

Send Home with Patient (Optional)

Use the links below to jump to a specific section.

CDC Caring for Your Child's Concussion

CDC Flyer for Families

Basic concussion and return to school information

Signs and Symptoms Handouts

Choose an age-appropriate version to help families understand what to look out for

- **Signs and Symptoms for the Young Child** ([English / Spanish](#)) - for the young child and those who communicate without words
- **Signs and Symptoms for the Older Child** ([English / Spanish](#)) - for use with school-aged children
- **Signs and Symptoms for Adults: When Your Head Has Been Hurt** ([English / Spanish](#)) - includes information for the elderly
- **Recognizing Concussion in People Who Communicate Without Words** ([English / Spanish](#)) - A tool to help identify concussion signs and symptoms in people who communicate without words.

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](#))

Concussions ARE Treatable -To help families understand that concussion symptoms can be treated. Can be given out at well visits in addition to following an injury.

Concussion and Brain Injury in Students, Who needs to know? - Helps foster communication between the family and school. This includes all school and or community-based sport programs.

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 Brain Injury Association of Virginia (English / Spanish)

TN Traumatic Brain Injury Service Coordination Program Brochure

Only for patients with injuries that require case management (help people with brain injuries and their families to assess their current resources and needs **at no cost**)

New 2022-23 TN TBI Services Directory

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.



TENNESSEE

CONCUSSION FACT SHEET FOR PARENTS



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



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.

2025-09 revised



JOIN THE CONVERSATION  www.facebook.com/CDCHeadsUp

TO LEARN MORE GO TO >> <https://www.cdc.gov/heads-up/index.html>

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).

HELP YOUR CHILD BE SUCCESSFUL AT SCHOOL AFTER A TBI

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.

TBI Effects can Last a Lifetime

Most children are resilient and recover well, but some effects can show up later in life.

It is important to

**RECOGNIZE
MONITOR
& CARE**

**for your child as
he or she grows up.**



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
- Brain Injury Association of America (BIAA): www.biausa.org
- United States Brain Injury Alliance (USBIA): www.usbia.org
- National Association of State Head Injury Administrators (NASHIA): 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
- Family communication skills
- Step-by-step problem-solving
- Education about the effects of a TBI

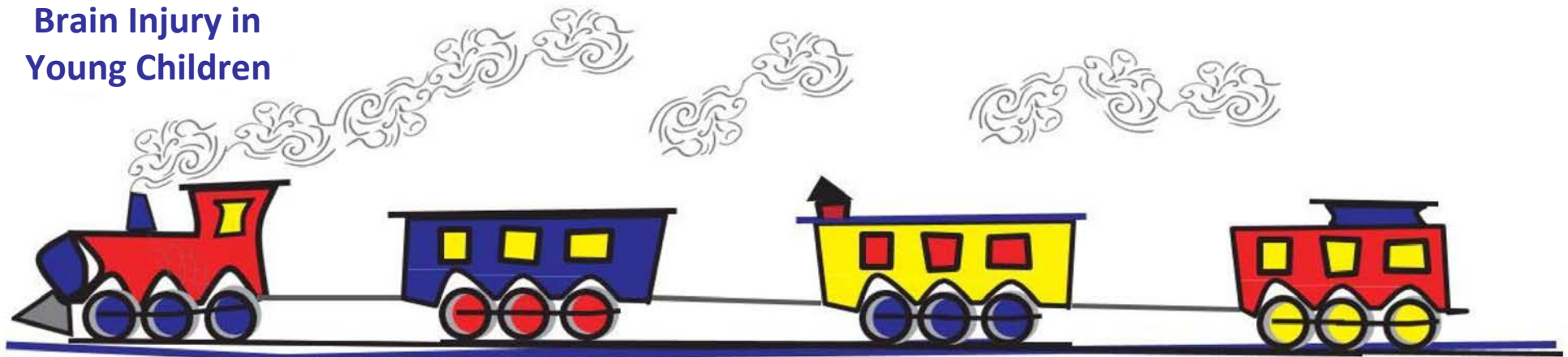


**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention

LEARN MORE

TBI: www.cdc.gov/TraumaticBrainInjury
HEADS UP: www.cdc.gov/HEADSUP

Brain Injury in Young Children



Prevention is the Only Cure

Falls are the leading cause of traumatic brain injury in children between 0 and 4 years.

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

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

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

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

Signs & Symptoms

Brain injury looks different in every child. Have a doctor examine your child if any of the following changes persist after a blow to the head:

- decreased strength or coordination
- behavior & sleep changes
- appetite changes, changes in sucking or swallowing
- decreased smiling, vocalizing or talking
- frequent rubbing of the eyes or head
- decreased ability to focus the eyes, unequal pupil size
- stomachaches
- increased sensitivity to light or sound
- extreme irritability

Multiple Injuries

Sustaining multiple concussions is particularly dangerous to young children.

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

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

Knowing how to prevent brain injuries helps keep children safe.

Brain injury lasts a lifetime.

For More Information

For more information:

TN Traumatic Brain Injury Program
<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

Brain Injury Association of America <https://www.biausa.org/>

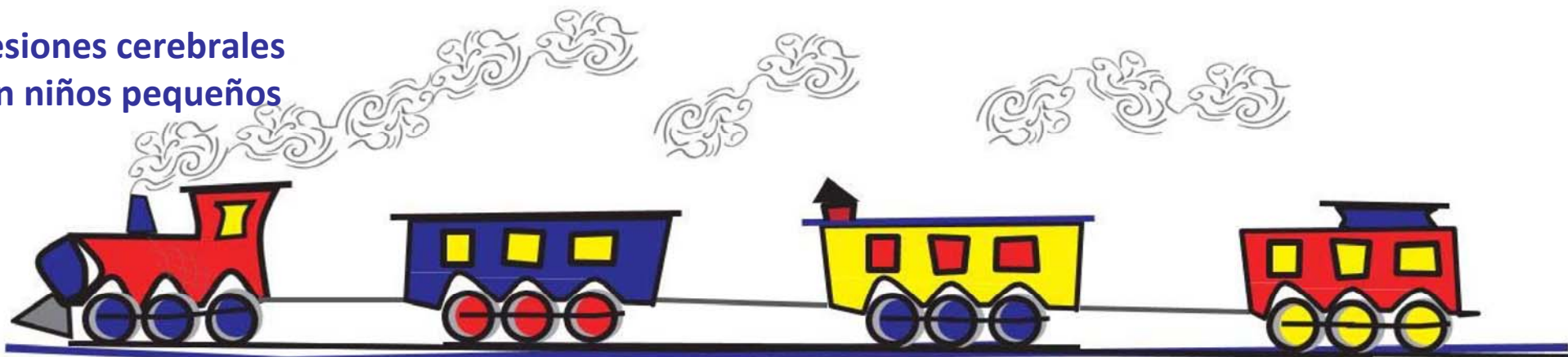
Brain Links
<https://www.tndisability.org/brain>



Brain Links is supported by the Administration for Community Living (ACL) of the U.S. Department of Health and Human Services under Grant No. 90TBSG0051-01-00 and in part by the Tennessee Department of Health, Traumatic Brain Injury Program.



