keeping our brains healthy is important for everyone, and it is extra important for people who have had a brain injury.

- Eat healthy foods
- Get exercise
- Get enough sleep
- Do not smoke, vape, drink alcohol or use drugs
- Be social
- Keep learning
- Take care of mental health
- Avoid another injury - see below.

Be a good role model with your food choices, exercise and relationships. To take control of your brain health, visit https://www.tndisability.org/brain-health.

PREVENTION

Preventing another injury is very important. Brain injury survivors have a higher risk for another injury. Talk to their doctor to plan a safe return to the classroom, playing, physical education, and sports. Make good decisions about social interactions and safety. Avoid rough sports and activities. With any activity, think first about how to avoid another injury. Children should always wear a helmet when needed and always wear a seatbelt.

FREE RESOURCES

Tennessee Resources

Tennessee Traumatic Brain Injury Program Service Coordination: https://www.tn.gov/health/health-program-areas/jpw/vipp/tbi.html helps with referrals, insurance issues and more

TN Statewide Crisis Phone Line at 855-CRISIS-1 (855-274-7471)


Brain Links: https://www.tndisability.org/brain

Keep supportive people in your family’s life is very important.

- Schedule play dates.
- Stay connected to friends in person, by phone or computer apps.
- Meet and connect with other people through church, scouts, classes, lessons, volunteering.
- You can also find private Facebook or social media groups that focus on brain injury or specific symptoms.

School and Work Resources

Tennessee Early Intervention Services (TEIS): https://bit.ly/3KSNeijTNTEIS provides services to children birth to age three who have disabilities or other developmental delays

Support and Training for Exceptional Parents: https://tnstep.org/ helps parents with support and training for a child's educational needs

Center on Brain Injury Research and Training (CBIRT): https://cbirt.org/ helpful school resources for families and educators

National Resources

Brainline: https://www.brainline.org/ information on living with brain injury

Brain Injury Association of America: https://www.biausa.org/ national resource on brain injury


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Published 2/22
A GUIDE TO POSSIBLE CHANGES
AFTER BRAIN INJURY
FOR SCHOOL-AGED CHILDREN AND ADULTS

This guide was designed to help people watch for changes that may follow a brain injury.

Changes after brain injury may happen even years after the person’s treatment ends, whether they completed rehabilitation, hospitalization, etc. This guide gives ideas about how to address these changes. It will also give tips for keeping your brain healthy throughout your life.

Keep this guide handy in case there are questions or concerns.

OUTCOMES AFTER BRAIN INJURY REHAB ARE DIFFERENT FOR EVERYONE

They will depend on many things including:

- Injury severity/Types of changes
- Support from family and friends
- Motivation to improve and ability to adapt to changes
- Mental health (ie depression, anxiety)
- Age at the time of injury
- Complications (things like infections, seizures, other injuries, etc.)
- Supports for transitioning to home or work (employer, transportation, etc.)
- Funding for rehab/Length of rehab/Willingness or ability to participate in rehab

There is no cut-off date for brain injury recovery. Positive change can continue for years. Improvement happens quickly for some people and more slowly for others. Some people may have negative changes over time or as they age. Some negative changes can be prevented by the choices you make today.

THINGS TO WATCH FOR IN CHILDREN

Your child’s immediate physical injuries may heal quickly, but they may continue to struggle in other areas. The changes in these other areas can be hard to see if you don’t know what you are looking for. Consider whether the following types of problems may be related to the injury.

Academic (School) Changes: Falling behind in class, difficulty learning new information, putting off school work, forgetting assignments, leaving items behind at school, trouble saying or writing what they mean

Social Changes: Losing friends, difficulty making new friends, not knowing how to act or speak in different situations, not understanding facial cues or social skills (like knowing it is time to end a conversation or that they are making someone uncomfortable), acting younger than their friends, laughing or crying too easily

Behavior Changes: Not acting like themselves, getting into fights, acting without thinking first, making poor decisions, making inappropriate sexual comments, using abusive words or tone, letting friends talk them into doing the wrong things, letting others mistreat or abuse them, alcohol use disorder, drug use disorder, trouble with the law

Physical Changes: Pain, a physical change from the injury that gets worse, reaching developmental milestones more slowly, sleep changes

Mental Health Changes: Becoming depressed or anxious, difficulty coping with change or handling stress, worrying at night and not sleeping, pushing friends and family away, spending too much time alone, doing things to hurt yourself, feeling stuck or unmotivated, developing addictive behaviors

See Suicide Warning Signs: https://www.tn.gov/health/health-program-areas/fhw/vipp/suicide-prevention/warning-signs.html
What To Do If You See Changes In Yourself or Family Members

What you do depends on what you see happening.

