

SECTION 2

SIGNS, SYMPTOMS, & FACT SHEETS

EDUCATIONAL TOOLS



Signs and Symptoms

Educational Tools

These tools help the family understand what to look for. Recommended to be given to teachers as well to help spot symptoms.

Signs and Symptoms for the **Young Child** [English](#) [Spanish](#)

For use with the young child and/or those who communicate without words. Brain Refer to this tool to learn more about the signs and symptoms and the effects of multiple brain injuries for children under age five.

Signs and Symptoms for the **Older Child** [English](#) [Spanish](#)

For use with the school-aged child. Refer to this tool to learn more about health problems, behavior changes, thinking difficulties, and communication change.

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 for those who care for people who communicate without words including family members, healthcare professionals, service providers and more.

Resilience and the Brain Factsheet:

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.

Three Infographics from Shepherd Center:

Brain Injury Facts, Living with a Brain Injury and Brain Injury Prevention

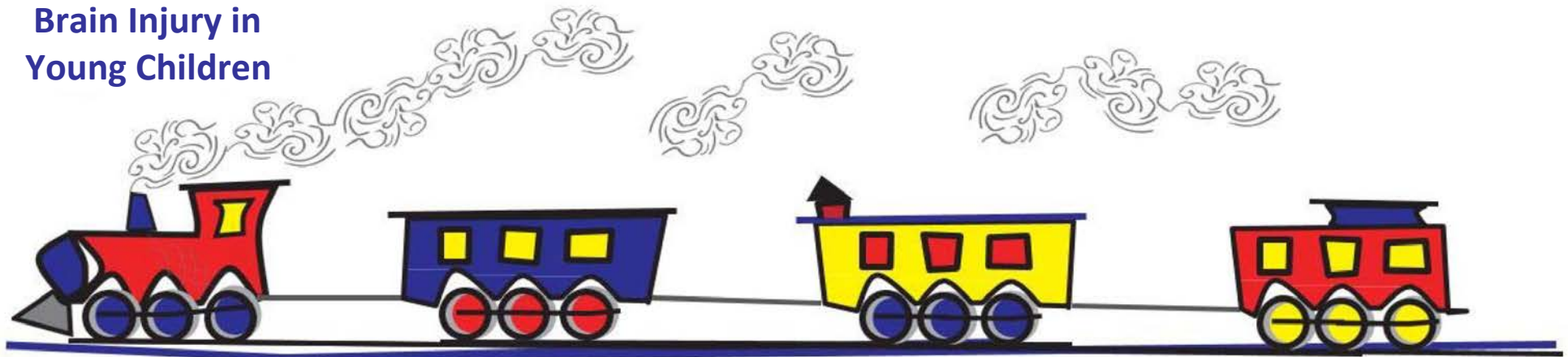
Brain Injury Prevention (BIAA - TN Chapter)

Fact Sheets ([follow this link to jump to the Fact Sheets on page 2](#))



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

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/>

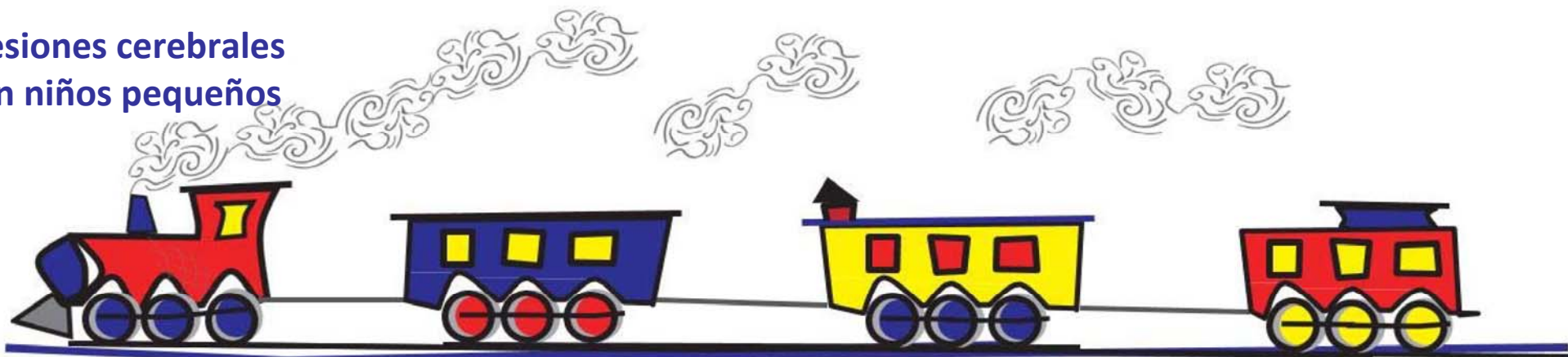
Brain Links
<https://www.tndisability.org/brain>



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

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 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

Una conmoción cerebral es un tipo de lesión cerebral traumática (TBI).

Todas las conmociones cerebrales son graves.

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



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

• 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.tn-disability.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:

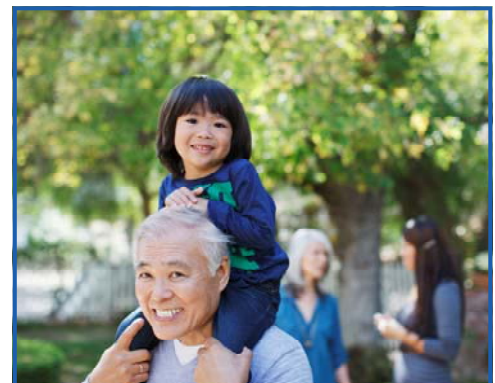
- Neurologist
- Neuropsychologist
- Specialized concussion center
- Brain injury rehabilitation center
- Specialist in your particular symptom

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

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



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.



TN Disability Coalition/ Brain Links
615-383-9442

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



@BrainLinksTN

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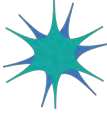


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Cuando te hieres la cabeza: Señales y síntomas



 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

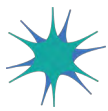
Problemas para dormir

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

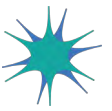
Pain Problems

- 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>



@BrainLinksTN

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

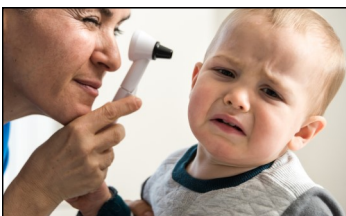
- headache that keeps coming back
- pain in head/ neck
- pain below the ear
- pain in the jaw
- pain in or around the eyes

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

Brain Links / TN Disability Coalition
615-383-9442 ~ tbi@tndisability.org
<https://www.tndisability.org/brain>

[@BrainLinksTN](https://www.facebook.com/BrainLinksTN) 

[YouTube Training Channel](#) 

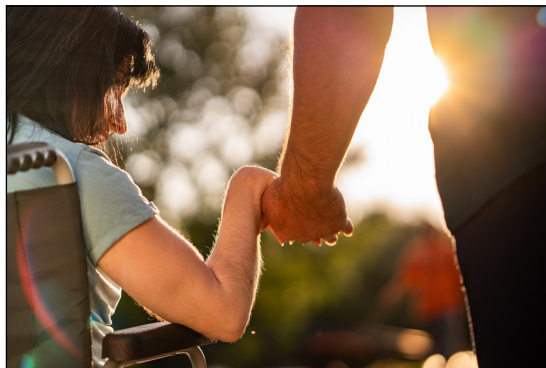
TN Traumatic Brain Injury Program
800-882-0611
<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>

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

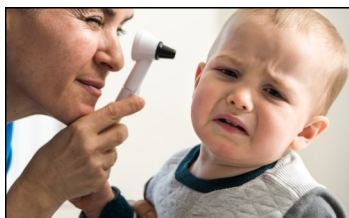
- dolores de cabeza que regresan constantemente
- dolor en la cabeza/cuello
- dolor detrás de la oreja
- dolor en la quijada
- dolor alrededor de los ojos

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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[YouTube Training Channel](#)



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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.





Brain Injury Facts



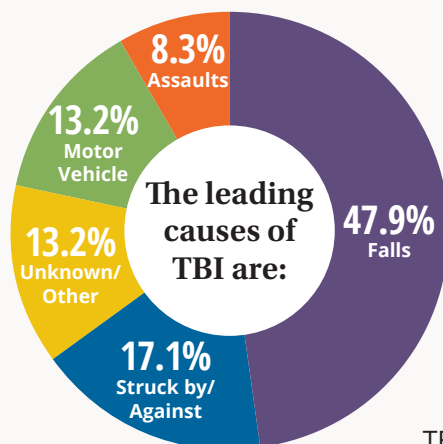
Shepherd Center

What is brain injury?

Brain injury, also called acquired brain injury, is any damage to the brain affecting a person physically, emotionally or behaviorally. Brain injuries can happen at birth, or later, from an illness or a trauma, and are called either traumatic or non-traumatic, depending on the specific cause.

How common is brain injury?

- They are most common in men between the ages of 15 to 24.
- After a brain injury, survivors are at higher risk (3 to 8 times higher) of having another brain injury.



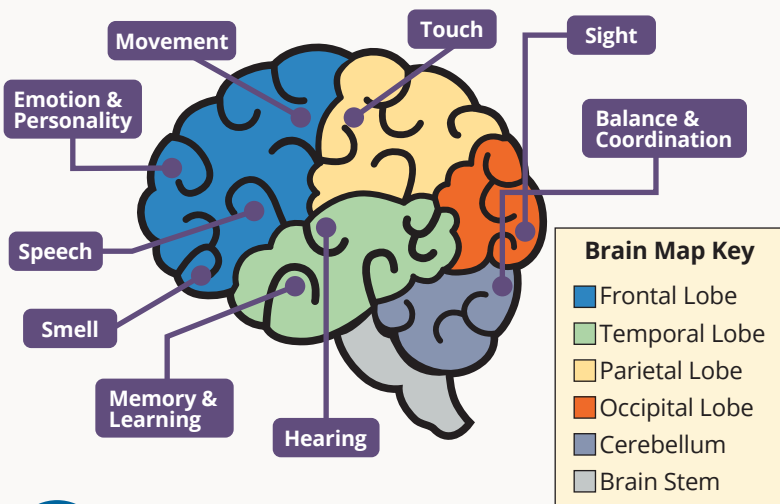
An estimated **1.7 million** people sustain a traumatic brain injury (TBI) each year.

About **5.3 million** Americans are living with a TBI-related disability.



cdc.gov/traumaticbraininjury/severe.html
biausa.org/brain-injury/about-brain-injury

What part of the brain is responsible for what?



biausa.org/brain-injury/about-brain-injury/basics/function-of-the-brain

The Impact of Brain Injury

A brain injury may lead to a wide range of short- or long-term issues affecting:

Cognitive Function

- Memory
- Attention
- Processing Speed
- Problem-Solving
- Language



Sensation

- Hearing
- Vision
- Sensation
- Body Awareness
- Smell



Physical Function

- Strength
- Coordination
- Balance
- Swallowing
- Bowel and Bladder Control



Emotion & Behavior

- Depression
- Anxiety
- Irritability/anger
- Impulse control
- Personality changes



cdc.gov/traumaticbraininjury/severe.html

Rancho Levels 1-10

The Rancho Los Amigos Levels of Cognitive Functioning-Revised is a 10-point system used to characterize TBI. It measures the levels of awareness, cognition, behavior and interaction with the environment.

Level 1	No Response: Total Assistance
Level 2	Generalized Response: Total Assistance
Level 3	Localized Response: Total Assistance
Level 4	Confused/Agitated: Maximal Assistance
Level 5	Confused, Inappropriate, Non-Agitated: Maximal Assistance
Level 6	Confused, Appropriate: Moderate Assistance
Level 7	Automatic, Appropriate: Minimal Assistance for Daily Living Skills
Level 8	Purposeful, Appropriate: Stand-By Assistance
Level 9	Purposeful, Appropriate: Stand-By Assistance on Request
Level 10	Purposeful, Appropriate: Modified Independent



neuroskills.com/resources/rancho-los-amigos-revised.php



shepherd.org | Continued on back ➔



Living with Brain Injury



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Injury Prevention

- Remove trip hazards, such as throw rugs.
- Stay healthy and active to reduce your risk of falls.
- Drive sober and distraction free.
- Always wear a seat belt.
- Wear a helmet while riding a bike, skateboard, motorcycle, horse or ATV.
- Wear a helmet while playing contact sports, skiing, skating or snowboarding.



Improving Sleep After Brain Injury



Do:

- » Follow a bedtime routine.
- » Establish a regular bed and wake time.
- » Have a regular daytime routine
- » Create a restful atmosphere.
- » Minimize screen time before bed.



Don't:

- » Nap more than 20 minutes during the day.
- » Eat, read, watch TV or do work while in bed.
- » Bring screen time into the bedroom
- » Use caffeine, nicotine, alcohol and sugar for five hours before bedtime.
- » Watch the clock.

Talk to your doctor about options to improve your sleep.



For more tips go to:

» msktc.org/tbi/factsheets/Sleep-And-Traumatic-Brain-Injury

Use Organization Tools

Calendars, daily planners, checklists, phone reminders and pill organizers to help stay organized and assist your memory.



Manage Stress

Stress Management

- Therapy
- Exercise
- Yoga
- Music
- Hobby
- Nature



Avoid Alcohol

- Alcohol slows down or stops brain injury recovery.
- Alcohol magnifies some of the cognitive and mood problems caused by brain injury.
- Alcohol lowers the seizure threshold and may trigger seizures.
- Alcohol use increases risk of another brain injury.