Lesiones cerebrales en niños pequeños



La prevención es la única cura

Las caídas son la causa más importante de lesiones cerebrales traumáticas en niños entre 0 y 4 años de edad.

Juego seguro: Asegúrese de que el equipo del patio de recreo esté diseñado apropiadamente y que reciba mantenimiento, y que tenga una superficie segura y suave en el piso en caso de que un niño caiga.

Realice mejoras en la seguridad del hogar: Instale puertas para escaleras, pasamanos y guardas en las ventanas por encima del nivel de piso.

Seguridad en los deportes: Asegúrese de que su hijo use casco cuando ande en bicicleta o patines, o cuando juegue deportes de actividad.

La supervisión es la clave: Siempre supervise a los niños pequeños cerca de escaleras y patios de recreo.

Señales y síntomas

Las lesiones cerebrales se aprecian de modo diferente en cada niño. Llévelo a examinar con un médico si alguno de los siguientes cambios persiste después de un impacto en la cabeza:

- fuerza o coordinación reducidas
- cambios en el comportamiento y sueño
- cambios en el apetito, la succión de amamantado o al deglutir
- sonríe menos, o se reduce su vocalización o habla
- se frota frecuente los ojos o la cabeza
- menor capacidad para enfocar los ojos, tamaño de pupilas desigual
- dolores de estómago
- mayor sensibilidad a la luz o a los sonidos
- irritabilidad extrema

Lesiones múltiples

Recibir varias conmociones cerebrales es particularmente peligroso para los niños pequeños.

Incluso cuando un impacto en la cabeza parezca pequeño, una segunda lesión también pequeña puede tener resultados devastadores. Una lesión ya es de por sí mala; una segunda puede ser catastrófica.

Mantenga un registro de cualquier lesión en la cabeza que sufra su hijo. Los síntomas de una lesión cerebral temprana pueden no aparecer sino hasta los últimos años de la primaria o en la secundaria.

Conocer cómo evitar lesiones cerebrales ayuda a mantener seguros a sus hijos.

Las lesiones cerebrales duran toda la vida.

Para mayor información

Para mayor información

Programa para Lesiones Cerebrales Traumáticas de Tennessee <https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

Brain Injury Association of America (Asociación para Lesiones Cerebrales de EE.UU.) <https://www.biausa.org/>

Brain Links <https://www.tn-disability.org/brain>



Brain Links cuenta con el respaldo de la Administración para la Vida Comunitaria (ACL, por sus siglas en inglés) del Departamento de Salud y Servicios Humanos de los EE. UU. Bajo la subvención No. 90TBSG0051-01-00 y, en parte, por el Departamento de Salud de Tennessee, Programa de Lesiones Cerebrales Traumáticas.





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.
- 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 <https://www.cdc.gov/heads-up>)

HEALTH PROBLEMS

Headaches

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

Balance Problems

- dizziness
- trouble with balance

Sensory Changes



- bothered by smells
- changes in taste or smell
- appetite changes

- feels too hot
- feels too cold



- doesn't feel temperature at all



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

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

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



Sleep Problems

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

Pain Problems

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



BEHAVIOR and FEELINGS

(Changes in personality, mood or behavior)

- is irritable, anxious, restless
- gets upset or frustrated easily
- overreacts, cries or laughs too easily
- has mood swings
- wants to be alone or away from people
- is afraid of others, blames others
- wants to be taken care of
- does not know how to act with people
- takes risks without thinking first

- is sad, depressed
- is slow to respond
- is tired, drowsy
- takes off clothes in public
- has different sexual behavior
- eats too little, eats all the time, or eats things that aren't food
- trips, falls, drops things, is awkward
- starts using or has a different reaction to alcohol or drugs
- doesn't want to do anything, can't "get started"

- ✓ See a doctor
- ✓ Inform school of the injury
- ✓ Take time to recover
- ✓ Gradual return to learn/ school
- ✓ Cleared by a doctor before returning to play sports

THINKING PROBLEMS

- has trouble remembering things
- has trouble paying attention
- needs more time to process information
- thinks slowly and reacts slowly
- takes things too literally, doesn't get jokes
- understands words but not their meaning
- thinks about the same thing over and over
- has trouble learning new things

- has trouble putting things in order (desk, room, papers)
- has trouble remembering to do things on time
- has trouble planning, starting, doing, and finishing a task
- has trouble making decisions
- makes poor choices



TROUBLE COMMUNICATING

- changes the subject, has trouble staying on topic
- has trouble thinking of the right word
- has trouble listening
- has trouble paying attention, can't have long conversations
- does not say things clearly



TN Disability Coalition/Brain Links

615-383-9442

<https://www.tndisability.org/brain>

TN Traumatic Brain Injury Program

800-882-0611

<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

Concussion and Brain Injury In Students: Who needs to know?

<https://bit.ly/3ZzX4io>

TN Sports Concussion Law Training & Resources

<https://www.tn.gov/health/health-program-areas/fhw/tbi/tn-sports-concussion.html>

Children and teens who show or report one or more of the signs and symptoms listed below, or simply say they just "don't feel right" after a bump, blow, or jolt to the head or body, may have a concussion or more serious brain injury.

Signs Observed by Parents or 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

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 "feeling down"

(Adapted from the Centers for Disease Control <https://www.cdc.gov/heads-up>)

It's better to miss one game than the whole season.



Cuando Su Niño Ha Recibido un Golpe En La Cabeza:



Un lesión en la cabeza puede ocurrirle a cualquiera en la vida cotidiana: en casa, en la escuela o practicando un deporte. Muchos niños que reciben golpes en la cabeza se recuperan y no quedan con problemas de largo plazo.

- No es fácil detectar una conmoción cerebral. Es posible que se presenten los síntomas de conmoción cerebral exactamente en el momento de la lesión o pueden aparecer o evidenciarse días o semanas después de la lesión.
- “Las conmociones cerebrales son ocasionadas por un golpe en la cabeza. Aún los golpes en la cabeza que supuestamente sólo generan un zumbido en los oídos o que parecen ser golpes muy suaves, pueden ser graves.
- Si su niño se queja de algún síntoma de conmoción cerebral o si usted nota los síntomas, busque atención médica inmediatamente.”