**Teach A Skill:** The person may just need to learn or relearn how to do the things that are difficult (tying a shoe, using an escalator, starting or stopping a conversation, learning how to do a type of math problem or learning how to use a computer or device, learning a new task at work).

**Teach A Strategy:** A strategy is a way to do something that is difficult in a different way. For example: using a thick pen to help handwriting, using an outline to organize writing, using a checklist to remember steps or items, using a brace to help with pain or weakness, using a notebook, telephone app or post-it notes to help memory.

**Talk To The Teacher:** The teacher can help figure out what to try in the classroom or next steps within the school. Options might be extra help, a tutor, a 504 Plan or an IEP (Individualized Education Program). Even if your child had an IEP in the past and “graduated” from it, it may be a good choice again now. If the child doesn’t qualify for the services in school, you can look to get help privately.

**Talk To Your Human Resource Specialist, Your Work Supervisor or Co-Worker:** Dealing with problems at work can be tricky. First you need to decide if and how to disclose (tell someone about) your injury. Meet with your Human Resource Specialist (HR) to get started. HR can help communicate with your supervisor. The supervisor may not know how to help or may not understand brain injury. HR can educate your supervisor on brain injury and your needs. You are entitled to “reasonable accommodations” for your disability under the Americans with Disabilities Act. These accommodations might include: installing a ramp, providing screen reader software, adjusting a work schedule, providing written instructions, noise cancelling earplugs. In some jobs, you can make changes without asking the employer. Maybe you can turn off your private office light, turn down the brightness on your computer, or close the door. Make any changes that you know you can make on your own. Work with your employer to make other changes. Set up your work environment so you can be successful. See askjan.org for more brain injury accommodations.

**Seek Symptom-Specific Treatment:** Take control of your own health. Keep a list of things that help you and things that worsen your symptoms. Sharing this list may also help a symptom specialist. Treatment can be helpful even years after an injury. Demands in your life can change. These changes can make it a good time to get a “tune-up” that fits your symptoms. If you are not sure who to go to for your issues, you can ask your doctor. It will probably be best to see someone who understands brain injury.
Keeping supportive people in your life is very important. We all need people around us.

Some ways to do that are to:

- Become part of a spiritual or social group.
- Join a group that does a fun activity like bowling, quilting, hiking or reading.
- Stay connected to friends in person, by phone or computer apps.
- Connect with other people with brain injury in safe, private online groups to learn from others.

<table>
<thead>
<tr>
<th>Specialist</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Therapist</td>
<td>Pain and tightness, balance changes, weakness, reduced stamina</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>Difficulty with a life task like cooking or budgeting, fine motor changes like trouble writing or texting, vision changes</td>
</tr>
<tr>
<td>Speech Language Pathologist</td>
<td>Difficulty communicating in a new environment, poor social skills, difficulty with thinking skills, changes in swallowing</td>
</tr>
<tr>
<td>Neurologist</td>
<td>Migraines, dizziness, pain management, sleep disorders, seizures</td>
</tr>
<tr>
<td>Neuro-opthalmologist</td>
<td>Vision issues related to the injury</td>
</tr>
<tr>
<td>Counselor</td>
<td>Depression, anxiety, help adjusting to new circumstances, feeling overwhelmed or alone, behavioral problems</td>
</tr>
<tr>
<td>Neuropsychologist</td>
<td>Difficulty with cognitive (thinking) abilities, depression, anxiety, and behavioral issues (may provide counseling or work with a counselor and other specialists)</td>
</tr>
<tr>
<td>Chiropractor</td>
<td>Back and neck pain, headaches</td>
</tr>
<tr>
<td>Support Groups</td>
<td>Find support from other people who understand brain injury. For support groups in Tennessee, see: <a href="https://www.tn.gov/content/dam/tn/health/program-areas/tbi/Brain_Injury_Support_Groups.pdf">https://www.tn.gov/content/dam/tn/health/program-areas/tbi/Brain_Injury_Support_Groups.pdf</a> There are also in-person and virtual support groups for specific symptoms like seizures, decreased balance and migraines.</td>
</tr>
<tr>
<td>Medical Doctor</td>
<td>Your doctor can help with sudden medical issues that come up and can help you figure out who to go to for your symptoms. When going to any doctor for any reason, tell them about the brain injury. The new problem could be related.</td>
</tr>
</tbody>
</table>
| Vocational Therapist or State Vocational Rehab Counselor | Help with work issues, including the return to work and keeping a job.  
  WorkAble TN (formerly Benefits to Work): [https://www.tndisability.org/workabletn](https://www.tndisability.org/workabletn)  |
Keeping our brains healthy is important for everyone, and it is extra important for people who have had a brain injury. Proven things you can do to keep your brain healthy:

- Eat healthy foods like fruits, vegetables, whole grains, nuts, seeds, and beans. Use healthy fats like avocado and olive oil. Avoid or limit dairy, meat and processed (junk) foods.
- Get regular exercise that raises your heart rate like fast walking, running or dancing.
- Get enough sleep for your age. Children, including teens, need more sleep than adults.
- Use natural cleaning and health care products.
- Do not smoke, vape, drink alcohol or use drugs.
- Be social - stay connected to friends and family.
- Continue to learn new things that interest you.
- Take care of your mental health.
- Avoid another injury - see below.

For more information on Brain Health, see https://www.tndisability.org/resources-o

PREVENTION

It is very important to prevent another injury from happening. People who have had a brain injury are more likely to have another. Make good decisions about social interactions and safety. Avoid rough sports and activities. With any activity, think first about how to avoid another injury. Always wear a helmet when needed and always wear a seatbelt.

EXPECT THE BEST, PLAN FOR THE BEST...BUT BE ARMED WITH KNOWLEDGE

FREE RESOURCES

Tennessee Resources

Tennessee Traumatic Brain Injury Program Service Coordination:
https://www.tn.gov/content/dam/tn/health/health-program-areas/tbi/2020%20Tennessee%20Department%20o%20Health%20Return%20to%20Learn-Return-to-Play%20Guidelines.pdf
help with referrals, insurance issues and more

TN Statewide Crisis Phone Line at 855-CRISIS-1 (855-274-7471)

Return to Learn/Return to Play: Concussion Management Guideline
https://www.tn.gov/content/dam/tn/health/health-program-areas/tbi/2020%20Tennessee%20Department%20o%20Health%20Return%20to%20Learn-Return-to-Play%20Guidelines.pdf

Empower Tennessee: https://empowertennessee.org/

Brain Links: https://www.tndisability.org/brain

Family Voices of Tennessee:
https://www.tndisability.org/family-voices-tennessee
families supporting families of children with special healthcare needs, chronic illnesses or disabilities

kidcentral tn - https://www.kidcentraltn.com

School and Work Resources

Support and Training for Exceptional Parents: https://tnstep.org/
help parents with support and training for a child’s educational needs

WorkAble TN: https://www.tndisability.org/workabletn

Center on Brain Injury Research and Training (CBIRT):
https://cbirt.org/

Job Accommodations Network: https://askjan.org/

National Resources

BrainLine Website: https://www.brainline.org/
information on living with brain injury

Brain Injury Associations of America: https://www.biausa.org/
national resource on brain injury

Psychology Today:
to get help or find a local counselor/therapist

https://www.tndisability.org/brain

@BrainLinksTN
Esta guía fue diseñada para ayudar a personas a estar atentas a los cambios que pueden ocurrir después de una lesión cerebral.

Los cambios después de una lesión cerebral pueden suceder incluso años después de que termine el tratamiento de una persona, aún si ha completado su rehabilitación, hospitalización, etc. Esta guía da ideas acerca de cómo abordar estos cambios. También dará algunas sugerencias para mantener su cerebro saludable durante toda su vida.

Mantenga esta guía a la mano, en caso de que tenga más preguntas o inquietudes.

No hay fecha límite para la recuperación de una lesión cerebral. El cambio positivo puede continuar por años. La mejora sucede rápidamente para algunas personas y más lentamente para otras. Algunos pacientes pueden tener cambios negativos a lo largo del tiempo o conforme envejecen. Algunos cambios negativos pueden evitarse con las decisiones que tome hoy.

COSAS A OBSERVAR EN LOS NIÑOS

Las lesiones físicas inmediatas de los niños pueden sanar rápidamente, pero podrían continuar batallando en otras áreas. Los cambios en estas otras áreas pueden ser difíciles de ver si no sabe lo que está buscando. Considere si los siguientes tipos de problemas pudieran estar relacionados con la lesión.