» msktc.org/tbi/factsheets/Alcohol-Use-After-Traumatic-Brain-Injury

Exercise Regularly

People with TBI who exercise show fewer symptoms of depression, fatigue and cognitive problems. Talk to your providers about an exercise plan that meets your physical needs.

The Brain Benefits of Exercise



Increases production of neurochemicals that promote brain cell repair



Boosts decision making skills



Improves memory and attention span



Prompts growth of new nerve cells and blood vessels



Improves multi-tasking and planning



» brainline.org/content/2008/07/aerobic-exercise-following-tbi_pageall.html

Monitor Mood

- Depression is about eight times more common in the first year after TBI than in the general population (about 50% of people with TBI).
- Seek help! There are many options to help with depression following TBI.



» nimh.nih.gov/health/topics/depression/index.shtml



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Sports Safety

Wear a helmet when:

- Riding a bike, motorcycle, snowmobile, scooter, electric scooter or all-terrain vehicle
- Playing a contact sport, such as football, ice hockey, lacrosse or boxing
- Using in-line skates or riding a skateboard
- Batting and running bases in baseball or softball
- Riding a horse
- Skiing or snowboarding



Child Safety

- Play safely. Make sure play surfaces on playgrounds are made of shock-absorbing material, such as hardwood mulch or sand.
- Make your home safer by installing window guards and safety gates around the stairs.
- Supervision on stairs and playground equipment is the key to prevent fall hazards.



Adult Safety

- **Distracted Walking:** Be careful when you are walking and texting, using headphones or talking on the cell phone.



Older Adult Safety

- **Making living areas safer by:**
 - Removing tripping hazards
 - Using nonslip mats in bathtub/shower
 - Installing grab bars next to toilet/shower
 - Installing handrails on both sides of the stairways
 - Improving lighting
- Ask your doctor to review medications to see if any make you dizzy or sleepy.
- Have your vision checked regularly.



Water Safety

- Do **NOT** dive! Enter feet first!
- Consider "SPLASH":

S	Supervision
P	Prevention
L	Life jackets save lives
A	Arm's length
S	Swim lessons
H	Have a Water Safety Plan.



[SPLASH GA: gdnrle.org/wear-it](http://gdnrle.org/wear-it)



Motor Vehicle & Driving Safety

- Buckle up. Wear a seat belt every time you drive or ride in a car.
- Use a child safety seat appropriately. Consider the selection, direction, location, installation and harnessing.



dph.georgia.gov/information-parents-and-caregivers

- Do not drive under the influence of alcohol or drugs.
- **Distracted Driving:** Do not drive while using a hand-held cell phone. It makes you four times more likely to get into a crash.
 - The "**Hands-Free Law**" in Georgia states that a driver cannot have a cell phone in their hand when driving. That includes voice calls and texting.
- **Drowsy Driving:** Consider whether you are sleep deprived before you get behind the wheel of a car.



Violence Safety

- **Gun Safety:** Keep guns unloaded and locked up.
- Educate children on the dangers of guns.
- **Suicide Prevention:** Watch for signs and symptoms and seek professional help, if needed.



Fact Sheets

When Concussion Symptoms Are Not Going Away - Choose age-appropriate version. This will alert you on what to look for over time and will help them know how to work with the school/workplace if problems persist.

- A Guide For Parents of Children Five and Under, [English](#) [Espanol](#)
- A Guide For Parents of School-Aged Children, [English](#) [Espanol](#)
- A Guide For Adults With Concussion, [English](#) [Espanol](#)

Concussions ARE Treatable

All concussions are different. Depending on your symptoms, your doctor may treat you in their office. To learn more [explore this resource](#).

Concussion Management Protocol Recommendation: 2 Visit Minimum

Good knowledge for all.

A Guide to Possible Changes After Brain Injury

- For Young Children Ages 7 and Under, [English](#)
- For School-Aged Children and Adults, [English](#) [Espanol](#)

5 Types of Concussion and Two Modifying Factors Infographic and Fact Sheet

Concussion Fact Sheet for Parents

Similar to the signs and symptoms above, but also contains information related to sports.

Help Your Child Be Successful at School After a Traumatic Brain Injury

By the CDC Traumatic Brain Injury Program.

Personal Guide for Everyday Living After Brain Injury

A tool to help people with TBI (especially mild TBI) better understand what conditions make things harder and what the person can do about it. Best if used as part of a conversation with the clinician. [English](#) [Espanol](#)



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

[Developmental Concern? Next Step for Families and Caregivers, American Academy of Pediatrics](#)

Brain Health: How to Have a Healthy Brain Throughout Life

[English](#) [Español](#)

[Resilience and the Brain](#)

[Brain Injury and Opioid Overdose: Fast Facts](#)

[Playground Safety Tips for Parents, CDC HEADS UP Concussion](#)

[Pediatric Neuropsychology - A Guide for Parents](#)

Northern California Neuropsychology Forum

[Model Systems Knowledge Translation Center: TBI Factsheets](#)

Booklets available in [English](#) & [Español](#)

[Brain Injury Identification Card](#)

Carry in your wallet; lets emergency responders know you have had an injury and some symptoms you may experience.

NOTE: You can ask for a Crisis Intervention trained officer to respond when calling 911.

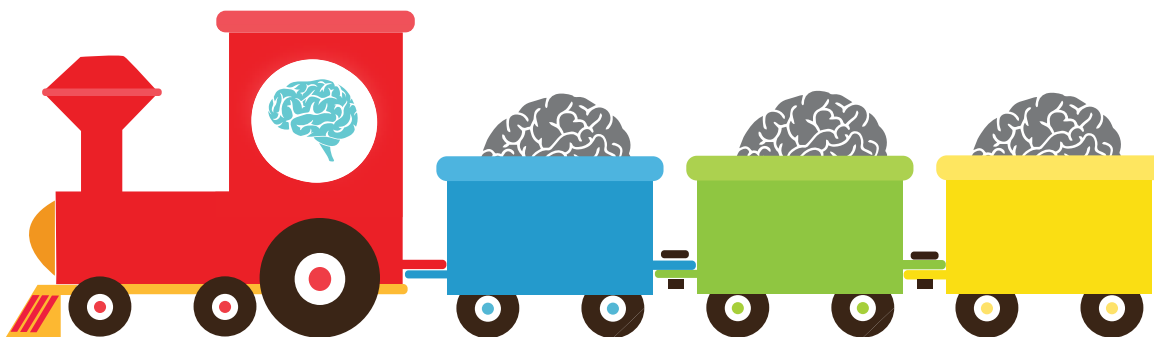
Interested in learning more?

Visit Brain Links: www.tndisability.org/brain

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

WHEN CONCUSSION SYMPTOMS ARE NOT GOING AWAY

A GUIDE FOR PARENTS OF CHILDREN WHO ARE FIVE AND UNDER



HAS YOUR CHILD HAD A CONCUSSION?

If your child has a concussion, also called a mild brain injury, there are certain steps you should take to help ease their symptoms. Usually concussion symptoms will clear by three months. For most children, symptoms will go away in two to four weeks. However, some children have symptoms that last longer than three months.

Here are some steps you should take when your child has a head injury.

FIRST THING AFTER INJURY

- Go to the doctor or emergency department.
- Follow the doctor's care plan. Watch your child carefully for changes.
- Have your child rest for the first one to three days as needed.
- Get a doctor's letter stating that your child has a concussion (or mild brain injury).
- Give copies of the letter to all childcare teachers and the school nurse. Keep a copy for yourself.



FOR A CHILD AT HOME

A young child may not be able to tell you what is wrong.
Look for changes in their behavior such as:

Touching or holding their head

Bothered by light or noise

Forgetting routines

Changes in walking or rolling

Changes in grasping, feeding, or potty training

More clingy and crying

Less social

Changes in eating or sleeping

More tantrums or "bad" behavior

Stomach hurts

Keep track of all changes. Write them down. Quickly tell a medical professional.

FIRST FEW DAYS TO WEEKS AFTER INJURY

After three days, make sure your child does not rest too much or have too much activity. It is safest to find a balance.

FOR A CHILD IN DAYCARE OR AT PRESCHOOL

Daycare or preschool personnel should put the doctor's letter into your child's medical chart and school file. Even if your child seems well now, they may have problems later as their brain matures. As your child goes back to daycare or preschool, make sure to:

- Ease the child back into school. Start with half days.
- You should expect mild symptoms. Watch your child's symptoms closely. Your child's symptoms should not be extreme. If you are worried, trust your gut. Talk to a medical professional.
- Ask the teacher to make simple changes to help your child stay at school longer:
 - Rest with head down
 - Take "brain breaks" in a quiet room
 - Wear a hat or turn down the lights
 - Use earplugs
 - Use a comfort item like a blanket or stuffed toy
 - Nap as needed
- Have the teachers track your child's symptoms and tell you which changes are helping. Use different types of changes as needed.

It's VERY important to keep your child safe after concussion. While healing, their brain could be injured again. Talk to your doctor. Find out what activities your child can and cannot do.





“Bad” behavior is sometimes the first sign that a young child has had an injury. Your child may be frustrated or angry about changes. They may not have the words to explain these feelings. Be patient. Dig deeper. Try to find out if the difficulty is with their thinking, listening, or talking. Ask your child’s teacher for help.

FOUR WEEKS AFTER INJURY

Is your child still facing problems? If so, follow these steps.

IF YOUR CHILD IS BETWEEN ZERO AND THREE YEARS OLD

Return to the doctor before four weeks if your child is struggling with symptoms. At 4 weeks, if your child is still having problems, follow these steps.

Talk to your doctor. Your child may need a referral to the Tennessee Early Intervention System (TEIS). Parents can also make referrals to TEIS. The TEIS website tells how to make a referral. Therapy can continue under TEIS until age 5 if they start receiving services before age three.

AFTER YOUR CHILD’S THIRD BIRTHDAY

Contact the local Special Education Supervisor. Start with your school district’s Central Office. Follow these steps:

- Set up a test / evaluation to see if your child needs services.
- Help make an Individualized Education Program (IEP) if your child needs services. The local school district provides the services.
 - Is your child in kindergarten? If so, ask the school [in writing](#) to start the testing process for special services.
- See Tennessee’s Support and Training for Exceptional Parents Program (STEP) for more help understanding special education.

ONE OR MORE YEARS AFTER INJURY

Sometimes symptoms seem to get better quickly. Then problems may appear in school a year or more after your child’s head injury. The brain matures as children grow older. We do not use some skills until we are old enough to need them.

- Ask for testing by the school if your child is having any type of problem. This might include learning, behavioral, emotions, or thinking.
- Tell the teachers about your child’s injury each new school year. Ask them to look for any signs of difficulty. Talking with teachers ahead of time can prevent bigger problems.

In some areas there are special clinics that focus just on concussion symptoms. Talk to your doctor about whether these are right for your child.



Remember - You can speak up for your child. Trust your gut. Stay involved.

Watch symptoms over time. Update your child's doctor. Stay in contact with the school. Concussion symptoms are real. Symptoms indicate the brain is healing and needs time and supports at home and school.

THINGS TO WATCH FOR OVER TIME (CHECK THOSE THAT YOU SEE)

- ☐ Mood swings, gets mad easily and changes in personality
- ☐ Trouble with attention and thinking
- ☐ Memory problems, especially things that just happened
- ☐ Anxiety, depression or difficulty handling stress
- ☐ Headaches
- ☐ Behavior that doesn't fit the time, place or people (loud in a library)
- ☐ Poor sleep and feeling tired too easily
- ☐ "Bad" or unwanted behavior
- ☐ Later: Grades dropping, falling behind other kids

NOTE:

Every brain injury is different. There is no set time that recovery takes. If your child is school-aged (five plus), ask for the school-aged parent guide.

FREE RESOURCES

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

KidCentral
<https://www.kidcentraltn.com>

Centers for Disease Control and Prevention
<https://www.cdc.gov/headsup/index.html>

Center on Brain Injury Research and Training
<https://cbirt.org/>

Tennessee Early Intervention System (TEIS)
<https://www.tn.gov/disability-and-aging/disability-aging-programs/teis.html>

Family Voices of Tennessee
<https://familyvoicestn.org>



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

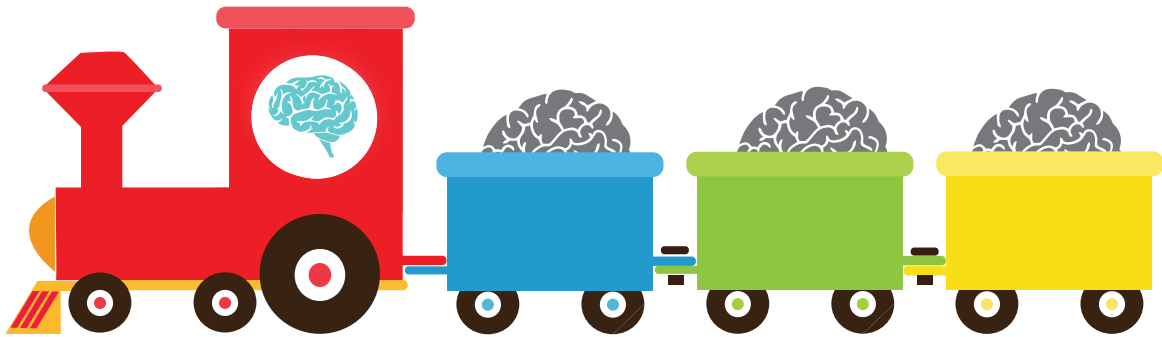


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CUANDO LOS SÍNTOMAS DE UNA CONCUSIÓN NO SE VAN

UNA GUÍA PARA PADRES DE NIÑOS CON HIJOS MENORES DE CINCO AÑOS



¿TU HIJO TIENE UNA CONCUSIÓN?