(Adaptado de ALERTAS para los Centros para el Control de Enfermedades en <https://www.cdc.gov/heads-up>)

PROBLEMAS DE SALUD

Dolores de cabeza

- dolor de cabeza que se presenta con mucha frecuencia
- dolor en la cabeza/cuello
- dolor debajo de los oídos
- dolor en la mandíbula
- dolor en o alrededor de los ojos

Problemas de equilibrio

- mareos
- problema con el equilibrio

Cambios en los sentidos



- se siente molesto por los olores
- cambios en el gusto o en el olfato
- cambios en el apetito



- siente mucho calor
- siente mucho frío
- no siente ni frío ni calor



- zumbido en los oídos
- pérdida de la audición
- se siente molesto por los ruidos
- no resiste el ruido de fondo

Una conmoción cerebral es un tipo de lesión cerebral traumática (TBI). Todas las conmociones cerebrales son graves.

Si su niño presenta alguno de estos problemas, vea a su médico inmediatamente.

- desorientado: pérdida de memoria/amnesia
- náusea o vómito recurrente
- una pupila más dilatada que la otra
- dolor de cabeza permanente que no desaparece
- convulsiones, parpadeo continuo, rigidez en el cuerpo, pérdida de acierto al dar la mano, temblores, debilitamiento de los músculos, pérdida de tono muscular

Para bebés y niños pequeños:

- todos los síntomas indicados anteriormente
- no deja de llorar, no es posible consolarlo
- no amamanta ni se alimenta

Problemas para dormir

- no puede dormir durante la noche
- duerme demasiado
- se le confunden los días con las noches

Problemas de dolor

- dolor en el cuello o en los hombros que ocurre con mucha frecuencia
- otros dolores inexplicables en el cuerpo



- visión borrosa
- visión doble
- dificultad para ver claramente (dificultad para enfocar)
- se siente molesto por la luz



COMPORTAMIENTO y SENTIMIENTOS

(Cambios en la personalidad, de humor o de comportamiento)

- irritable, ansioso, inquieto
- se altera o se frustra fácilmente
- reacciona exageradamente, llora o ríe con mucha facilidad
- tiene cambios de humor
- desea estar a solas o alejado de los demás
- siente temor por los demás, culpa a otros
- desea que se le dedique atención
- no sabe cómo actuar ante los demás
- actúa en forma arriesgada sin pensarlo antes

- está triste, depresivo
- se demora en responder
- permanece cansado, apático
- se quita la ropa en público
- presenta un comportamiento sexual diferente
- come poco, come todo el tiempo o come cosas que no son alimentos
- se resbala, cae, deja caer cosas, adopta posiciones desgarbadas
- empieza a consumir drogas o bebidas alcohólicas o reacciona en forma diferente a las bebidas alcohólicas
- no desea hacer nada, no le es posible “empezar”

- ✓ Vea a un médico
- ✓ Informe a la escuela acerca de la lesión
- ✓ Déle tiempo a la recuperación
- ✓ Regreso gradual al aprendizaje/escuela
- ✓ Autorizado por un médico antes de regresar a practicar deportes

PROBLEMAS CON EL PENSAMIENTO

- tiene problemas recordando cosas
- tiene problemas para prestar atención
- necesita más tiempo para procesar la información
- piensa con lentitud y reacciona lentamente
- toma las cosas demasiado en serio, no admite bromas
- comprende las palabras pero no su significado
- piensa en lo mismo una y otra vez
- tiene problemas para aprender cosas nuevas
- tiene problemas para colocar cosas en orden (el escritorio, el cuarto, papeles)
- tiene problemas para recordar que debe hacer cosas a tiempo
- tiene problemas para planificar, iniciar, hacer y terminar tareas
- tiene problemas para tomar decisiones
- hace selecciones deficientes



TIENE PROBLEMAS PARA COMUNICARSE

- cambia el tema de conversación, tiene problemas para mantener el tema de conversación
- tiene problemas para seleccionar la palabra correcta
- tiene problemas para escuchar
- tiene problemas para prestar atención, no puede sostener conversaciones prolongadas
- no dice las cosas con claridad
- tiene problemas para leer
- habla demasiado

Coalición para Discapacitados de TN/ Brain Links
615-383-9442

<https://www.tndisability.org/brain>

Programa para Lesiones Cerebrales Traumáticas de TN

800-882-0611

<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

Conmoción cerebral y lesión cerebral en estudiantes: ¿Quién necesita saberlo?

<https://bit.ly/3ZzX4io>

Capacitación y recursos acerca de la ley sobre Contusiones Cerebrales en el Deporte de TN

<https://www.tn.gov/health/health-program-areas/fhw/tbi/tn-sports-concussion.html>



Si su niño ha recibido un golpe en la cabeza durante la práctica de un deporte, busque los siguientes signos y síntomas de una conmoción cerebral:

Signos observados por padres o tutores:

- Parece vacilante o desconcertado
- Está confundido acerca de la asignación o la posición
- Olvida una instrucción
- Se siente inseguro ante el juego, la puntuación o el oponente
- Se mueve torpemente
- Responde las preguntas lentamente
- Pierde la conciencia (así sea brevemente)
- Presenta cambios de humor, comportamiento o personalidad

Síntomas que se presentan en los deportistas:

- Dolor de cabeza o “presión” en la cabeza
- Nausea o vómito
- Problemas de equilibrio o mareo
- Visión doble o borrosa
- Sensibilidad a la luz
- Sensibilidad al ruido
- Se siente con pereza, perdido, confundido o aturdido
- Problemas de concentración o de memoria
- Confusión
- Sólo “no me siento bien” o “no me siento de humor”

(Adaptado de los Centros para el Control de Enfermedades en <https://www.cdc.gov/heads-up>)

Es mejor perderse un juego que toda la temporada.

When Your Head Has Been Hurt: Signs and Symptoms



A head injury can happen to anyone at any age at any time.

Many people who hurt their heads get well and have no long-term problems.

Concussions are caused by a bump, blow or jolt to the head or body. 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 you notice any symptoms of concussion seek medical attention right away.

(Adapted from the Centers for Disease Control HEADS UP <https://www.cdc.gov/heads-up>)

Problems at the Time of Injury

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

- changes in taste or smell
- appetite changes
- too hot/ cold
- ringing in the ears
- bothered by noises
- can’t handle background noise
- vision changes
- bothered by light



If you have any of these problems, see a doctor right away.

- nausea or vomiting
- one pupil larger than the other
- headache that does not go away
- seizures, eyes fluttering, body going stiff, staring into space
- loss of consciousness, even brief
- disoriented/ confused
- hands shake, tremors, muscles get weak, loss of muscle tone



DANGER SIGNS

[cdc.gov/heads-up/signs-symptoms](https://www.cdc.gov/heads-up/signs-symptoms)

A concussion is a type of traumatic brain injury (TBI). All concussions should be taken seriously.

WHAT TO DO:

Seek help & referrals.

Treatment for concussion is available.