**Cambios académicos (escuela):** Retrasarse en las clases, dificultad para aprender información nueva, posponer las tareas escolares olvidar las tareas, dejar cosas olvidadas en la escuela, problemas diciendo o escribiendo lo que quieren comunicar.

**Cambios sociales:** Perder amigos, dificultad para hacer nuevos amigos, no saber cómo actuar o hablar en diferentes situaciones, no entender las expresiones faciales o habilidades sociales (como saber que es momento para terminar una conversación o que ellos están haciendo que alguien se sienta incómodo), actuar como si tuvieran menor edad que sus amigos, reír o llorar fácilmente

**Cambios en el comportamiento:** No actuar como ellos mismos, involucrarse en peleas, actuar sin pensar primero, tomar malas decisiones, hacer comentarios sexuales inapropiados, usar palabras o tono abusivo, permitir que sus amigos les induzcan a hacer cosas incorrectas, permitir que otros los maltraten o abusen de ellos, trastorno por uso de alcohol o drogas, problemas con la ley

**Cambios físicos:** Dolor, algún cambio físico causado por la lesión que ha empeorado, alcanzar logros de desarrollo más lentamente, cambios en el sueño

**Desórdenes de salud mental:** Deprimirse o estar ansiosos, dificultad para sobrellevar los cambios o manejar el estrés o manejo de estrés, preocuparse en la noche y no dormir, alejar a amigos y familiares, pasar mucho tiempo a solas, hacer cosas para herirse a sí mismos, sentirse atorados o sin motivación, desarrollar comportamientos adictivos

Consulte las señales de advertencia de suicidio: [https://www.tn.gov/health/health-program-areas/fhw/vipp/suicide-prevention/warning-signs.html](https://www.tn.gov/health/health-program-areas/fhw/vipp/suicide-prevention/warning-signs.html)
Qué hacer si ve cambios en su persona o en sus familiares

Que hacer depende en lo que vea que está sucediendo.

**Enseñar una habilidad:** La persona podría sólo necesitar aprender o reaprender cómo hacer las cosas que son difíciles (atar un zapato, usar una escalera eléctrica, comenzar o detener una conversación, aprender cómo resolver algún tipo de problema matemático, o aprender cómo usar una computadora o algún dispositivo, aprender una nueva tarea en el trabajo).

**Enseñar una estrategia:** Una estrategia es una manera para hacer algo que es difícil en una forma diferente. Por ejemplo: usar un bolígrafo grueso para ayudar a escribir a mano, usar un boceto para organizar la escritura, usar una lista de comprobación para recordar los pasos o artículos, usar un soporte para ayudar con el dolor o la debilidad, usar una libreta, una app de teléfono o Post-its para ayudar con la memoria.

**Hablar con el maestro:** El(la) maestro(a) puede ayudar a encontrar qué intentar en el salón de clase o los siguientes pasos dentro de la escuela. Las opciones pueden ser: ayuda adicional, un tutor, un plan 504 o un IEP (Programa de educación individualizada). Incluso si su hijo tuvo un IEP anteriormente y se “graduó” del mismo, puede ser una buena opción nuevamente ahora. Si el/la niño/a no califica para los servicios en la escuela, puede buscar obtener ayuda de forma privada.

**Hable con su especialista de Recursos Humanos, su supervisor o compañero de trabajo:** Tratar con problemas en el trabajo puede ser complicado. Primero necesita decidir si va a divulgar su lesión (decirle a alguien acerca al respecto) y cómo lo hará. Reúñase con su especialista de Recursos Humanos (RH) para comenzar. RRHH puede ayudar a comunicarse con su supervisor. Es posible que el Supervisor no sepa como ayudar o no entienda lo que es una lesión cerebral. RRHH puede capacitar a su supervisor sobre lesiones cerebrales y sus necesidades. Usted tiene derecho a un “acomoño razonable” por su discapacidad bajo la Ley de Estadounidenses con Discapacidades. Estos acomodos pueden incluir: instalar una rampa, proveer software para leer la pantalla, ajustar un programa de trabajo, proporcionar instrucciones por escrito tapones para los oídos con cancelación de ruido. En algunos trabajos, usted puede hacer cambios sin preguntarle al patrón. Quizá puede apagar la luz de su oficina privada, reducir el brillo en su computadora, o cerrar la puerta. Haga cualquier cambio que usted sepa que puede hacer por sí mismo. Trabaje con su patrón para hacer otros cambios. Configure su ambiente de trabajo de modo que pueda ser exitoso. Consulte askjan.org para conocer más acomodos para lesiones cerebrales.