Si su hijo tiene una Concusión, también llamada lesión cerebral leve, hay ciertos pasos que debe tomar para ayudar a aliviar sus síntomas. Por lo general, los síntomas de una concusión desaparecerán a los tres meses. Para la mayoría de los niños, los síntomas desaparecerán en dos a cuatro semanas. Sin embargo, algunos niños tienen síntomas que duran mas de tres meses.

[Aquí hay algunos pasos que debes seguir cuando tu hijo tiene una lesión en la cabeza.](#)

LO PRIMERO DESPUÉS DE LA LESIÓN

- Dirijase al médico o al servicio de urgencias.
- Siga el plan de cuidado del médico. Observa cuidadosamente a su hijo para detectar cambios.
- Haga que su hijo descanse inicialmente de uno a tres días, según sea necesario.
- Obtenga una carta del médico que indique que tu hijo tiene una concusión (o lesión cerebral leve).
- Entregue copias de la carta a todos los maestros a cargo del cuidado y a la enfermera de la escuela. Guarde una copia para usted.



PARA UN NIÑO EN CASA

Es posible que un niño pequeño no pueda decirle que está mal.
Busque cambios en su comportamiento, tales como:

Tocarse o sostener su cabeza.

Más apegado y lloroso

Molesto por la luz o el ruido

Menos social

Olvida las rutinas

Cambios al comer o dormir.

Cambios en el caminar o rodar

Más rabietas o comportamiento "malo"

Cambios en el agarre, alimentación o entrenamiento para ir al baño. Dolor de estómago

Mantenga un registro de todos los cambios. Escríbalos. Informe rápidamente a un profesional médico.

DE LOS PRIMEROS DÍAS A LAS SEMANAS DESPUÉS DE LA LESIÓN

Después de tres días, asegúrese de que su hijo no descanse demasiado o tenga demasiada actividad. Es más seguro encontrar un balance.

PARA UN NIÑO EN LA GUARDERÍA O EN EL PREESCOLAR

El personal de guardería o preescolar debe poner la carta del médico en el expediente médico y el archivo escolar de su hijo. Incluso si su hijo parece estar bien ahora, pueden tener problemas más adelante a medida que su cerebro madura. Cuando su hijo regrese a la guardería o al preescolar, asegúrese de:

- Facilitar el regreso del niño a la escuela. Iniciar con medio día.
- Esperar síntomas leves. Observar atentamente los síntomas de su hijo. Los síntomas de su hijo no deben ser extremos. Si está preocupado, confíe en su instinto. Hable con un profesional médico.
- Pídale a la maestra que haga cambios simples para ayudar a su hijo a quedarse en la escuela por más tiempo:
 - Que descanse con la cabeza hacia abajo
 - Tomar descansos mentales en una habitación tranquila
 - Usar un sombrero o luces tenues
 - Usar tapones para los oídos
 - Usar un artículo de estabilidad emocional como una manta o un juguete de peluche
 - Dormir si es necesario
- Haga que los maestros registren los síntomas de su hijo y le digan qué cambios están ayudando. Use diferentes tipos de cambios según sea necesario.

Es MUY importante mantener a su hijo salvo después de una concusión. Mientras se cura, su cerebro podría lesionarse de nuevo. Hable con su médico. Averigüe qué actividades el niño puede y no puede hacer.





El "mal" comportamiento es a veces la primera señal de que un niño pequeño ha sufrido una lesión. Su hijo puede estar frustrado o enojado por los cambios. Es posible que no tenga las palabras para explicar estos sentimientos. Sea paciente. Indague más hondo. Trate de averiguar si la dificultad está en pensar, escuchar o hablar. Pida ayuda a la maestra de su niño.

CUATRO SEMANAS DESPUÉS DE LA LESIÓN

¿Su hijo sigue enfrentando problemas? Si es así, siga estos pasos.

SI SU HIJO ESTÁ ENTRE CERO Y TRES AÑOS

Hable con su médico. Su hijo puede necesitar una derivación al Sistema de Intervención Temprana de Tennessee (TEIS). Los padres también pueden hacer derivaciones a TEIS. El sitio web de TEIS dice cómo hacer derivaciones.

DESPUÉS DEL TERCER AÑO DE SU HIJO

Póngase en contacto con el supervisor local de educación especial. Comience con la Oficina Central de su distrito escolar. Siga estos pasos:

- Prepare una prueba/evaluación para ver si su hijo necesita servicios.
- Ayude a crear un Programa de educación individualizado (IEP) si su hijo necesita servicios. El distrito escolar local proporciona los servicios.
 - ¿Está su hijo en el jardín infantil? Si es así, pídale a la escuela [por escrito](#) que comience el proceso de prueba para servicios especiales.
- Vea el Programa de Apoyo y Capacitación para Padres Excepcionales de Tennessee (PASO) Para obtener más ayuda para entender la educación especial.

UNO O MÁS AÑOS DESPUÉS DE LA LESIÓN

A veces los síntomas parecen mejorar rápidamente. Luego, pueden aparecer problemas en la escuela un año o más después de la lesión en la cabeza de su hijo. El cerebro madura a medida que los niños crecen. No usamos algunas habilidades hasta que tengamos la edad suficiente para necesitarlas.

A medida que su hijo continúa en la escuela:

- Solicite que la escuela evalúe si su hijo tiene algún tipo de problema. Esto podría incluir aprendizaje, comportamiento, emociones, o pensamiento.
- Informe a los maestros sobre la lesión de su hijo cada nuevo año escolar. Pídeles que busquen cualquier señal de dificultad. Hablar con los maestros antes de tiempo puede prevenir problemas más grandes.

En algunas zonas hay clínicas especializadas que se centran sólo en los síntomas de las concusiones. Hable con su médico si estos son adecuados para su hijo.



Recuerde: usted puede hablar por su hijo. Confié en su instinto. Manténgase involucrado.

Observe los síntomas a lo largo del tiempo. Informe al médico de su hijo. Manténgase en contacto con la escuela. Los síntomas de una concusión son reales. Los síntomas indican que el cerebro está sanando y, necesita tiempo y apoyo en el hogar y la escuela.

COSAS A VERIFICAR EN EL TIEMPO(VERIFIQUE LOS QUE VE)

- ☐ Cambios de humor, se enoja fácilmente y cambia de personalidad.
- ☐ Problemas con la atención y el pensamiento.
- ☐ Problemas de memoria, especialmente las cosas que acaban de pasar.
- ☐ Ansiedad, depresión o dificultad para manejar el estrés.
- ☐ Dolores de cabeza
- ☐ Comportamiento que no se ajusta al tiempo, lugar o personas (ruidoso en una biblioteca)
- ☐ Pobre dormir y sentirse cansado con demasiada facilidad.
- ☐ Comportamiento "Malo" o no deseado
- ☐ Luego: Notas escolares bajando detrás de otros niños

NOTA:

Cada lesión cerebral es diferente. No hay tiempo establecido para que termine la recuperación. Si tu hijo esta en edad escolar (más de cinco años), pregunte por Guía para padres de niños en edad escolar.

RECURSOS GRATIS

Programa de lesión cerebrales traumáticas de Tennessee

<https://www.tn.gov/health/health-program-areas/fhw/tbi.html>
800-882-0611

KidCentral

<https://www.kidcentraltn.com>

Centros de Control y Prevención de Enfermedades

Programa de lesión cerebrales traumáticas de Tennessee

<https://www.cdc.gov/headsup/index.html>

Centro de Investigación y Entrenamiento de Lesiones Cerebrales

<https://cbirt.org/>

Sistema de Intervención Temprana de Tennessee (TEIS)

<https://www.tn.gov/disability-and-aging/disability-aging-programs/teis.html>

Family Voices de Tennessee

<https://familyvoicestn.org>



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

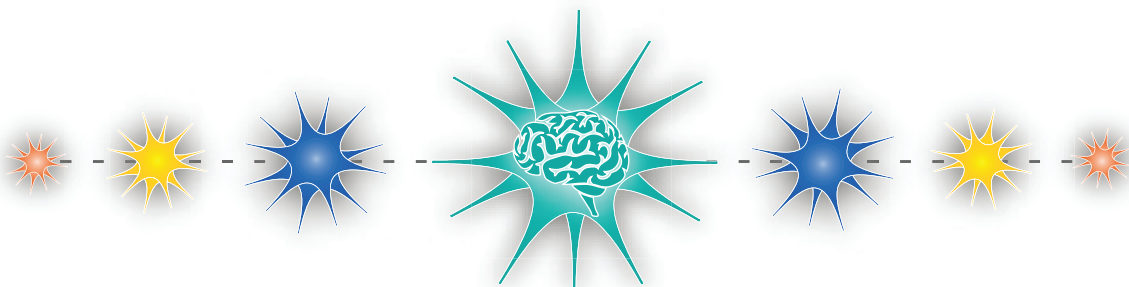


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WHEN CONCUSSION SYMPTOMS ARE NOT GOING AWAY

A GUIDE FOR PARENTS OF CHILDREN WHO ARE SCHOOL-AGED



HAS YOUR CHILD HAD A CONCUSSION?

If your child has a concussion, also called a mild brain injury, there are certain steps you should take to help ease their symptoms. Usually concussion symptoms will clear by three months. For most children, symptoms will go away in two to four weeks. However, some children have symptoms that last longer than three months.

If you have a child in school, three months is too long to wait and see if symptoms go away. You need to take action earlier, along with the school, to help your child do well in school and stay up-to-date.

Here are some steps you should take when your child has a head injury.

FIRST THING AFTER INJURY

- Go to the doctor or emergency department.
- Follow the doctor's care plan. Watch your child carefully for changes.
- Have your child rest for the first one to three days as needed.
- Get a doctor's letter stating that your child has a concussion (or mild brain injury).
- Give copies of the letter to all teachers and coaches, as well as the school nurse and principal. Keep a copy for yourself.



FIRST FEW DAYS TO WEEKS AFTER INJURY

After three days, make sure your child does not rest too much or have too much activity. It is safest to find a balance.

FOR A CHILD IN DAYCARE OR AT PRESCHOOL

School personnel should put the doctor's letter into your child's medical chart and school file. Even if your child seems well now, they may have problems later as their brain matures. As your child goes back to school, make sure to:

- Ease the child back into school when they can focus for at least 30 minutes. Start with half days.
- Ask the teacher to make simple changes to help your child's symptoms. For example, if your child had a broken arm, another student would take notes for him until it heals. There are other changes that could help at any time:
 - Rest with head down and/or eyes closed
 - Take "brain breaks" in a quiet room
 - Wear a hat or turn down the lights
 - Use earplugs
- Have the teachers track your child's symptoms and note which changes are helping. Use different types of changes as needed.
- Make a clear plan with the teachers to assign only **the most needed** classwork and homework. Students should **make up** only the most needed work.

FOUR TO SIX WEEKS AFTER INJURY

Is your child still having problems? It may be time to make the classroom changes more official with a **504 Plan** at school. A 504 Plan is a formal plan made just for your child. The plan includes supports the school gives to help your child to do his or her best. The changes or supports stop a little at a time when your child no longer needs them. The changes are called "accommodations" in a 504 Plan.

Examples of these changes (accommodations) may include:

- Longer time for exams or classwork
- "Brain breaks" as needed
- Sunglasses to help with headaches
- Checklists for school work and homework

If state testing is coming up soon, your child may need a 504 Plan quickly. This plan will allow for more time on a test. A doctor can also write a letter asking that the child skip testing for now.

**Remember - You can speak up for your child.
Trust your gut. Stay involved.**

Watch symptoms over time. Update your child's doctor. Stay in contact with the school. Concussion symptoms are real. Symptoms tell you that the brain is still healing and needs time and supports at home and school.





"Bad" behavior is sometimes the first sign that a child has had a brain injury. Your child may be confused about what is happening. Your child may be frustrated or angry about changes. They may not have the words to explain these feelings. Be patient. Dig deeper. Try to find out if the difficulty is with their thinking, listening, or talking. Ask your child's teacher to help.

THREE MONTHS AFTER INJURY

Is your child still facing problems? It may be time to do two things:

- Ask the school to test your child for needed services. Ask this **in writing**.
- Ask the school about scheduling a "neuropsychological evaluation". This is a different test done by a brain specialist (neuropsychologist). This person is trained to understand how the brain is working. They will test the most basic parts of learning like attention, memory, and organization. They will give ideas about how to best teach your child and helpful changes for the classroom.
 - With this test and input, you and the school will decide whether to keep (or start) a 504 Plan. Or, it might be best to make an **Individualized Education Program (IEP)** for your child. An IEP might include working with a Special Educator, Speech Therapist, or Occupational Therapist at school
 - See Tennessee's Support & Training for Exceptional Parents Program (STEP) for help with the special education process. For more help, see the Center on Brain Injury Research and Training website.

ONE OR MORE YEARS AFTER INJURY

Sometimes symptoms seem to get better quickly. Then problems may appear in school a year or more after your child's head injury. The brain matures as children grow older. We do not use some skills until we are old enough to need them.

- Ask for testing by the school if your child is having any type of problem. This might include learning, behavior, emotions, or thinking.
 - See the steps listed under "Three Months After Injury"
- Tell the teachers about your child's injury each new school year. Ask them to look for any signs of difficulty. Talking with teachers ahead of time can prevent bigger problems.