Your doctor may refer you to:

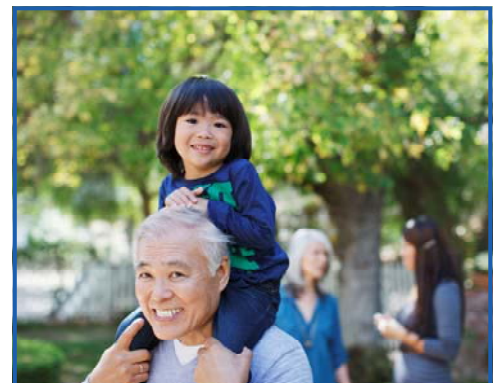
- Neurologist
- Neuropsychologist
- Specialized concussion center
- Brain injury rehabilitation center
- Specialist in your particular symptom

Sleep Problems

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

Pain Problems

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





PROBLEMS TO WATCH FOR OVER TIME



Changes in Mood Personality or Behavior

- irritability, anxiety, restlessness
- upset or frustrated easily
- overreacts, cries or laughs too easily
- mood swings
- want to be alone or away from people
- sad, depressed
- tired, drowsy
- trips, falls, drops things, is awkward
- does not want to do anything, can't "get started"



Trouble Communicating

- trouble thinking of the right word
- trouble listening
- trouble paying attention, can't have long conversations
- does not say things clearly
- trouble reading
- talk too much/ too little

Thinking Problems

- trouble remembering things
- trouble paying attention
- more time needed to process information
- take things too literally, doesn't get jokes
- think about the same thing over and over
- trouble learning new things
- trouble putting things in order (desk, room, papers)
- trouble remembering to do things on time
- trouble planning, starting, doing, and finishing a task
- trouble making decisions
- make poor choices

Concussion In Older Adults

- Older adults are more likely to get a concussion from a bump, blow or jolt to the head.
- Even falling to your knees or bumping your head on a doorway can cause a concussion.
- Signs and symptoms may be delayed in someone who is older.
- Diagnosing a concussion can be harder in someone who already has changes in their thinking or behavior because of aging.



Other Things To Think About!

- ✓ Tell work of the injury
- ✓ Return to activities/ work gradually
- ✓ Be cleared by a doctor before returning to strenuous physical activity



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TN Traumatic Brain Injury Program
800-882-0611

<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

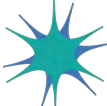


Brain Links is supported by the Administration for Community Living (ACL) of the U.S. Department of Health and Human Services under Grant No. 90TBSG0051-01-00 and in part by the TN Department of Health, Traumatic Brain Injury Program.



Cuando te hieres la cabeza: Señales y síntomas



 Una concusión en la cabeza puede pasarle a todos, a cualquier edad y en cualquier momento. Muchas personas que se lastiman la cabeza se recuperan y no tienen problemas a largo plazo.

Las concusiones cerebrales son causadas por un golpe, impacto o sacudida de la cabeza o el cuerpo. Incluso un "golpe", "sonarte la cabeza" o lo que parece ser un golpe leve o un golpe en la cabeza puede ser grave.

No se puede ver una concusión cerebral. Los signos y síntomas de conmoción cerebral pueden aparecer inmediatamente después de la lesión o pueden aparecer o notarse hasta días o semanas después de la concusión.

Si nota algún síntoma de una concusión cerebral, busque atención médica de inmediato.

(Adaptado de los Centros para el Control de Enfermedades HEADS UP <https://www.cdc.gov/heads-up/>)

Problemas en el momento de la lesión

Dolores de cabeza

- dolor de cabeza repetido
- dolor en la cabeza/cuello
- dolor debajo del oído
- dolor en la mandíbula

Problemas de equilibrio

- mareos
- problemas con el equilibrio

Cambios sensoriales

- cambios en el gusto o el olfato
- cambios en el apetito
- demasiado caliente/frío
- zumbido en los oídos
- molestia por los ruidos
- no puede resistir ruido de fondo
- cambios en la visión
- sensibilidad a la luz



Si tiene alguno de estos problemas, consulte a un médico de inmediato.

- náuseas o vómitos
- una pupila más grande que la otra
- dolor de cabeza que no desaparece
- convulsiones, ojos con espasmos, cuerpo rígido, mirada perdida
- pérdida de la conciencia, incluso aunque sea breve
- desorientación/confusión
- manos temblorosas, temblores corporales, pérdida de tono muscular



SEÑALES DE PELIGRO

<https://www.cdc.gov/heads-up/>

Una concusión cerebral es un tipo de Traumatismo Encéfalo Craneano (TEC). Todas las concusiones cerebrales deben tomarse en serio.

¿QUÉ HACER?

Busque ayuda y referencias.

Existen tratamientos para una concusión cerebral.

Su médico puede referirlo a un:

- Neurólogo
- Neuropsicólogo
- Centro especializado de concusiones cerebral
- Centro de rehabilitación de lesiones cerebrales

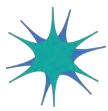
Problemas para dormir

- no puede dormir toda la noche
- duerme demasiado
- los días y las noches se confunden

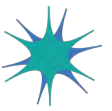
Pain Problems

- dolor de cuello y hombros casi todo el tiempo
- otro dolor corporal inexplicable





PROBLEMAS A CONTEMPLAR EN EL TIEMPO



Cambios de humor Personalidad o Comportamiento

- irritabilidad, ansiedad, inquietud
- molestarse o frustrarse fácilmente
- reacciones exageradas, llorar o reír con demasiada facilidad
- cambios de humor
- quiere estar solo o alejado de personas
- tristeza, depresión
- cansancio, somnolencia
- tropiezos, caídas, dejar caer cosas es incomodo
- no quiere hacer nada, no puede "empezar"



Problemas para comunicarse

- problemas para pensar en la palabra correcta
- problemas para escuchar
- problemas para prestar atención
- no puedo tener conversaciones largas
- no se expresa claramente
- problemas para leer
- habla demasiado o muy poco

Problemas al pensar

- problemas para recordar
- problemas para prestar atención
- necesita más tiempo para procesar información
- toma las cosas demasiado literalmente
- no entiende chistes
- piensa en lo mismo una y otra vez
- problemas para aprender cosas nuevas
- problemas para poner las cosas en orden (escritorio, cuarto, papeles)
- problemas para recordar hacer cosas a tiempo
- problemas para planificar, iniciar, hacer y terminar una tarea
- problemas para tomar decisiones

¡Otras cosas para considerar!

- ✓ Avise de la lesión en el trabajo
- ✓ Regrese a las actividades o trabajo gradualmente
- ✓ Obtenga autorización de un médico antes de volver a actividades físicas extenuantes

Concusiones cerebrales en adultos mayores

- Adultos mayores tienen más probabilidades de sufrir una concusión cerebral por un golpe, impacto o sacudida de la cabeza.
- Incluso caer de rodillas o golpearse la cabeza contra una puerta puede causar una concusión cerebral.
- Los signos y síntomas pueden demorarse en personas mayores.
- Diagnosticar una concusión cerebral puede ser más difícil para alguien que ya tiene cambios en su forma de pensar o en su comportamiento debido al envejecimiento.