**Busque tratamiento específico para sus síntomas** Tome el control de su propia salud. Mantenga una lista de cosas que le ayuden y cosas que empeoren sus síntomas. Compartir esta lista podría también ayudarle a un especialista de síntomas. El tratamiento puede ser útil incluso años después de la lesión. Las demandas en su vida pueden cambiar. Estos cambios pueden hacer que sea un buen momento para “afinar” que se adecue a sus síntomas. Si no está seguro de a quién acudir para sus problemas, puede preguntarle a su doctor. Probablemente será mejor consulte a alguien que entienda sobre lesiones cerebrales.
Mantener personas que le apoyen en su vida es muy importante. Todos necesitamos personas a nuestro alrededor.

Algunas maneras de hacerlo son:

- Íntrese a un grupo espiritual o social.
- Únase a un grupo que haga actividades divertidas como jugar boliche, hacer colchas, practique senderismo o grupos de lectura.
- Manténgase conectado con amigos en persona, por teléfono o apps para computadora.
- Conéctese con otras personas con lesión cerebral en grupos seguros y privados en línea para aprender de otros.
MANTENGAN SU CEREBRO SALUDABLE

Mantener nuestros cerebros saludables es importante para todos, y es sumamente importante para personas que tienen lesión cerebral. Algunas cosas comprobadas que puede hacer para mantener su cerebro saludable:

- Comer alimentos sanos como frutas, vegetales, granos enteros, nueces, semillas y frijoles. Use grasas saludables como el aceite de aguacate y de oliva. Evite o limite los lácteos, la carne y la comida procesada (chataarra).
- Haga ejercicio regularmente que eleve su pulso cardíaco como caminar rápidamente, correr o bailar.
- Duerma lo suficiente para su edad. Los niños, incluyendo los adolescentes, necesitan dormir más que los adultos.
- Utilice productos de limpieza y de cuidado de la salud que sean naturales.
- No fume ni use cigarros electrónicos, no beba alcohol ni use drogas.
- Socialice - manténgase conectado con amigos y familiares.
- Continúe aprendiendo nuevas cosas que le interesen.
- Cuide su salud mental.
- Evite otra lesión - vea abajo.

Para mayor información sobre salud cerebral, visite https://www.tndisability.org/resources-o

PREVENCIÓN

Es muy importante prevenir que suceda otra lesión. Las personas que han sufrido una lesión cerebral tienen mayor probabilidad de sufrir otra. Tome buenas decisiones acerca de interacciones sociales y seguridad. Evite deportes y actividades bruscas. Con cualquier actividad, piense primero cómo evitar otra lesión. **Siempre** use un casco cuando se necesite y **siempre** use el cinturón de seguridad.

**ESPERE LO MEJOR, PLANEE PARA LO MEJOR... PERO ESTÉ PREPARADO CON EL CONOCIMIENTO**

RECURSOS GRATIS

**Recursos de Tennessee**

- Coordinación de Servicios del Programa de Lesión Cerebral Traumática de Tennessee: https://www.tn.gov/health/health-program-areas/lhw/vipp/tbi.html
- Línea telefónica estatal de crisis en Tennessee: 855-CRISIS-1 (855-274-7471)

**Recursos para la escuela y el trabajo**

- Regresar a aprender/Regresar a jugar: Pautas para el manejo de una contusión cerebral https://www.tn.gov/content/dam/tn/health/program-areas/tbi/2020%20Tennessee%20Department%20of%20Health%20Return%20to%20Learn%20Play%20Guidelines.pdf
- Empower Tennessee: https://empowertennessee.org/
- Brain Links: https://www.tndisability.org/brain
- Family Voices de Tennessee: https://www.tndisability.org/family-voices-tennessee
- kidcentral Tennessee - https://www.kidcentraltn.com

**Recursos nacionales**

- Sitio web de BrainLine: https://www.brainline.org/
- Asociación contra las Lesiones Cerebrales de los Estados Unidos: https://www.biausa.org/

Brain Links cuenta con el respaldo de la Administración para la Vida Comunitaria (ACL) del Departamento de Salud y Servicios Humanos de los EE. UU. Bajo la subvención N° 90TBSG0024-01-00 y en parte por el Departamento de Salud de Tennessee, Programa de Lesiones Cerebrales Traumáticas.