In some areas there are special clinics that focus just on concussion symptoms. Talk to your doctor about whether these are right for your child.



Returning to Sports and Other Physical Activity

Student athletes must be cleared by a medical professional before returning to play. This person should be trained in concussion care. They will probably recommend a gradual return to sports.

Your child should not return to a sport when they are still taking medicine to control pain. They should not return to sports when they need changes or adjustments in their classes.

THINGS TO WATCH FOR OVER TIME (CHECK THOSE THAT YOU SEE)

- ☐ Mood swings, gets mad easily and changes in personality
- ☐ Trouble with attention and thinking
- ☐ Memory problems, especially things that just happened
- ☐ Anxiety, depression or difficulty handling stress
- ☐ Headaches
- ☐ Behavior that doesn't fit the time, place or people (loud in a library)
- ☐ Poor sleep and feeling tired too easily
- ☐ "Bad" or unwanted behavior
- ☐ Later: Grades dropping, falling behind other kids

FREE RESOURCES

Tennessee Traumatic Brain Injury Program

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

Tennessee Youth Sports League Safe Stars Initiative

<https://www.tn.gov/health/health-program-areas/fhw/injury-and-violence-prevention-programs/ivp-programs/safe-stars-initiative.html>

KidCentral

<https://www.kidcentraltn.com>



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



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Center on Brain Injury Research and Training

<https://cbirt.org/>

Centers for Disease Control and Prevention

<https://www.cdc.gov/headsup/index.html>

Family Voices of Tennessee

<https://familyvoicestn.org>

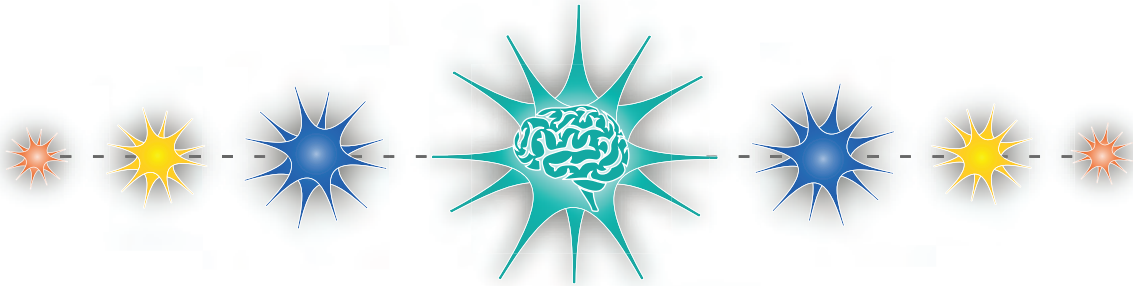


NOTE:

Every brain injury is different. There is no set time that recovery takes. If your child is zero to five years old, ask for the "zero to five" parent guide.

CUANDO LOS SÍNTOMAS DE UNA CONCUSIÓN NO SE VAN

UNA GUÍA PARA PADRES DE NIÑOS QUE ESTÁN EN EDAD ESCOLAR



¿TU HIJO TIENE UNA CONCUSIÓN?

Si su hijo tiene una Concusión, también llamada lesión cerebral leve, hay ciertos pasos que debes tomar para ayudar a aliviar sus síntomas. Por lo general, los síntomas de una concusión desaparecerán a los tres meses. Para la mayoría de los niños, los síntomas desaparecerán en dos a cuatro semanas. Sin embargo, algunos niños tienen síntomas que duran mas de tres meses.

Si tiene un hijo en edad escolar, tres meses es demasiado tiempo para esperar y ver si los síntomas desaparecen. Debe actuar antes, junto con la escuela, para ayudar a su hijo a tener un buen desempeño en la escuela y mantenerse al día.

Aquí hay algunos pasos que debes seguir cuando su hijo tiene una lesión en la cabeza.

LO PRIMERO DESPUÉS DE LA LESIÓN

- Diríjase al médico o al servicio de urgencias.
- Siga el plan de cuidado del médico. Observe cuidadosamente a su hijo para detectar cambios.
- Haga que su hijo descanse durante uno a tres días, según sea necesario.
- Obtenga una carta del médico que indique que su hijo tiene una concusión (o lesión cerebral leve).
- Entregue copias de la carta a todos los maestros y entrenadores, así como a la enfermera de la escuela y al director. Guarda una copia para usted.



LOS PRIMEROS DÍAS A LAS SEMANAS DESPUÉS DE LA LESIÓN

Después de tres días, asegúrese de que su hijo no descansa demasiado o tenga demasiada actividad. Es más seguro encontrar un balance.

PARA UN NIÑO EN LA GUARDERÍA O EN EL PREESCOLAR

El personal de la escuela debe poner la carta del médico en el expediente médico y el archivo escolar de su hijo. Incluso si su hijo parece estar bien ahora, pueden tener problemas más adelante a medida que su cerebro madura. Cuando su hijo regrese a la escuela, asegúrese de:

- Retornar el niño a la escuela cuando pueda concentrarse durante al menos 30 minutos. Iniciar con medio día.
- Pedir a la maestra que haga cambios simples para ayudar a los síntomas de su hijo. Por ejemplo, si su hijo tenía un brazo roto, otro estudiante tomaría notas por él hasta que se cure. Hay otros cambios que podrían ayudar en cualquier momento:
 - Descansar con la cabeza baja y/o los ojos cerrados.
 - Tomar descansos mentales en una habitación tranquila
 - Usar un sombrero o luces tenues
 - Usar tapones para los oídos
- Haga que los maestros observen los síntomas de su hijo y anoten qué cambios están ayudando. Usar diferentes tipos de cambios según sea necesario.
- Haga un plan claro con los maestros para asignar **solo** el trabajo en clase y la tarea más necesarios. Los estudiantes deben **hacer** solamente el trabajo más necesario.

CUATRO A SEIS SEMANAS DESPUÉS DE LA LESIÓN

¿Su hijo todavía tiene problemas? Puede que sea el momento de hacer que los cambios en el aula sean más oficiales con un **Plan 504** en la escuela. Un Plan 504 es un plan formal hecho solo para su hijo. El plan incluye apoyos de la escuela para ayudar a su hijo a hacer lo mejor posible. Los cambios o apoyos se detienen poco a poco cuando su hijo ya no los necesita. Los cambios se llaman "acomodaciones" en un Plan 504.

Ejemplos de estos cambios (acomodaciones) pueden incluir:

- Mayor tiempo para exámenes o trabajos de la clase.
- Descansos mentales según sea necesario.
- Gafas de sol para ayudar con dolores de cabeza.
- Listas de verificación para el trabajo escolar y la tarea.

Si se aproximan las pruebas estatales, es posible que su hijo necesite un Plan 504 inmediatamente. Este plan le permitirá más tiempo en una prueba. Un médico también puede escribir una carta pidiendo que el niño salte las pruebas por ahora.

**Recuerde: usted puede hablar por su hijo.
Confíe en su instinto. Manténgase involucrado.**

Observe los síntomas a lo largo del tiempo. Informe al médico de su hijo. Manténgase en contacto con la escuela. Los síntomas de un concusión son reales. Los síntomas te dicen que el cerebro todavía está sanando y necesita tiempo y apoyo en casa y en la escuela.





El mal comportamiento es a veces la primera señal de que un niño ha tenido una lesión cerebral. Su hijo puede estar confundido acerca de lo que está sucediendo. Su hijo puede estar frustrado o enojado por los cambios. Es posible que no tengan las palabras para explicar estos sentimientos. Sea paciente. Indague más hondo. Trate de averiguar si la dificultad está en su forma de pensar, escuchar o hablar.

Pídale ayuda a la maestra de su hijo.

TRES MESES DESPUÉS DE LA LESIÓN

¿Su hijo sigue enfrentando problemas? Puede que sea hora de hacer dos cosas:

- Pídale a la escuela que evalúe a su hijo para los servicios que necesita. Pídale **por escrito**.
- Pregunte a la escuela sobre la programación de una "evaluación neuropsicológica". Esta es una prueba diferente hecha por un especialista del cerebro (neuropsicólogo). Esta persona está entrenada para entender cómo está trabajando el cerebro. Examinarán las partes más básicas del aprendizaje, como la atención, la memoria y la organización. Le darán ideas sobre cómo enseñar mejor a su hijo y sobre cambios útiles para el aula.
 - Con esta prueba y aportes, usted y la escuela decidirán si deben mantener (o comenzar) un Plan 504. O, podría ser mejor hacer un **Programa de Educación Individualizada (IEP)** para su hijo. Un IEP puede incluir trabajar con un educador especial, un terapeuta del habla o un terapeuta ocupacional en la escuela.
 - Consulte el Programa de Apoyo y Capacitación para Padres Excepcionales de Tennessee (STEP) para obtener ayuda con el proceso de educación especial. Para obtener más ayuda, consulte el sitio web del Centro de investigación y capacitación sobre lesiones cerebrales.

UNO O MÁS AÑOS DESPUÉS DE LA LESIÓN

A veces los síntomas parecen mejorar rápidamente. Luego, pueden aparecer problemas en la escuela un año o más después de la lesión en la cabeza de su hijo. El cerebro madura a medida que los niños crecen. No usamos algunas habilidades hasta que tengamos la edad suficiente para necesitarlas. **A medida que su hijo continúa en la escuela:**

- Solicite que la escuela evalúe si su hijo tiene algún tipo de problema. Esto podría incluir aprendizaje, comportamiento, emociones, o pensamiento.
 - Vea los pasos enumerados en "Tres meses después de la lesión"
- Informe a los maestros sobre la lesión de su hijo cada nuevo año escolar. Pídeles que busquen cualquier señal de dificultad. Hablar con los maestros antes de tiempo puede prevenir problemas más grandes.

En algunas zonas hay clínicas especializadas que se centran sólo en los síntomas de las concusiones. Hable con su médico si estos son adecuados para su hijo.



Volviendo a los deportes y otras actividades físicas

Los actividades de estudiantes atletas deben ser aprobadas por un profesional médico antes de volver a jugar. Esta persona debe ser entrenada en la atención de concusiones. Probablemente recomendarán un regreso gradual a los deportes.

Su hijo no debe regresar a un deporte cuando aún esté tomando medicamentos para controlar el dolor. No debe regresar a los deportes cuando necesiten cambios o ajustes en sus clases.

COSAS A VERIFICAR EN EL TIEMPO(VERIFIQUE LOS QUE VE)

- ☐ Cambios de humor, se enoja fácilmente y cambia de personalidad.
- ☐ Problemas con la atención y el pensamiento.
- ☐ Problemas de memoria, especialmente las cosas que acaban de pasar.
- ☐ Ansiedad, depresión o dificultad para manejar el estrés.
- ☐ Dolores de cabeza.
- ☐ Comportamiento que no se ajusta al tiempo, lugar o personas (ruidoso en una biblioteca)
- ☐ Pobre dormir y sentirse cansado con demasiada facilidad.
- ☐ Comportamiento "Malo" o no deseado.
- ☐ Luego: Notas escolares bajando detrás de otros niños.

RECURSOS GRATIS

Programa de lesión cerebrales traumáticas de Tennessee

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

Iniciativa Safe Stars de la Liga Deportiva de Tennessee

<https://www.tn.gov/health/health-program-areas/fhw/injury-and-violence-prevention-programs/ivp-programs/safe-stars-initiative.html>

KidCentral

<https://www.kidcentraltn.com>



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



@BrainLinksTN



Centro de Investigación y Entrenamiento de Lesiones Cerebrales

<https://cbirt.org/>

Centros de Control y Prevención de Enfermedades

<https://www.cdc.gov/headsup/index.html>

Family Voices de Tennessee

<https://familyvoicestn.org>



NOTA:

Cada lesión cerebral es diferente. No hay tiempo establecido para que termine la recuperación. Si su hijo tiene de cero a cinco años, solicite la guía para padres "de cero a cinco".

WHEN CONCUSSION SYMPTOMS ARE NOT GOING AWAY

A GUIDE FOR ADULTS WITH CONCUSSION



HAVE YOU HAD A CONCUSSION?

If you have had a concussion, also called a mild brain injury, there are things you can do to feel better. Usually concussion symptoms will go away by three months. Most people feel better in two to four weeks. However, some people have symptoms that last longer than three months.

Remember: You don't have to hit your head to get a concussion. A hard bump to the body can also cause a concussion.

If you have an active lifestyle, three months may be too long to wait to see if symptoms go away. You need to act sooner to safely and successfully return to school, work and physical activity.

FIRST THING AFTER INJURY

- Go to the doctor or hospital.
- Rest for the first one to three days as needed.
- Follow the doctor's care plan.
- Watch carefully for changes.
- Have someone else watch, too.

Get a doctor's letter saying that you have a concussion (or mild brain injury) and when you may return part-time or full-time to school or work.

FIRST FEW DAYS TO WEEKS AFTER INJURY

After three days, start to ease back into daily routine, but try not to do too much. Too much activity can make symptoms last longer. **Did you know that research also shows that too much rest can do the same?** It is safest to find a balance. If you can, put off big work, legal or financial decisions during this time.

TRY NOT TO PUSH THROUGH YOUR SYMPTOMS

RETURNING TO COLLEGE (OR OTHER TRAINING AFTER HIGH SCHOOL)

Ease back into school. You may need to start with a shorter schedule. Leave class as symptoms get worse and before they become too bad.

Take a break when you need one.