Asociación de discapacitados de Tennessee/
Brain Links 615-383-9442

<https://www.tndisability.org/brain>



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Programa para Lesiones Cerebrales Traumáticas de Tennessee

<https://www.tn.gov/content/tn/health/health-program-areas/fhw/vipp/tbi.html>



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 No. 90TBSG0051-01-00 y, en parte, por el Departamento de Salud de TN, Programa de Lesiones Cerebrales Traumáticas.



RECOGNIZING CONCUSSION

In People Who Communicate Without Words



A tool for those who care for people

who communicate without words including family members, healthcare professionals, service providers and more.



Concussions are caused by a bump, blow or jolt to the head or body. 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.

(Adapted from the CDC <https://www.cdc.gov/headsup/index.html>)

Common Problems at the Time of Injury

Headaches

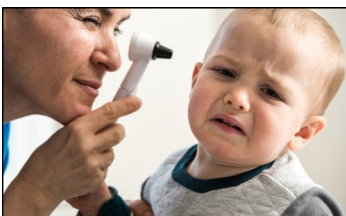
- headache that keeps coming back
- pain in head/ neck
- pain below the ear
- pain in the jaw
- pain in or around the eyes

Balance Problems

- dizziness
- trouble with balance

Sensory Changes

- changes in taste or smell
- appetite changes
- too hot/ cold
- ringing in the ears
- bothered by noises
- can't handle background noise
- vision changes
- bothered by light



If you have any of these problems, see a doctor right away!

- nausea or vomiting
- one pupil larger than the other
- headache that does not go away
- seizures, eyes fluttering, body going stiff, staring into space
- loss of consciousness, even brief
- disoriented/ confused
- hands shake, tremors, muscles get weak, loss of muscle tone

Adapted from the CDC:

https://www.cdc.gov/headsup/?CDC_AAref_Val=https://www.cdc.gov/headsup/basics/concussion_danger_signs.html

DANGER SIGNS

A Concussion is a Type of Traumatic Brain Injury (TBI).

All Concussions Should Be Taken Seriously.

A Head Injury Can Happen to Anyone at Any Age at Any Time.

WHAT TO DO:

Seek help & referrals.

Treatment for concussion is available.

Your doctor may refer you to:

- Neurologist
- Neuropsychologist
- Specialized concussion center
- Brain injury rehabilitation center
- Specialist in your particular symptom

Sleep Problems

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

Pain Problems

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



Common Concussion Symptoms

Cognitive/ Communication

- feeling dazed or in a fog
- slower to understand

Emotional/ Behavioral

- irritability
- quick to anger
- decreased motivation
- cries easily



Physical

- headaches or neck pain
- changes in vision
- sleep changes
- fatigue
- balance/ dizziness
- bothered by light or sounds



Signs of Pain

- excessive crying
- anxious or agitated
- a lot of physical movement
- changes in breathing
- increased muscle tightness
- facial changes (tense or stressed)



Identifying a concussion can be more difficult in someone who communicates without words.



Look for:

- disrupted sleep
- stomachaches
- changes in eating habits
- decreased engagement, changes with things they once loved
- poorly controlled behaviors or behaviors that change quickly
- continence issues, bedwetting or uncontrolled bladder & bowels



What Symptoms Might Look Like

- covering, squinting or closing eyes
- changes in appetite, not eating favorite foods
- changes in sleep, night walking, not able to stay in bed for as long
- * touching/ holding their head
- * bothered by light or noises
- * forgetting routines
- * changes in any skill they already had
- * more clingy/ emotional or withdrawn
- * change in appetite or sleep
- * more tantrums/ disruptive
- * stomach issues



* This information is adapted from a study on very young children (3-5 years old) who often don't have the words to describe their symptoms: Suskauer, S. J., Rane, S., Reesman, J., & Slomine, B. S. (2018). Caregiver-report of symptoms following traumatic brain injury in a small clinical sample of preschool-aged children. *Journal of Pediatric Rehabilitation Medicine*, 11(1), 7-14. doi:10.3233/prm-160424

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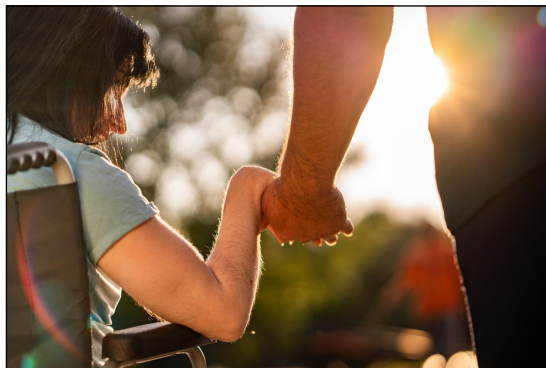
TN Traumatic Brain Injury Program
800-882-0611
<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

RECONOCIENDO UNA CONMOCIÓN CEREBRAL

En las personas que se comunican sin palabras



Una herramienta para aquellos que atienden a personas que se comunican sin palabras, incluyendo familiares, profesionales de la atención médica y proveedores de servicios, etc.



Las concusiones cerebrales son causadas por un golpe, impacto o sacudida de la cabeza o el cuerpo. Incluso un "golpe", "quedar aturdido por una sacudida" o lo que parece ser un golpe leve o un golpe en la cabeza puede ser grave.

No se puede ver una conmoción cerebral. Los signos y síntomas pueden aparecer inmediatamente después de la lesión o pueden aparecer o notarse hasta días o semanas después de la conmoción.

(Adaptado de la CDC <https://www.cdc.gov/headsup/index.html>)

Problemas comunes al momento de la lesión

Dolores de cabeza

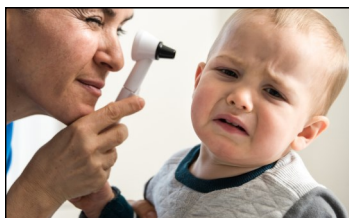
- dolores de cabeza que regresan constantemente
- dolor en la cabeza/cuello
- dolor detrás de la oreja
- dolor en la quijada
- dolor alrededor de los ojos

Problemas de equilibrio

- mareo
- problemas con el equilibrio

Cambios sensoriales

- cambios en gusto u olfato
- cambios de apetito
- demasiado caliente/frío
- zumbido en los oídos
- molestia con ruidos
- no puede manejar ruido de fondo
- cambios en la visión
- molestia con la luz



Si tiene alguno de estos problemas, ¡Consulte a un médico de inmediato!

- náuseas o vómitos
- una pupila más grande que la otra
- dolor de cabeza que no termina
- espasmos, ojos que se mueven con rapidez, rigidez en el cuerpo, se queda viendo al vacío
- pérdida de la conciencia, incluso si es breve
- desorientación/confusión
- temblor en las manos, sacudidas, músculos que se debilitan, pérdida de tono muscular

Adaptado de la CDC: https://www.cdc.gov/headsup/?CDC_AAref_Val=https://www.cdc.gov/headsup/basics/concussion_danger_signs.html

SEÑALES DE PELIGRO

Una conmoción (o concusión) cerebral es un tipo de Traumatismo Encéfalo Craneano (TEC).