Publicado en febrero de 2021
Resilience & the Brain

Resilience is the ability to bounce back after adversity.

Resilience, mental health, physical health and brain health all interact and affect how long we live.

Hardship in our lives can be very helpful, believe it or not. Hardship can make us more resilient by creating Post Traumatic Growth. It can create:

- Improved relationships
- New possibilities
- Greater appreciation
- Greater sense of personal growth
- Spiritual development

How is resilience related to the brain?

- Your brain will change with stress. This change will be negative change UNLESS you are resilient. If you ARE resilient, there will be even MORE change, but it will be GOOD change and help your brain.
- Resilience helps you to quiet the overly emotional part of your brain to boost the thinking part of your brain during stress. This boost to the prefrontal cortex area of your brain allows you to think of the best solution to get out of the stressful situation.

Studies have shown that people who are sick but are optimistic live longer than people who are realistic.

People who live to be very old:

- Handle stress better than the average person
- React less negatively, with less hostility
- Accept change as a part of life, even if it seems negative at first.

Stress is helpful or harmful... 
depending on what we believe it is!

If we believe stress is helpful, then it is and it actually helps us to live longer. BUT...
If we believe stress is harmful...then it is! Stress will shorten our lives.

How Do We Become Resilient?

There are many doors to resilience.

Building Resilience in Children

- Help them build social connections.
- Teach them that asking for help is okay.
- Teach them to face their fears with support.
- Exercise strengthens and calms the brain.
- Even the support of one caring adult helps!

- Build executive functions (this strengthens the front part of the brain)
  - Set routines
  - Build problem-solving skills
  - "What's worked before?"
  - List all ideas, even silly ones
  - Break down steps to the problem
  - List pros and cons
More Ways to Build Resilience in Children

- Teach them to do deep breathing.
- Role models help, even superheroes.
- Let them talk.
- Don't rush in too fast to fix things for them.
- Give them some independence; let them disagree.
  - They may offer other solutions. Let them make some decisions.
- Build feelings of competence: "You can do this!" "You are good at this!"
- Nurture optimism: "What's good about this situation?"
- Teach to reframe: "What's another way to look at this?" "Could there be anything good about this?"
- Meet them where they are. They may need time to be sad or angry before moving on.
- Let them know they are loved unconditionally. "I love you always, even though I'm not so happy with your behavior right now."
- Model resilience; model healthy relationships. Promote faith, optimism and strength during hard times.

A RESILIENCE TIP FOR ALL AGES

Meditation
- Proven to be helpful for many conditions, including depression, anxiety and ADHD.
- Improves the brain by quieting brain chatter and improving memory.

Ways to Build Resilience in Teens

The same things that work for children are good for teens, but here are a few more.

- Having a safe place, like a bedroom. Having some alone time.
- A way to express themselves - music, art, writing.
- Help them to get good at something; develop a passion.
- Get professional help to reframe earlier trauma.
- Become aware of stressors and how to deal with them.

CONTINUE TO MODEL RESILIENCE, EVEN IF YOU THINK THEY ARE NOT WATCHING!
More Ways to Build Resilience in Teens

- Relaxation and self-care
- Set reasonable goals
- Take breaks
- Consistent routine
- Accept change
- Volunteer or get a job, try new things
- Build self-reliance and initiative
- Humor and optimism in difficulty
- Build morality: "Do the right thing."

Ways to Build Resilience in Adults

The same things that work for children and teens can work for adults, but here are a few more.

- Music, singing, dancing - they promote relaxation, recovery and brain health
- Eat healthy food: whole foods that are plant-based
- Faith has many components that build the brain and resilience
  - Prayer
  - Meditation
  - Giving and receiving
  - Sabbath (taking a break from regular life)
  - Concepts/life perspectives: "Everything happens for a reason."
- Exercise!
- Sleep
- Positive self-talk
- Manage stress

For more information on Brain Health and Supporting a Healthy Brain, follow the link below:
https://www.tndisability.org/brain-health

References:
Thank You!

We’re here to help
Our mission is to bring together professionals to recognize the far-reaching and unique nature of brain injury and to improve services for survivors. If we can help you, please feel free to reach out!

Contact us:
tbi@tndisability.org

Check out our website:
www.tndisability.org/brain

Follow us on social media:
[YouTube][Facebook][Twitter][LinkedIn]

We want to hear from you!
Complete our short survey to let us know how we’re doing.