Start by talking to each teacher. Show them the doctor's note. Tell them what happened. Let them know how you are feeling and what you think may help you or what you may need to do.

Examples of helpful changes:

- "I may need to wear sunglasses because I'm sensitive to light."
- "I may need to put my head down to rest. I'd like to do this rather than leave so I can still listen."
- "I can't handle a whole class yet, so I may need to leave early."
- "I may need extra time for this test/project because it takes longer for me to think and plan."



Let teachers know that you do not expect these changes to last long, but you do need them now in order to do your best. If you need help in making these changes, talk to the school's Disability Services office.

Tennessee's TBI Service Coordinators are people who can help you at no cost. They know about concussion (brain injury) and can help with what you need. **800-882-0611**

RETURNING TO WORK

You may need to give your employer the letter from your doctor that tells why you were out and gives the okay to return.

If possible, work with your employer to return slowly (half day at first) to see if your symptoms get worse.

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 are okay to make on your own. Work with your employer to make other changes. Tell them that these changes may not last long. It may help to talk with your Human Resources office.



FOUR TO SIX WEEKS AFTER INJURY

If your symptoms have not gone away by four weeks after injury, you may need to see a symptom specialist. **What is a symptom specialist?** New research shows that there are different types of symptom groups like having problems with thinking, headaches and balance. Treatment for your symptom group can help you feel better sooner. Talk to your doctor about sending you sooner if needed. **Talk about your injury and problems that have started with the specialist.**

Below are some of the problems and who your doctor might send you to see:

Problem	Referral (Specialist who can help)
Thinking (Cognitive) and Tiredness (Fatigue)	Neuropsychologist, specialized concussion clinic, brain trauma clinic, Speech Language Pathologist
Balance (Vestibular)	Physical Therapist, specialized concussion clinic
Problem with eye movement (Ocular-Motor)	Neuro-ophthalmologist, Occupational Therapist
Headache/Migraine	Neurologist
Neck pain (Cervical)*	Chiropractor, Physical Therapist
Changes in feelings, Sad, Angry (Mood, Anxiety)	Psychologist, Counselor, Neuropsychologist, Psychiatrist

**If the neck is out of place, it can cause headaches and other concussion symptoms.*

ONGOING

Continue to use your helpful changes at work and school. If you start new classes and jobs, you may need to think of new changes for those. Look at a strategy list like the **Strategies and Accommodations Tool** at: <http://bit.ly/4ngy8GD> for ideas or talk to a specialist.

**Choose a key person in your life to help you with ideas for helpful changes while you heal.
It is good to know and to ask for what you need.**



DANGER SIGNS

If you see any of these signs, CALL 911
or go to the hospital immediately

- 🧠 Nausea (very sick stomach) or vomiting
- 🧠 One pupil larger than the other
- 🧠 Headache that does not go away
- 🧠 Seizures: eyes fluttering, body going stiff or shaking, staring into space
- 🧠 Loss of consciousness, even brief
- 🧠 Disoriented/confused
- 🧠 Hands shake, body shaking, muscles get weak, loss of muscle tone

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

OLDER ADULTS

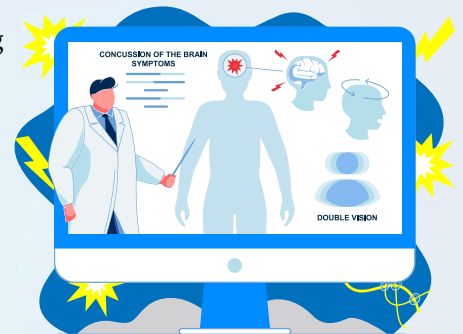
As we age, changes can take place in our brains. A fall or other accident is more likely to cause a concussion or even a brain bleed. A bleed may take more time to show up in someone who is older, so they need to be watched more closely over several days. **If any danger signs are seen (see box) - in anyone at any age - call 911 or go to the hospital right away.**

WHAT'S GOING ON? IS THERE REALLY ANYTHING WRONG WITH ME?

Concussion symptoms can seem to come and go or get worse. Sometimes you may even doubt if there is a problem. When symptoms seem to change, it is usually because your body or your mind is tired. Symptoms can also change if you drink alcohol or take a drug (even legal medicine). Being sick, being upset, in pain, or stressed can also cause changes. The better you can manage these other things, the better your symptoms will be. Symptoms are real. They tell you that the brain is still healing and needs time.

Take time to make helpful changes at home, school and work until you don't need them.

- TN Statewide Crisis Phone Line: **855-CRISIS-1**
- See the **Personal Guide for Everyday Living after Concussion/Traumatic Brain Injury** at <https://www.tndisability.org/rehabilitation>



BEHAVIOR CHANGES

Sometimes angry behavior, like yelling at others, is the first sign that you have had a brain injury. You may be mad or sad that you can't do something that was easy before the injury. Others may not understand.

Be patient with yourself. Try to figure out what the real problem is.

Ask yourself these questions: Can I pay attention? Has my vision changed? Am I in pain? Maybe you just can't handle things like you used to. Try to figure out if there are any helpful changes you can make. Talk with someone who can help you - a trusted friend, family member or a specialist.

RETURNING TO SPORTS AND OTHER PHYSICAL ACTIVITY AND PHYSICAL JOBS

Student athletes, recreational athletes and people with physical jobs should be cleared by a medical professional before going back to their sport or to a job.

- You should not return to sports (or a physical job) if you still have concussion symptoms.
- You should also not return when you are still taking medicine for pain or other concussion symptoms. See the National Collegiate Athletic Association guidelines:
<https://www.ncaa.org/sport-science-institute/concussion>

THINGS TO WATCH FOR OVER TIME

Check all those that you see:

- ☐ Mood swings, getting mad easier, changes in how you act
- ☐ Trouble with staying on task and thinking
- ☐ Memory problems - things that just happened
- ☐ Anxiety, depression, or problem handling stress
- ☐ Headaches
- ☐ Behavior that doesn't fit the time, place or people (loud in a library)
- ☐ Poor sleep and feeling tired too easily
- ☐ Later: Problems with work at school or job



EVERY BRAIN INJURY IS DIFFERENT.
There is no set time that getting better takes.

DOMESTIC VIOLENCE

If your injury is the result of someone you know who is hurting you, ask for help.
Tell the doctor. **Call 911** if it is an emergency.

Call the Tennessee Statewide Domestic Violence Helpline at **800-356-6767**.

You can find help at the Tennessee Coalition to End Domestic Violence and Sexual Violence: <https://www.tncoalition.org/>.

For a child: <https://www.tn.gov/dcs/program-areas/child-safety/reporting/child-abuse.html>
or call 877-237-0004

For an older person: <https://www.tn.gov/aging/learn-about/elder-abuse.html> or call 888-277-8366

ALCOHOL ABUSE

Many people feel that alcohol changes them more than it did before their injury. Thinking becomes harder and their emotions are more out of control. It is wise to avoid alcohol and drugs while you are getting better. Never drink or use drugs and drive.



FREE RESOURCES

Tennessee Traumatic Brain Injury Program:

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

Tennessee Traumatic Brain injury Service Coordinators:

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

Tennessee Vocational Rehabilitation:

<https://www.tn.gov/humanservices/ds/vocational-rehabilitation.html>

Supported Employment:

<https://www.tn.gov/behavioral-health/mental-health-services/ips-supported-employment.html>

WorkAbleTN:

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

Brainline:

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

Brain Injury Association of America:

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



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

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CUANDO LOS SÍNTOMAS DE CONMOCIÓN CEREBRAL NO DESAPARECEN

UNA GUÍA PARA ADULTOS CON CONMOCIÓN CEREBRAL



¿HA TENIDO UNA CONMOCIÓN?

Si usted ha tenido una conmoción cerebral, también llamada una lesión cerebral leve, hay cosas que puede hacer para sentirse mejor. Usualmente los síntomas de conmoción desaparecerán a los tres meses. La mayoría de la gente se siente mejor en dos o cuatro semanas. Sin embargo, algunas personas tienen síntomas que duran más de tres meses.

Recuerde: Una conmoción cerebral no siempre surge de golpearse en su cabeza. Una colisión fuerte en el cuerpo también puede ocasionar una conmoción.

Si tiene un estilo de vida activo, tres meses pueden ser demasiado tiempo de espera para ver si los síntomas desaparecen. Usted necesita actuar más pronto para regresar con seguridad y éxito a su escuela, trabajo y actividad física.

LO PRIMERO DESPUÉS DE LA LESIÓN

- Diríjase al médico o al hospital.
- Descanse de uno a tres días, según sea necesario.
- Siga el plan de cuidado del médico.
- Vigile cuidadosamente si hay algún cambio.
- Pida a otra persona que también lo vigile.

Obtenga una carta de su médico diciendo que tiene una conmoción cerebral (o una lesión cerebral leve) y cuándo puede regresar a la escuela o al trabajo ya sea medio tiempo o tiempo completo.

DE LOS PRIMEROS DÍAS A UNAS SEMANAS DESPUÉS DE LA LESIÓN

Después de tres días, comience a regresar de nuevo a su rutina diaria, pero trate de no hacer demasiado. Demasiada actividad puede hacer que los síntomas duren más tiempo. ¿Sabía que los estudios también muestran que demasiado descanso puede hacer lo mismo? Es más seguro encontrar un balance. Si puede, aplaze trabajos grandes, y decisiones legales o financieras durante este tiempo.

TRATE DE NO SEGUIR ADELANTE SI TIENE SÍNTOMAS

REGRESANDO A LA UNIVERSIDAD (U OTRA CAPACITACIÓN DESPUÉS DE PREPARATORIA)

Regrese paulatinamente a la escuela. Usted quizá necesite comenzar con un horario reducido. Deje las clases si los síntomas empeoran y antes de que se tornen demasiado malos. Tome un descanso cuando lo necesite. Comience hablando con cada maestro. Muéstreles la nota del médico. Dígales lo que sucedió. Comuníqueles cómo se siente y lo que piensa que puede ayudarle o lo que quizá necesite hacer.

Ejemplos de cambios útiles:

- “Quizá necesite usar lentes oscuros porque estoy sensible a la luz.”
- “Quizá necesite recostar la cabeza para descansar. Quisiera hacer esto en vez de salir, de modo que aún pueda escuchar.”
- “No puedo tomar una clase completa, así que quizá necesite salir temprano.”
- “Quizá necesite tiempo extra para este examen/proyecto porque me toma más tiempo pensar y planear.”



Informe a sus maestros que no espera que estos cambios duren mucho, pero los necesita ahora para dar lo mejor de usted. Si necesita ayuda para hacer estos cambios, hable con la oficina de Servicios de Discapacidad de su escuela.

Los Coordinadores de Servicio de TBI pueden ayudarle sin costo.

Ellos conocen acerca de la conmoción (lesión cerebral) y pueden ayudarle con lo que requiera. **800-882-0611**

REGRESANDO AL TRABAJO

Quizá necesite darle a su patrón la carta de su médico que dice por qué usted estuvo ausente y que da la autorización para regresar.

Si es posible, negocie con su patrón para regresar lentamente (primero medio tiempo) para ver si sus síntomas empeoran.

En algunos trabajos, usted puede hacer cambios sin preguntarle al patrón. Quizá pueda apagar la luz de su oficina privada, reducir el brillo de su computadora, o cerrar la puerta. Haga cualquier cambio que sepa que está bien hacerlo usted mismo. Negocie con su patrón para hacer otros cambios. Dígale que estos cambios quizá no duren mucho. Tal vez ayude hablar con su oficina de Recursos Humanos.



CUATRO A SEIS SEMANAS DESPUÉS DE LA LESIÓN

Si sus síntomas no han desaparecido a las cuatro semanas después de la lesión, podría necesitar ver a un especialista en síntomas. **¿Qué es un especialista en síntomas?** Los nuevos estudios muestran que hay diferentes tipos de grupos de síntomas como tener problemas al pensar, dolores de cabeza y equilibrio. Un tratamiento para su grupo de síntomas puede ayudarle a sentirse mejor más pronto. Hable con su médico acerca de enviarlo antes si es necesario. **Hable con el especialista acerca de su lesión y los problemas que han comenzado.**

Abajo hay algunos de los problemas y a quién podría enviarlo su médico:

Problema	Referir a (Especialista que puede ayudar)
Pensamiento (Cognitivo) y Cansancio (Fatiga)	Neuropsicólogo, clínica especializada en conmociones, clínica de trauma cerebral, patólogo de lenguaje hablado
Equilibrio (Vestibular)	Terapeuta físico, clínica especializada en conmociones
Problema con movimiento del ojo (ocular-motriz)	Neuro-oftalmólogo, terapeuta ocupacional
Dolor de cabeza / migraña	Neurólogo
Dolor de cuello (Cervical)*	Quiropráctico, terapeuta físico
Cambios en sentimientos, triste, enojado (Estado de ánimo, Ansiedad)	Psicólogo, consejero, neuropsicología, psiquiatra

**Si el cuello está fuera de lugar, puede ocasionar dolores de cabeza y otros síntomas de conmoción.*

CONTINUAMENTE

Continúe usando sus cambios útiles, en el trabajo y la escuela. Si comienza nuevas clases y trabajos, quizá necesite pensar en nuevos cambios para ellos. Vea una lista estratégica como la Herramienta de estrategias y acomodo en:

<http://bit.ly/3TCuFVh> para obtener ideas o hable a un especialista.