Todas las conmociones cerebrales deben tomarse en serio.

Una lesión en la cabeza puede sucedernos a cualquier persona, a cualquier edad y en cualquier momento.

Problemas para dormir

- no puede dormir durante la noche
- duerme demasiado
- los días y noches se confunden

Problemas con dolores

- hay dolor en cuello y hombros a menudo
- otros dolores en el cuerpo inexplicables



¿QUÉ HACER?:

Busque ayuda y referencias.

Existen tratamientos para una concusión cerebral.

Su médico puede referirlo a:

- Neurólogo
- Neuropsicólogo
- Centro especializado en conmoción cerebral
- Centro de rehabilitación de lesión cerebral
- Especialista en su síntoma particular

Cognitivo / comunicación

- se siente aturdido o en una niebla
- lentitud para entender



Busque:

- sueño interrumpido
- dolor de estómago
- cambios en hábitos alimenticios
- disminuye su involucramiento, cambios con cosas que antes le encantaban
- comportamientos controlados deficientemente o comportamientos que cambian rápidamente
- problemas de continencia, moja la cama o presenta vejiga e intestinos incontrolados



Emocional / de comportamiento

- irritabilidad
- rápido para enojarse
- disminución en motivación
- llora con facilidad



Físico

- dolores de cabeza o de cuello
- cambios en la visión
- cambios al dormir
- fatiga
- falta de balance/ mareo
- molestia por luz o sonidos



Señales de Dolor

- llanto excesivo
- ansioso o agitado
- mucho movimiento físico
- cambios en respiración
- incremento en tirantez de músculos
- cambios faciales (tenso o estresado)



Cómo pueden lucir los síntomas

- cubre o cierra los ojos o los hace bizcos
- cambios en apetito, no come sus alimentos favoritos
- cambios en sueño, sonambulismo, incapacidad de mantenerse en cama por mucho tiempo
- * tocar/sostener su cabeza
- * le molestan la luz o los ruidos
- * olvida las rutinas
- * cambios en cualquier habilidad que ya tenía
- * más apegado / emocional o apartado
- * cambios en apetito o sueño
- * más rabietas / destructivo
- * problemas estomacales



* Esta información está adaptada de un estudio sobre niños muy pequeños (3-5 años) que a menudo no tienen las palabras para describir sus síntomas: Suskauer, S. J., Rane, S., Reesman, J., & Slomine, B. S. (2018). Informe de cuidadores sobre síntomas después de una lesión cerebral traumática en una muestra clínica pequeña de niños de edad preescolar. *Journal of Pediatric Rehabilitation Medicine*, 11(1), 7-14. doi:10.3233/prm-160424

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Programa para Lesiones Cerebrales Traumáticas de Tennessee
800-882-0611

<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

A GUIDE TO POSSIBLE CHANGES AFTER BRAIN INJURY

FOR YOUNG CHILDREN AGES 7 AND UNDER

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:

Changes	Watch for these Changes Since Injury	Specialist
Emotions/Feelings	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	Counselor, Psychologist
Sleep	Sleeps more or less than usual, tired during day, trouble falling asleep, wakes often at night, wets the bed, nightmares	Pediatrician, Neurologist
Appetite/Food	Eats more or less since injury, stomachaches	Pediatrician
Cognitive/Thinking	Thinks slowly and reacts slowly, has trouble putting things in order, harder to concentrate, forgetting	Neuropsychologist, Speech Language Pathologist, Occupational Therapist
Development/Progress	Struggling to learn new skills, needs to relearn skills like: using a spoon, tying a shoe, potty training, counting, handwriting, typing	Occupational Therapist, Physical Therapist, Neuropsychologist
Play	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	Speech Language Pathologist, Occupational Therapist
Social/Friends/Behavior	More hitting, pushing, taking toys, less sharing, harder to make friends, withdrawn, clingy	Speech Language Pathologist, Counselor, Behavior Specialist
Flexibility/Changes	Upset by changed routine, schedule or people	Behavior Specialist, Neuropsychologist
Language/Talking	Difficulty naming objects, understanding directions, telling stories. Using shorter sentences than before injury.	Speech Language Pathologist
Physical	Headaches, dizziness, head or neck pain, tightness, weakness, balance, visual problems, reduced stamina, fatigue, sensitive to lights and sounds, seizures	Pediatrician, Physical Therapist, Neurologist, Chiropractor, Neuro-Ophthalmologist

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.info/>.

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 themselves, feeling stuck or unmotivated, developing addictive behaviors like: overeating, overexercising, fasting, drugs or alcohol.

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

CDC

Subtle Warning Signs of Suicide in Children: <http://bit.ly/4ldYTtC>

General Suicide Warning Signs, TN Dept of Health: <https://bit.ly/3TwVB8U>

Facts About Suicide, CDC: <https://www.cdc.gov/suicide/facts/index.html>

How to Recognize Signs of Mental Health Problems and Teen Suicides, Kidcentral: <https://bit.ly/3KT0ZOcMentalHealthTeenSuicide>

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.

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/33TgDIUChildwithDisability>
- Disability information and resources at Tennessee Disability Pathfinder: <https://www.tnpathfinder.org/>
- For brain injury support groups in Tennessee: <https://www.tn.gov/health/health-program-areas/fhw/tbi/contact.html>

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.



**Keeping
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.

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 enough sleep
- Be social
- Take care of mental health
- Get exercise
- Do not smoke, vape, drink alcohol or use drugs
- Keep learning
- 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 Service Coordination Program:
<https://www.tn.gov/health/health-program-areas/fhw/tbi/support-groups.html>
help with referrals, insurance issues and more

Dial 988 for the Suicide & Crisis Lifeline or you can text to 988; 988lifeline.org to chat with someone.

Concussion and Brain Injury in Students: Who needs to know?
<https://bit.ly/3ZzX4io>

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>
find parenting tips, track child milestones and more

School and Work Resources

Tennessee Early Intervention Services (TEIS): <https://bit.ly/44mvojv>
provides services to children birth to age three who have disabilities or other developmental delays

Support and Training for Exceptional Parents: <https://tnstep.info/> 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

Psychology Today:
<https://www.psychologytoday.com/us/therapists/traumatic-brain-injury>
find a local counselor/therapist



<https://www.tndisability.org/brain>

@BrainLinksTN



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>

THINGS TO WATCH FOR IN ADULTS

See the list for children. Most are the same for adults, too.

Watch for those and other changes:

Work: Trouble at work, unable to complete tasks as before, being fired from jobs, moving from one job to another

Finances: Making poor money decisions, buying before thinking, borrowing money, making late payments

Relationships: Struggling to keep healthy relationships with family, friends and co-workers, being verbally, physically, emotionally or sexually abusive in a relationship, being taken advantage of in a relationship, being very needy

**There is no
cut-off date
for brain
injury recovery**

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.

SPECIALISTS & THEIR SYMPTOM-SPECIFIC TREATMENT

Specialist	Symptoms
Physical Therapist	Pain and tightness, balance changes, weakness, reduced stamina
Occupational Therapist	Difficulty with a life task like cooking or budgeting, fine motor changes like trouble writing or texting, vision changes
Speech Language Pathologist	Difficulty communicating in a new environment, poor social skills, difficulty with thinking skills, changes in swallowing
Neurologist	Migraines, dizziness, pain management, sleep disorders, seizures
Neuro-ophthalmologist	Vision issues related to the injury
Counselor	Depression, anxiety, help adjusting to new circumstances, feeling overwhelmed or alone, behavioral problems
Neuropsychologist	Difficulty with cognitive (thinking) abilities, depression, anxiety, and behavioral issues (may provide counseling or work with a counselor and other specialists)
Chiropractor	Back and neck pain, headaches
Support Groups	Find support from other people who understand brain injury. For support groups in Tennessee, see: https://www.tn.gov/health/health-program-areas/fhw/tbi/contact.pdf There are also in-person and virtual support groups for specific symptoms like seizures, decreased balance and migraines.
Medical Doctor	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 <i>any</i> doctor for <i>any</i> reason, tell them about the brain injury. The new problem could be related.
Vocational Therapist or State Vocational Rehab Counselor	Help with work issues, including the return to work and keeping a job. TN Vocational Rehab: https://www.tn.gov/humanservices/ds/vocational-rehabilitation.html WorkAbleTN: https://www.tndisability.org/workabletn



COMMUNITY SUPPORT

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.

KEEP YOUR BRAIN HEALTHY

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/brain-health>



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 Service Coordination Program:
<https://www.tn.gov/health/health-program-areas/fhw/tbi/support-groups.html>
help with referrals, insurance issues and more

Dial **988** for the Suicide & Crisis Lifeline or you can text to **988**; 988lifeline.org to chat with someone.

Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) for help with treatment

Behavioral Health Safety Net and substance use Continuum of Care.

<https://www.tn.gov/behavioral-health/bhsn.html>

<https://www.tn.gov/behavioral-health/substance-abuse-services/treatment--recovery.html>

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.info/>
help parents with support and training for a child's educational needs

WorkAbleTN: <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:
<https://www.psychologytoday.com/us/therapists/traumatic-brain-injury>
to get help or find a local counselor/therapist



<https://www.tndisability.org/brain>
@BrainLinksTN



UNA GUÍA PARA POSIBLES CAMBIOS DESPUÉS DE UNA LESIÓN CEREBRAL

PARA NIÑOS EN EDAD ESCOLAR Y ADULTOS

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.

LOS RESULTADOS DESPUÉS DE UNA REHABILITACIÓN POR LESIÓN CEREBRAL SON DIFERENTES PARA CADA PERSONA



DEPENDERÁN DE MUCHOS FACTORES, INCLUYENDO:

- Severidad de la lesión/tipos de cambios
- Apoyo de familiares y amigos
- Motivación para mejorar y la habilidad de adaptarse a los cambios
- Salud mental (es decir, Depresión, ansiedad)
- Edad al momento de la lesión
- Complicaciones (como por ejemplo: infecciones, espasmos, otras lesiones, etc.)
- Apoyo para hacer la transición a la casa o al trabajo (patrón, transporte, etc.)
- Fondos para rehabilitación / duración de la rehabilitación / disposición o capacidad para participar en la rehabilitación

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

COSAS A OBSERVAR EN ADULTOS

Vea la lista para niños. La mayoría son las mismas para los adultos también.

Observe si hay estos u otros cambios:

Trabajo: Problemas en el trabajo, incapacidad para completar las tareas como lo hacía antes, ser despedido de los trabajos, cambiar de un trabajo a otro

Finanzas: Tomar decisiones malas con el dinero, comprar antes de pensar, pedir dinero prestado, hacer pagos atrasados

Relaciones: Batalla para mantener relaciones sanas con familiares, amigos y compañeros del trabajo, ser abusivo verbal, física, emocional o sexualmente en una relación; que se aprovechen de usted en una relación; ser muy necesitado

No hay fecha límite para recuperarse de una lesión cerebral

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. Reúname con su especialista de Recursos Humanos (RH) para comenzar. RRHH puede ayudar a comunicarse con su supervisor. Es posible que el Supervisor no sepa cómo 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 “acomodo 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 adecúe 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.

ESPECIALISTAS Y SU TRATAMIENTO ESPECÍFICO PARA LOS SÍNTOMAS

Especialista	Síntomas
Terapeuta físico	Dolor y tensión muscular, cambios en balance, debilidad, reducción de vitalidad
Terapeuta ocupacional	Dificultad con tareas cotidianas como cocinar o hacer presupuestos, cambios de motricidad fina como problemas para escribir o enviar mensajes de texto, cambios en la visión
Logopeda (especialista en patologías del habla)	Dificultad al comunicarse en un ambiente nuevo, habilidades sociales deficientes, dificultad con habilidades de pensamiento, cambios al deglutir
Neurólogo	Migrañas, mareo, manejo del dolor, trastornos del sueño, del sueño, espasmos
Neuro-oftalmólogo	Problemas de la visión relacionados con la lesión
Consejero	Depresión, ansiedad, ayuda para ajustarse a las nuevas circunstancias, sentirse abrumado o solo, problemas de comportamiento
Neuropsicólogo	Dificultad con capacidades cognitivas (de pensamiento), depresión, ansiedad y problemas de comportamiento (puede proveer consejería o trabajar con un consejero y otros especialistas)
Quiropráctico	Dolor de espalda y cuello, dolores de cabeza
Grupos de soporte	Busque el apoyo de otras personas que entienden acerca de lesiones cerebrales. Para grupos de apoyo en Tennessee, visite: https://www.tn.gov/content/dam/tn/health/program-areas/tbi/Traumatic-Brain-Injury-Support-Groups.pdf También hay grupos de soporte en persona y virtuales para síntomas específicos como espasmos, disminución en equilibrio y migrañas.
Médico	Su doctor puede ayudarle con asuntos médicos repentinos que surjan y puede ayudarle a encontrar a quién acudir para sus síntomas. Cuando vaya a <i>cualquier</i> doctor por <i>cualquier</i> razón, infórmele sobre su lesión cerebral. El problema nuevo podría estar relacionado.
Terapeuta Ocupacional o Consejero Estatal de Rehabilitación Ocupacional	Ayuda con problemas de trabajo, incluyendo el regreso al trabajo y mantener un trabajo. Rehabilitación Ocupacional de Tennessee https://www.tn.gov/humanservices/ds/vocational-rehabilitation.html WorkAbleTN: https://www.tndisability.org/workabletn



APOYO COMUNITARIO

Mantener personas que le apoyen en su vida es muy importante. Todos necesitamos personas a nuestro alrededor.