**Escoja una persona clave en su vida para ayudarle con ideas para cambios útiles mientras sana.
Es bueno saber y solicitar lo que necesita.**

SEÑALES DE PELIGRO

Si ve cualquiera de estas señales LLAME
AL 911 o vaya al hospital de inmediato



- 🧠 Náuseas (malestar estomacal) y vómito
- 🧠 Una pupila más grande que la otra
- 🧠 Dolor de cabeza que no desaparece
- 🧠 Espasmos, ojos que se mueven con rapidez, rigidez o convulsiones en el cuerpo, se queda viendo al vacío
- 🧠 Pérdida de la conciencia, incluso si es breve
- 🧠 Desorientación/confusión
- 🧠 Manos temblorosas, temblores corporales, músculos debilitados, pérdida de tono muscular

https://www.cdc.gov/heads-up/?CDC_AAref_Val=https://www.cdc.gov/heads-up/basics/concussion_danger_signs.html

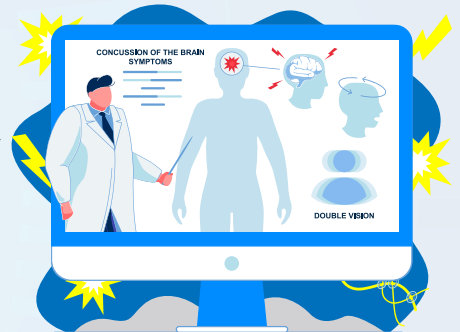
ADULTOS MAYORES

Conforme envejecemos, pueden tener lugar cambios en nuestros cerebros. Una caída u otro accidente causa con mayor probabilidad una conmoción o incluso un sangrado cerebral. Un sangrado puede tomar más tiempo en mostrarse en alguien de mayor edad, así que necesita ser vigilado con más cercanía durante varios días. **Si se ven señales de algún daño (vea el recuadro) - en cualquier persona de cualquier edad - llame al 911 o vaya al hospital de inmediato.**

¿QUÉ ESTÁ PASANDO? ¿HAY REALMENTE ALGO MALO CONMIGO?

Puede parecer que los síntomas de conmoción vienen y se van, o que empeoran. Algunas veces quizá hasta dude si hay un problema. Cuando los síntomas parecen cambiar, es usualmente porque su cuerpo o su mente están cansados. Los síntomas también pueden cambiar si toma alcohol o una droga (incluso una medicina legal). Estar enfermo, enojado, con dolor o estresado puede ocasionar cambios también. Mientras mejor pueda manejar estas otras cosas, sus síntomas serán mejores. Los síntomas son reales. Le dicen que el cerebro todavía está sanando y necesita tiempo. **Tómese el tiempo de hacer cambios útiles en la casa, la escuela y el trabajo, hasta que no los necesite.**

- Línea telefónica estatal de crisis en TN: **855-CRISIS-1**
- Consulte la Guía personal para vivir cada día después de una conmoción lesión cerebral o traumática en: <https://www.tndisability.org/rehabilitation>



CAMBIOS EN EL COMPORTAMIENTO

Algunas veces un comportamiento con enojo, como gritarle a otros, es la primera señal de que tiene una lesión cerebral. Puede estar enojado o triste por no poder hacer algo que era fácil antes de la lesión. Quizá otros no lo entiendan. Sea paciente con sí mismo. Trate de averiguar cuál es el problema verdadero.

Hágase estas preguntas: ¿Puedo poner atención? ¿Mi vista ha cambiado? ¿Tengo dolor? Quizá tan sólo no puede de manejar las cosas como solía hacerlo. Intente averiguar si hay algún cambio útil que pueda hacer. Hable con alguien que pueda ayudarle - un amigo, familiar o especialista en quien confíe.

REGRESANDO A DEPORTES Y OTRAS ACTIVIDADES FÍSICAS Y TRABAJOS CON ESFUERZO FÍSICO

Los estudiantes atletas, atletas recreativos y personas con trabajos con esfuerzo físico deben ser autorizadas por un profesional médico antes de regresar a su deporte o trabajo.

- Usted no debe regresar a los deportes (o a un trabajo con esfuerzo físico) si aún tiene síntomas de conmoción cerebral.
- Tampoco debe regresar cuando aún está tomando medicina para el dolor o para otros síntomas de conmoción cerebral. Consulte las directrices de la Asociación Nacional de Atletica Colegial:

<https://www.ncaa.org/sport-science-institute/concussion>

COSAS A VIGILAR DURANTE CON EL TIEMPO



Marque todos los que vea:

- ☐ Cambios de estado de ánimo, se enoja fácilmente, cambios en cómo actúa
- ☐ Problema para quedarse en una tarea y para pensar
- ☐ Problemas de memoria - cosas que acaban de pasar
- ☐ Ansiedad, depresión o problemas manejando el estrés
- ☐ Dolores de cabeza
- ☐ Comportamiento que no se ajusta al tiempo, lugar o personas (ruidoso en una biblioteca)
- ☐ Sueño deficiente y sentirse cansado con demasiada facilidad
- ☐ Más tarde: Problemas con los trabajos de la escuela o el trabajo

CADA LESIÓN CEREBRAL ES DIFERENTE.
No hay un tiempo establecido para sentirse mejor.

VIOLENCIA DOMÉSTICA

Si su lesión es el resultado de que alguien que conoce le está lastimando, pida ayuda.

Dígale al doctor. **Llame al 911** si es una emergencia.

Llame a la Línea telefónica de Ayuda para Violencia Doméstica del Estado de Tennessee al **800-356-6767**.

Puede encontrar ayuda en la Coalición de Tennessee para Detener la Violencia Doméstica y la Violencia Sexual: <https://www.tncoalition.org/>.

Para niños: <https://www.tn.gov/dcs/program-areas/child-safety/reporting/child-abuse.html>

o llame al 877-237-0004

Para una persona mayor: <https://www.tn.gov/disability-and-aging/resource-directory/elder-abuse.html> o llame al 888-277-8366

ABUSO DE ALCOHOL

Mucha gente siente que el alcohol los cambia más de lo que lo hacía antes de su lesión. Pensar se vuelve más difícil y sus emociones están más fuera de control. Es sabio evitar el alcohol y las drogas mientras está mejorándose. Nunca conduzca si toma o ha consumido drogas.



RECURSOS GRATIS

Programa de Lesiones Cerebrales Traumáticas de Tennessee:

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

Coordinadores de Servicio de Lesión Cerebral Traumática de Tennessee:

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

Rehabilitación Vocacional de Tennessee:

<https://www.tn.gov/humanservices/ds/vocational-rehabilitation.html>

Empleo Apoyado:

<https://www.tn.gov/behavioral-health/mental-health-services/ips-supported-employment.html>

WorkAbleTN:

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

Brainline:

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

Asociación de Lesiones Cerebrales de América:

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



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

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Brain Links cuenta con el respaldo de la Administración para la Vida Comunitaria (ACL) del Departamento de Salud y Servicios Humanos de los EE. UU. Bajo la subvención N° 90TBSG0051-01-00 y en parte por el Departamento de Salud de Tennessee, Programa de Lesiones Cerebrales Traumáticas.

2025-06 REV Org Pub 2020-08 under Grant No 90TBSG0024-01-00

CONCUSSIONS are TREATABLE

... and EARLY treatment will actually SPEED UP recovery.

What is a Concussion?

A concussion is a type of **Traumatic Brain Injury** - or TBI - caused by a bump, blow, or jolt to the head or body. It can change the way a person

- thinks
- acts
- learns
- sleeps
- feels

-CDC.gov



Image: CDC

Concussions can be experienced in different ways.
Here are just **SOME** Concussion Symptoms:

- Headaches
- Dizziness
- Noises seem too loud
- Lights seem too bright
- Vision changes
- Sleep problems
- Head/neck pain
- Balance problems

When to Seek **Emergency Care**

Seek emergency care **IMMEDIATELY** if you see any of these **DANGER SIGNS**:

- 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



Brain injuries can be very dangerous. All concussions should be taken seriously.

See Your Doctor

Concussions **ARE** treatable. In fact, treatment may help you get better **FASTER**.



Your doctor will be able to tell you if you have had a concussion. They may ask you some questions and do simple tests. All concussions are different.

Depending on your symptoms, they may treat you in their office. **They may refer you to a symptom-specific specialist, like a physical therapist, speech-language pathologist, eye doctor, neurologist or others.**

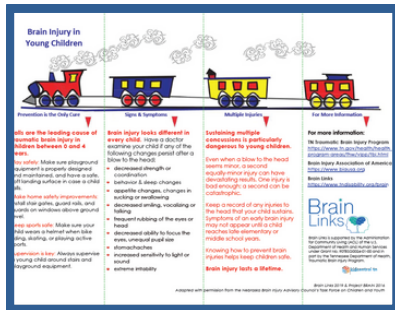
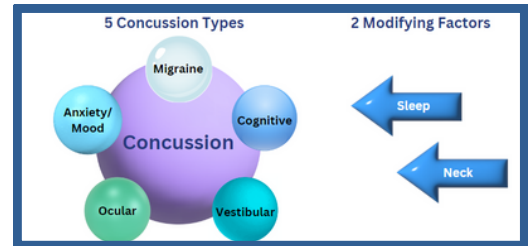
They can tell you the best way to return to school, work and your other activities, like sports and yardwork.

NOT getting treatment can slow down recovery and also lead you to feel anxious or depressed.

Concussion Resources

Understanding the 5 Types of Concussion & 2 Modifying Factors

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



Signs and Symptoms of Concussion

Different versions available for recognizing symptoms in:

- Young Children
- School-Aged Children
- Adults
- People Who Communicate without Words

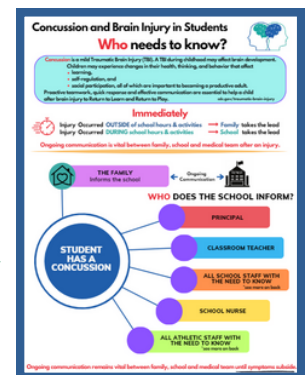
<https://www.tndisability.org/people>

*See under "Factsheets"

Concussions and Brain Injury in Students: Who Needs to Know?

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

*See under "Factsheets"



Supporting Brain Health

Important for everyone, not just those with brain injuries.

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

Concussion Management Protocol

Stresses early treatment and ongoing monitoring

<https://www.tndisability.org/primary-emergency-care-providers>



Traumatic Brain Injury Toolkits for

- Healthcare Providers
- Survivors Families & Caregivers
- School Nurses
- Service Providers

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





CONCUSSION MANAGEMENT PROTOCOL

Recommendation: 2 Visit Minimum

INITIAL VISIT

Outcomes are better if educational materials are given at the first visit.

SYMPTOM EVALUATION AND PATIENT EDUCATION:

- ACE - Acute Concussion Evaluation (*Physician/Clinician Office Version*)
- A Symptom Scale (*Age-appropriate version*)
- A Symptom Scale (*Parent/Adult Patient - fill out in office*)
- A Symptom Scale (*Parent/Adult Patient - take home*)
- ACE Care Plan (Return to School or Work Version)
- CDC Return to School Letter
- When Concussion Symptoms Are Not Going Away (*Age-appropriate version*)
- Any other educational materials or Symptom Tracker as needed

➤ **Send home** an additional parent or adult version of a symptom scale to track symptoms over the next 4 weeks or until next appointment - this helps to understand what symptoms/behaviors to look for. **Send home** a letter to the school or work with accommodations and other recommendations. Research indicates that supports are more likely to be implemented if recommended by the health care professional.

➤ **Cognitive Rest:** Research shows only **2-3 days** of strict cognitive rest is helpful. After that, return to activity as tolerated is recommended. **Safe exercise** (treadmill, stationary bicycle) that only mildly increases symptom level may be helpful in recovery. However, athletes should **not return to sports until all symptoms have cleared**.

➤ With concussion diagnosis, **SCHEDULE a follow up visit within 4 weeks. If any symptoms or new behaviors since injury are present, proceed with 2nd visit.** Patient brings back completed take-home symptom scale to next visit. Most symptoms will clear by 4 weeks, however, they should be addressed earlier as needed.

2ND VISIT (BY 4 WEEKS)

Refer to a symptom-specific specialist when possible.

- Specialized Concussion Treatment Center
- Brain Trauma Rehabilitation Center
- Sports Medicine
- Neurologist
- Neuro-ophthalmologist
- Physical Therapist
- Occupational Therapist
- Speech Language Pathologist
- Sleep specialist
- Neuropsychologist
- Psychologist
- TEIS if child is under 3 years old
- TEIS Extended Option - If already receiving services therapy can continue until the school year after 5th birthday.
- School/School district (3 years and older if not already enrolled in TEIS)

YEARLY CHECK-UPS

For all patients with no known history of brain injury, screen yearly for prior history.