Algunas maneras de hacerlo son:

- Intégrese 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.

MANTENGA 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 (chatarra).
- Haga ejercicio regularmente que eleve su pulso cardiaco 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/brain-health>



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/fhw/tbi.html> ayuda con referencias, problemas con seguros y más

Línea telefónica estatal de crisis en Tennessee: 855-CRISIS-1 (855-274-7471)

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%20Return%20to%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>

familias apoyando a familias de niños con necesidades de atención médica especiales, enfermedades crónicas o discapacidades

kidcentral Tennessee - <https://www.kidcentraltn.com>

Recursos para la escuela y el trabajo

Apoyo y capacitación para padres excepcionales: <https://tnstep.info> ayuda a padres con apoyo y capacitación para las necesidades educativas de los niños

WorkAbleTN: <https://www.tndisability.org/WorkAbleTN>

Centro de Investigación y Capacitación en Lesiones Cerebrales (CBIRT): <https://cbirt.org/>

Red de Acomodación en el Trabajo <https://askjan.org/>

Recursos nacionales

Sitio web de BrainLine: <https://www.brainline.org/>

Información sobre cómo vivir con una lesión cerebral

Asociación contra las Lesiones Cerebrales de los Estados Unidos:

<https://www.biausa.org/>

recurso nacional para la lesión cerebral

Psychology Today:

<https://www.psychologytoday.com/us/therapists/traumatic-brain-injury> para obtener ayuda o para encontrar un consejero/terapeuta



<https://www.tndisability.org/brain>

@BrainLinksTN



Driving after Traumatic Brain Injury

For more information, contact your nearest TBI Model Systems. For a list of TBI Model Systems, go to: <http://www.msktc.org/tbi/model-system-centers>

This publication was produced by the TBI Model Systems in collaboration with the University of Washington Model Systems Knowledge Translation Center with funding from the National Institute on Disability and Rehabilitation Research in the U.S. Department of Education, grant no. H133A060070.

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

Eby, D.W., Molnar, L. J. (2010) Driving Fitness and Cognitive Impairment. *JAMA*. 303(16):1642-1643.

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

Para más información, contacte al TBI Model Systems más cercano. Para una lista de TBI Model Systems vaya a: <http://www.msktc.org/tbi/model-system-centers>

Esta publicación fue producida por TBI Model Systems en colaboración con el Model Systems Knowledge Translation Center con fondos del Instituto Nacional de Investigación sobre la Discapacidad y Rehabilitación en el Departamento de Educación de los EE.UU., subvención núm. H133A060070.

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 adaptivo 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 transportación

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 transportación, y se puede usar transportación pública como autobuses. Algunas comunidades proporcionan transportación pública 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

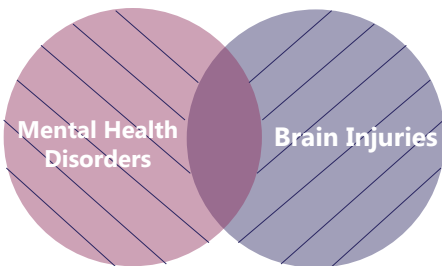
El conducir después de una lesión cerebral traumática fue desarrollado por Thomas Novack, PhD y Eduardo Lopez, MD en colaboración con el with the Model System Knowledge Translation Center. Porciones de este documento fueron adaptadas de materiales desarrollados por University of Alabama TBI MS y JFK 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).

**QUICK
GUIDE**

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.

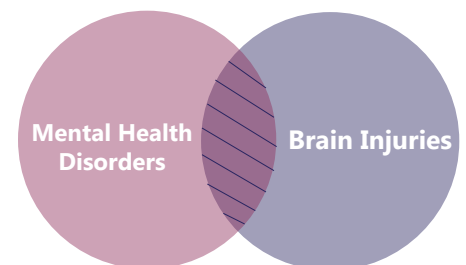
What are the differences between mental health disorders and brain injuries?



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 injury¹. 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:

	Concussion	Anxiety	Depression	Substance Abuse
Headaches	X	X	X	X
Drowsiness	X	X	X	X
Irritability	X	X	X	X
Poor memory	X	X	X	X
Fatigue	X	X	X	X
Poor sleep	X	X	X	X
Nausea	X	X	X	X
Dizziness	X			X
Blurred vision	X			X

*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/tbi.html>

Contact Brain Links for "free" Training & Educational Information at: tbi@tndisability.org

1. Administration for Community Living National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) "Opioids and TBI" Brief, April 2019.

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1.800.444.6443
biav.net

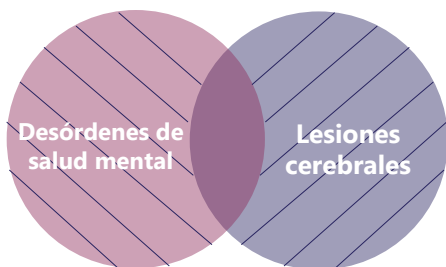
This project is supported [in part] through state general funds (Contract #16-002A) administered by the Virginia Department for Aging and Rehabilitative Services (DARS). 2025 Revised



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 aboguen por sí mismas y para que los profesionales de la medicina hagan diagnósticos exactos.

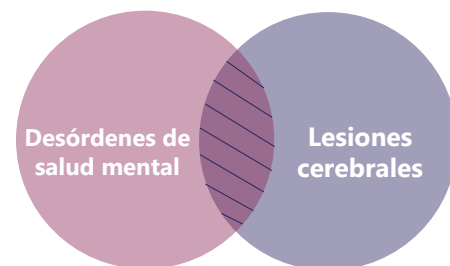
¿Cuáles son las diferencias entre los desórdenes de salud mental y las lesiones cerebrales?



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 cerebral¹. 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 de ello.

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

	Conmoción cerebral	Ansiedad	Depresión	Abuso de sustancias
Dolores de cabeza	X	X	X	X
Somnolencia	X	X	X	X
Irritabilidad	X	X	X	X
Memoria deficiente	X	X	X	X
Fatiga	X	X	X	X
Sueño deficiente	X	X	X	X
Náuseas	X	X	X	X
Mareos	X			X
Visión borrosa	X			X

*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 ayudarles 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

1. Administración para el Instituto Nacional de Vida Comunitaria sobre Discapacidad, Vida Independiente e Investigación de Rehabilitación (Siglas en inglés: NIDILRR) Resumen de "Opioides y TBI", Abril de 2019.



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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.



- Play
 - Creative play
 - Board games
 - Memory games

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:

Willcox, B.J., Willcox, D.C. & Suzuki, M. (2002). The Okinawa Program: How the world's longest-lived people achieve everlasting health - and how you can too. Harmony/Rodale.

Tedeschi, R. G. & Calhoun, L G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. Journal of Traumatic Stress. 9, 455-471.



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

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