Over the last year, ask about:

- Any residual concussion symptoms
- Any changes in school or work performance
 - Drop in grades, difficulty with new learning, falling behind with work, etc.
- Any physical changes or challenges (balance, ocular, pain)
- Any cognitive changes or challenges, for example in memory or attention
 - Forgetting homework or books at home. Difficulty paying attention in a work environment.
- Substance Use
- Chronic pain
- Relationships /Friendships
- Any new injuries
- Any behavior/mood changes

Refer if needed

ADDITIONAL RESOURCES

- **Traumatic Brain Injury Toolkit for Healthcare Providers:** Includes many useful tools and educational handouts, including those mentioned in this protocol.
<https://www.tndisability.org/brain-toolkits>
- **TBI Toolkit for Survivors, Families & Caregivers:**
<https://www.tndisability.org/brain-toolkits>
- **Research Support for this Concussion Management Protocol:**
<https://www.tndisability.org/primary-emergency-care-providers>
- **Brain Links Website:** <https://www.tndisability.org/brain>

THINGS TO WATCH FOR OVER TIME

- Headaches
- Changes in sleep patterns
- Fatigue
- Changes in vision
- Balance, coordination changes, dizziness
- Mood swings, getting mad easily
- Changes in personality
- Not feeling like themselves
- Trouble with attention and thinking
- Memory problems, especially short term
- Depression, anxiety
- Difficulty handling stress
- Inappropriate behavior
- Grades dropping, falling behind in class
- Changes in work performance
- Overuse/misuse of legal or illegal substances
- Chronic pain
- Loss of friendships; difficulty with relationships



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 cardíaco como caminar rápidamente, correr o bailar.
- Duerma lo suficiente para su edad. Los niños, incluyendo los adolescentes, necesitan dormir más que los adultos.
- Utilice productos de limpieza y de cuidado de la salud que sean naturales.
- No fume ni use cigarros electrónicos, no beba alcohol ni use drogas.
- Socialice - manténgase conectado con amigos y familiares.
- Continúe aprendiendo nuevas cosas que le interesen.
- Cuide su salud mental.
- Evite otra lesión - vea abajo.

Para mayor información sobre salud cerebral, visite <https://www.tndisability.org/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



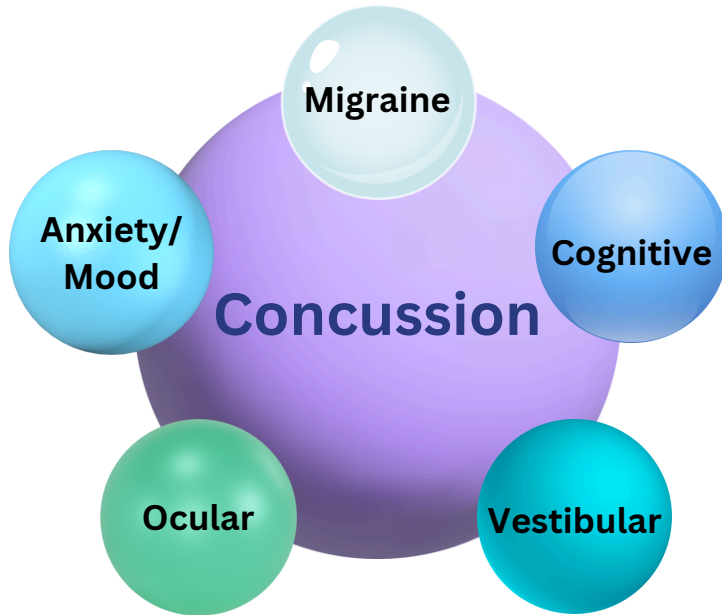
5 TYPES OF CONCUSSION

with 2 Modifying Factors

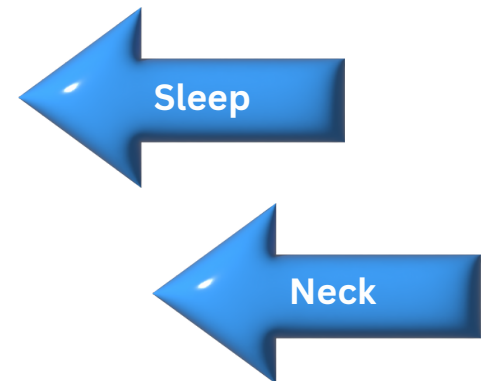


“Concussions are characterized by diverse symptoms and impairments in function resulting in different clinical profiles and recovery trajectories.”

5 Concussion Types



2 Modifying Factors



CONCUSSION FACTS

- Symptoms will be broad and generalized during the first week following a concussion and will generally include symptoms like headache and fatigue.
- After the first week, if symptoms persist, they will tend to fall into one of the 5 clinical trajectories.
- There could be more than one trajectory type present.
- Specific trajectory and outcome depends on several factors:
 - Direction of force (linear vs. rotational)
 - Location of impact
 - Amount of force involved
 - Pre-injury risk factors

ACTIVE TREATMENT

Research is showing that active, specialized treatment - focused on specific symptoms - helps the brain recover from injury. These treatments include:

- | | |
|--|--|
| ▪ Neuropsychology | ▪ Neurosurgery |
| ▪ Vestibular Physical Therapy | ▪ Neuroradiology |
| ▪ Exertional Physical Therapy | ▪ Chiropractic |
| ▪ Physical Medicine and Rehabilitation | ▪ Cognitive Therapy/ Speech Language Pathology |
| ▪ Neuro-optometry/ Neuro-ophthalmology | |
| ▪ Orthopedist | |

RISK FACTORS (which may delay recovery)

- | | |
|--------------------------------|---|
| • History of prior concussions | • Migraine history |
| • Motion sickness | • Gender (female) |
| • Visual problems | • Age (younger children tend to take longer to recover) |
| • Learning or attention issues | |

CONCUSSION CLINICAL TRAJECTORIES

A model for understanding assessment, treatment and rehabilitation.

COGNITIVE

“Cognitive difficulties include decreased concentration, increased distractibility, difficulty learning/retaining new information or decreased multitasking abilities. Sometimes accompanied by increased fatigue as the day progresses.”



VESTIBULAR

“Impairments of the vestibular system - the balance center of the brain - affects one’s ability to interpret motion, coordinate head and eye movements, or stabilize vision upon head movement.”



OCULAR

“Ocular dysfunction occurs when the movement of the eyes in tandem, or binocular movement, is affected. This may result in difficulties bringing the eyes together, or moving one’s eyes to track motion.”



POST-TRAUMATIC MIGRAINE

“Post-traumatic migraine symptoms include headaches, nausea, and/or sensitivity to light or noise.”



ANXIETY/MOOD

“This occurs when someone has a hard time turning his or her thoughts off, being particularly ruminative, or suffering from excessive worry or concern.”



TWO MODIFYING FACTORS: The presence of modifiers impacts the concussion symptoms.

SLEEP

The sleep modifier involves sleeping more or less than usual and having difficulty falling or staying asleep.

NECK

The neck modifier includes neck pain, stiffness or difficulty moving the neck.

The information on this infographic is from the University of Pittsburgh Medical Center’s *TREAT Sport-related Concussion Conference* on April 20-21, 2024. It was based on research from: Collins, Kontos, Reynolds, Murawski, et al. KSSTA; 2014. Kontos & Collins, APA Books; 2018. Kontos et al. *Curr Sports Med Rep*; 2019. This *5 Types of Concussion and 2 Modifying Factors* information reflects an update from the original *6 Types of Concussion*.



[@BrainLinksTN](https://www.tndisability.org/brain)



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July 2024

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



PERSONAL GUIDE FOR EVERYDAY LIVING AFTER CONCUSSION/TRAUMATIC BRAIN INJURY

This guide was developed to help you better understand what you may be experiencing following your injury. The better you understand the conditions that can have an impact on you, what can be difficult situations for you, and which strategies to try, the more you will succeed in life.

“CONDITIONS” likely to make symptoms worse:

- A. Being **TIRED**
- B. Being **EMOTIONAL** – sad, frustrated, excited, angry, etc.
- C. Being **UNDER PRESSURE**, being **RUSHED**, **STRESSED** or **ANXIOUS**
- D. Being **DRUNK/UNDER THE INFLUENCE** of drugs (Prescription or not)
- E. Being in **PAIN**
- F. Being **SICK**

STRATEGIES to consider for each state:

- A. **Tired:** Do not allow yourself to become tired. **Plan** things that you need to do and complete them early whenever possible. **Slow down** and **check** your work. Stick to a fairly regular sleep schedule and make sure you get enough sleep at night.
- B. **Emotional:** If you become emotional, **slow down** and **think before** you speak or act. Remember that being tired can make you become more emotional. If you know that you are going into a potentially emotional situation, **plan** as much as possible so that you are ready.
- C. **Stress/Pressure:** Avoid being rushed, stressed or under pressure by **planning**. Lay out things to do in a **planner** (calendar), allowing plenty of time for each task. Especially when you are rushed, **slow down** to allow yourself time to think clearly and look for missed details. Take the time to make **checklists** so nothing is missed. **Check** off each step as it is completed.
- D. **Alcohol/Drugs:** Do not drink alcohol or take drugs. Many people with brain injuries report feeling out of control without adding to it with alcohol or drugs. Know that your symptoms are likely to be enhanced while you are under the influence. Know also that drugs and alcohol have been reported to lower seizure threshold, making your chances of having a seizure greater.
- E. **Pain:** Avoid getting in pain when possible. When avoiding pain is not possible, attempt to relieve it as soon as possible. Do pain management exercises as recommended. Take medications as prescribed. Know that pain medications may affect your thinking ability. Use proper body mechanics, etc. Keep expectations realistic when you are in pain. **Allow more time** to do things when in pain. **Plan ahead and check** your work.

- F. **Sickness:** Avoid getting sick. Keep a regular schedule. Get enough sleep. Rest when sick. Cold medications may effect thinking ability. **Allow more time** to do things when sick. **Plan ahead.** **Check** your work.

Note that many of the same strategies were repeated over and over. Summed up briefly, the keys to improving performance are:

1. **Slowing down**
2. **Organizing yourself**
3. **Planning ahead, and**
4. **Checking your work**

Over time, all of these strategies can become a natural part of your daily life. Most likely, they will eventually make you more efficient, accurate and thorough; although in the beginning they may feel strange, intrusive and time-consuming.

****Give the strategies – and yourself – time****

SITUATIONS that may prove difficult (Fill in the blank lines with tasks that fit your life.)

- A. **Sustained Attention Tasks** – Keeping your attention focused on one thing (Fill in the blanks with situations that fit your life.)
1. Reading a magazine, book, etc.
 2. Listening to a lecture
 3. Listening on the phone
 4. Writing a letter, report, checklist, etc.
 5. _____
 6. _____
- B. **Simultaneous/Divided Attention Tasks** – Keeping your attention on 2 or more things at a time.
1. Cooking dinner while watching television
 2. Listening to a lecture while taking notes
 3. Talking on the phone while writing a message
 4. Counting the number of items on a conveyor while simultaneously looking for broken pieces
 5. Keeping your eye on your young child while trying to write a letter
 6. _____
 7. _____
- C. **Alternating Attention Tasks** – Needing to switch your attention between two things.
1. Stop typing to answer the phone, then go back to typing
 2. Stop doing your work at your desk to answer a question, then go back to work
 3. Stop making dinner to clean up a spill, then knowing where you left off
 4. Stop paying the bills to ask your spouse where some receipts are, then finishing
 5. _____

6. _____

ATTENTION – Very often a significant problem after brain injury.

A. Increase your Awareness of Distractors – Try to determine what types of things tend to distract you. Are they:

1. **Internal Distractors** – your own thoughts, emotions, being tired, in pain, sick, etc.
and/or
2. **External Distractors** – things in the environment:
 - a. Auditory – any noise: people talking, machines or air conditioners humming, cars driving by, etc.
 - b. Visual – people walking by, a ceiling fan spinning, miscellaneous papers on your desk, a spider crawling on the wall, etc.
 - c. Tactile/Sensation – an uncomfortable chair, an itchy rash, being too hot or cold, etc.

B. Anticipate Distractors - Learn what tends to distract you

1. Minimize these things whenever possible (for example, sit with your back to a distracting environment)
2. Eliminate them whenever possible (see below)

C. Eliminate Distractors – Take Control

1. Strategies for **Internal Distractors**
 - a. Try to eliminate the distractor by actually doing the thing that is distracting you (i.e.: check to see if the stove is off, go mail the letter you are afraid you'll forget, etc.)
 - b. Write the distractor down, decide to put it out of your mind for now and come back to it at a more appropriate time
 - c. Overtly tell yourself, "I'm distracted and I need to get back to work"
 - d. Get enough sleep to increase your ability to control your attention
2. Strategies for **External Distractors**
 - a. Turn off the radio, T.V., ceiling fan, air conditioner, etc.
 - b. Go to a quiet room
 - c. Close your door, windows, curtains
 - d. Wear earplugs
 - e. Ask people to quiet down
 - f. Clear your desk of papers before working
 - g. Overtly tell yourself, "I'm distracted and I need to get back to work."
 - h. Get enough sleep to increase your ability to control your attention

USE OLD STRATEGIES to your advantage:

- A. **Make a list of strategies** that you used before you were injured. Everyone uses strategies – they just don’t think of them as strategies because that is the “normal” way they do things.
1. To help you in creating this list, mentally go through all of the things you do during the day
 2. Next, write down all the things you do to make these things easier
Examples:
 - a. Sticking to a routine when getting ready in the morning
 - b. Making a list of chores, assignments, phone calls, etc., for the day
 - c. Reviewing your day over morning coffee
 - d. Planning what you will say during an important meeting or confrontation
 - e. Referring to your desk calendar throughout the day
 - f. Setting a cooking timer to remind you when to check the oven
 - g. Laying out your clothes the day before
 - h. And on and on
- B. Do **NOT** discard these strategies now! Now they will be more important than ever! Do not decide to “test” your memory by not writing something down. You wrote things down before from time to time, didn’t you? There was a reason for it. **Do it!**
- C. **Build on old strategies.** Examples:
1. If you used a checklist to help you remember your chores, see where else in your day you can use a checklist.
 2. If you used a routine to help you get out of the house in the morning, see if you can incorporate one into your workday.
 3. If you used a calendar to keep track of your workday, maybe you can use one to organize your home life.

Know that in the end, things can go back to feeling “normal” again, even if that new “normal” is different than the old one. **In the meantime, know who you can go to for help and support.**

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Brain Injury Specialist, Brain Links Revised 3/2020



Brain Links is supported by the Administration for Community Living (ACL) of the U.S. Department of Health and Human Services under Grant No. 90TBSG002/-01-00 and in part by the TN Department of Health, Traumatic Brain Injury Program.



GUÍA PERSONAL PARA LA VIDA COTIDIANA DESPUÉS DE UNA CONMOCIÓN CEREBRAL / LESIÓN

Esta guía fue desarrollada para ayudarle a entender lo que usted puede estar experimentando después de su lesión. Mientras mejor entienda las condiciones que pueden tener un impacto en usted, qué situaciones pueden ser difíciles para usted y cuáles estrategias intentar, mejor tendrá éxito en su vida.

“CONDICIONES” que es probable que empeoren sus síntomas:

- A. Estar **CANSADO**
- B. Ser **EMOTIVO**: Triste, frustrado, emocionado, enojado, etc.
- C. Estar **BAJO PRESIÓN, DE PRISA, ESTRESADO o ANSIOSO**
- D. Estar **EBRIO / BAJO LA INFLUENCIA** de medicamentos (recetados o no)
- E. Tener **DOLOR**
- F. Estar **ENFERMO**

ESTRATEGIAS a considerar para cada estado:

- A. **Cansado**: No se permita llegar a estar cansado. **Planee** las cosas que necesita hacer y complételas con tiempo siempre que sea posible **Reduzca su velocidad** y **verifique** su trabajo. Apéguese a un horario de sueño regular y asegúrese de dormir lo suficiente en la noche.
- B. **Emotivo**: Si se pone emotivo, **reduzca su velocidad** y **piense antes** de hablar o actuar. Recuerde que estar cansado puede hacer que se ponga emotivo. Si sabe que va a pasar por una situación potencialmente emocional, **planee** tanto como sea posible de modo que esté preparado.
- C. **Estrés/presión**: Evite estar apresurado, estresado o bajo presión, mediante la **planeación**. Presente las cosas a hacer en un **planeador** (calendario) permitiendo mucho tiempo para cada tarea. Especialmente cuando usted ande de prisa, **reduzca su velocidad** para permitirse tiempo para pensar claramente y mirar detalles pasados por alto. Tómese el tiempo de hacer **listas de comprobación** para que nada falte. **Marque** cada paso cuando es completado.
- D. **Alcohol/medicamentos** No ingiera alcohol ni tome medicamentos. Mucha gente con lesiones cerebrales reportan sentirse fuera de control cuando les añaden alcohol o medicinas. Tome nota que es probable que sus síntomas serán amplificados mientras está bajo la influencia de sustancias. También tome nota que se ha reportado que los medicamentos y el alcohol reducen el umbral a las convulsiones, haciendo que se incremente la posibilidad de una convulsión.
- E. **Dolor**: Evite sentir dolor siempre que sea posible. Cuando evitar el dolor no es posible, intente aliviarlo tan pronto como sea posible. Haga ejercicios de administración del dolor conforme se recomienda. Tome los medicamentos que le recetaron. Tenga en cuenta que los medicamentos para el dolor puede afectar su capacidad de pensar. Use mecánica corporal apropiada. Mantenga sus expectativas realistas cuando tenga dolor. **Permítase más tiempo** para hacer las cosas cuando tenga dolor. **Planee con anticipación y verifique** su trabajo.

- F. **Enfermedad:** Evite enfermarse. Mantenga un horario regular. Duerma lo suficiente. Descanse cuando esté enfermo. Los medicamentos para el resfriado pueden afectar su capacidad para pensar. **Permítase más tiempo** para hacer las cosas cuando esté enfermo. **Planee con anticipación. Verifique** su trabajo.

Note que muchas de las mismas estrategias fueron repetidas una y otra vez. Resumiendo brevemente, las claves para mejorar el desempeño son:

1. **Reducir la velocidad**
2. **Organizarse**
3. **Planear con anticipación, y**
4. **Verificar su trabajo.**

Con el tiempo, todas estas estrategias pueden convertirse en una parte natural de su vida diaria. Lo más probable es que eventualmente le harán más eficiente, exacto y minucioso; aunque al principio quizá pueda sentir que son extrañas e intrusivas y que consumen tiempo.

****Deles tiempo a las estrategias - y a sí mismo****

SITUACIONES que pueden resultar difíciles (llene los espacios en blanco con tareas que puedan ajustarse a su vida).

- A. **Tareas de atención sostenida** – Mantener su atención enfocada en una cosa (llene los espacios en blanco con situaciones que puedan ajustarse a su vida).
1. Leer una revista, libro, etc.
 2. Escuchar una cátedra
 3. Escuchar el teléfono
 4. Escribir una carta, informe, lista de comprobación, etc.
 5. _____
 6. _____
- B. **Tareas Simultáneas/Atención Dividida** – Mantener su atención en 2 o más cosas a la vez.
1. Cocinar la cena mientras ve la televisión
 2. Escuchar una cátedra mientras toma notas
 3. Tomar un teléfono mientras escribe un mensaje
 4. Contar el número de objetos de un transportador mientras observa piezas rotas
 5. Mantenerse vigilando a su niño pequeño mientras trata de escribir una carta
 6. _____
 7. _____
- C. **Tareas de atención alterna** – Necesitar intercambio de atención entre dos cosas.
1. Dejar de escribir la respuesta en el teléfono, luego regresar a escribir
 2. Dejar de hacer su trabajo en un escritorio para responder una pregunta, luego regresar a trabajar
 3. Dejar de preparar la cena para limpiar un derrame, luego saber dónde se quedó
 4. Dejar de pagar las facturas para preguntarle a su cónyuge dónde están algunos recibos, luego terminar

5. _____
6. _____

ATENCIÓN – Muy a menudo un problema muy significativo después de lesión cerebral.

A. **Incremente su conciencia sobre los distractores** – Trate de determinar qué tipos de cosas tienden a distraerle. Estos son:

1. **Distractores internos** – sus propios pensamientos, emociones, estar cansado, con dolor, etc.
Y/o
2. **Distractores externos** – cosas en el ambiente:
 - a. Auditivas - cualquier ruido: personas hablando, máquina o aires acondicionados zumbando, automóviles circulando, etc.
 - b. Visuales - personas pasando, un ventilador de techo girando, papeles varios en su escritorio, una araña trepando la pared, etc.
 - c. Táctil/sensación - una silla incómoda, una erupción con escozor, tener mucho calor o frío, etc.

B. **Anticipe los distractores - aprenda lo que tiende a distraerle**

1. Minimice estas cosas siempre que le sea posible (por ejemplo, siéntese de espaldas a un ambiente con distracciones)
2. Elimínelos siempre que sea posible (vea abajo)

C. **Elimine distractores - tome el control**

1. Estrategias para **distractores internos**
 - a. Trate de eliminar el distractor al realizar la cosa que le está distrayendo (por ej. verificar si la estufa está apagada, enviar el correo que teme olvidar, etc.).
 - b. Escriba el distractor, decida ponerlo fuera de su mente por ahora y regrese al mismo en un momento más adecuado
 - c. Dígase a sí mismo abiertamente “Estoy distraído y necesito regresar a trabajar”
 - d. Duerma lo suficiente para incrementar su capacidad para controlar su atención
2. Estrategias para **distractores externos**
 - a. Apague el radio, el televisor, el ventilador de techo, el aire acondicionado, etc.
 - b. Vaya a una habitación silenciosa
 - c. Cierre la puerta, ventanas y cortinas
 - d. Póngase tapones auditivos
 - e. Pídale a las personas que no hagan ruido
 - f. Limpie su escritorio de papeles antes de trabajar
 - g. Dígase a sí mismo abiertamente “Estoy distraído y necesito regresar a trabajar”
 - h. Duerma lo suficiente para incrementar su capacidad para controlar su atención

USE ESTRATEGIAS ANTIGUAS para obtener ventaja:

A. **Haga una lista de estrategias** que usted usó antes de lesionarse. Cada personas usa estrategias - sólo que no piensan en ello como estrategias porque esa es la manera “normal” en que hacen las cosas.

1. Para ayudarle a crear esta lista, repase mentalmente todas las cosas que hace durante el día
2. Luego, escriba todas las cosas que hace para lograr que las cosas sean sencillas.

Ejemplos:

- a. Apegarse a una rutina cuando se aliste en la mañana
- b. Hacer una lista de faenas, asignaciones, llamadas telefónicas, etc. para el día
- c. Revisar su día durante su taza de café en las mañanas
- d. Planear lo que dirá durante una reunión importante o confrontación
- e. Consultar su calendario de escritorio durante el día
- f. Establecer un temporizador de cocina para acordarle de revisar el horno
- g. Preparando su ropa desde un día antes
- h. Y la lista sigue y sigue

B. ¡**NO** descarte estas estrategias ahora! ¡Ahora serán más importantes que nunca! No decida “probar” su memoria al no escribir algo. Usted escribió cosas antes de vez en cuando, ¿no es así? Hubo una razón para eso. ¡**Hágalo!**

C. **Construya sobre estrategias antiguas.** Ejemplos:

1. Si usted usó una lista de comprobación para ayudarle a recordar sus tareas, vea en qué otro lugar de su día puede usar una lista de comprobación.
2. Si usó una rutina para ayudarle a salir de la casa en la mañana, vea si puede incorporar una en su día de trabajo.
3. Si usó un calendario para llevar registro de su día de trabajo, quizá pueda usarlo para organizar su vida en la casa.

Sepa que al final, las cosas pueden regresar a sentirse “normales” otra vez, incluso si ese nuevo “normal” es diferente al antiguo. **Mientras tanto, tome en cuenta que puede acudir por ayuda y apoyo.**

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revisado Mar/2020



Brain Links is supported by the Administration for Community Living (ACL) of the U.S. Department of Health and Human Services under Grant No. 90TBSG002/-01-00 and in part by the TN Department of Health, Traumatic Brain Injury Program.

Developmental Concern?

Next Steps for Families and Caregivers



Your child has many strengths and a supportive family. Together, we want your child to have what he/she/they need to learn and grow.

Today our office is referring your child to see if services might help their learning and development and/or see if your child may have developmental delays.



If your **child is under 3 years of age**, one of the places our office may refer you to is _____ (Name) _____.

your state's early intervention program. If referred to early intervention, the program will evaluate your child at no cost and provide early intervention services, if they qualify, for minimal to no cost.



If your **child is over 3 years of age**, our office may ask you to call your local public elementary school _____ (Name) _____. When you

call the school you can say, "I have concerns about my child's development and I would like to have my child evaluated through the school system for preschool special education services." If the person who answers is unfamiliar with preschool special education, ask to speak with the school or district's special education director.



Along with referring your child to your state's early intervention, preschool special education, or Head Start program, our office may refer them to see one or more early childhood professionals, or programs, including:

- ☐ **Physical Therapist** (addresses delays in head control, sitting, walking, running, jumping, kicking, or climbing).
- ☐ **Occupational Therapist** (addresses sensory issues and delays in reaching, using hands together, self-feeding, undressing/dressing).
- ☐ **Speech and Language Pathologist** (addresses delays in understanding and making speech sounds, words, having conversations, feeding problems, stuttering).
- ☐ **Behavioral Therapist or Social worker** (addresses trouble engaging socially, paying attention to others, or having behavioral challenges).
- ☐ **Early Childhood Care and Education**, eg. Head Start (provides early childhood education, health, nutrition, and family engagement services to children and families/caregivers).
- ☐ **Other:** _____.



Final Steps:

1. Keep your follow up appointments at our office.
2. Contact our office if you are having trouble making the referral appointments.
3. Let our office know what the professional/specialist said and any next steps they recommend by:
 - ☐ Making an appointment at our office to discuss.
 - ☐ Contacting _____.
 - ☐ Other _____.
4. Start any early intervention services your child qualifies for, even if you are waiting for other appointments to find out if there is a cause/diagnosis for any delays.



Developmental Concern? Next Steps for Families and Caregivers

If you are uncertain about making appointments, or have more questions please let our office know. It is important to find out if your child needs help and not “wait and see”, because the earlier interventions are started for delays, the easier it can be for a child to learn new skills.



Tips and Additional Resources

- Connect with early education professionals (eg, your childcare providers, teachers, home visitors) for feedback on your child's development.
- Communicate updates, including progress your child is making or roadblocks you are facing to your pediatrician.
- Visit your local library for a reading hour or to choose books to read with your child.
- Use the *Learn the Signs. Act Early. (LTSAE)* milestone tracker app for tips and activities along with milestone checklists: <https://www.cdc.gov/MilestoneTracker>.
- Visit HealthyChildren.org for information on how to support your child's development: <https://healthychildren.org/english/ages-stages/pages/default.aspx>.
- Connect with your state or territory Family-to-Family Health Information Center (F2F HIC). More information about F2F HICs is available here: <https://familyvoices.org/lfpp/f2fs>; You can find your local F2F HIC here: <https://familyvoices.org/affiliates>.
- Use Vroom brain building tips: <https://www.vroom.org>.
- Use tip sheets from Read Talk Sing: <https://www.ed.gov/early-learning/talk-read-sing>.
- Find your Parent Center for assistance on being an effective advocate for children with disabilities: <https://www.parentcenterhub.org/the-parent-center-network>.
- To learn about Head Start and school readiness visit: <https://www.acf.hhs.gov/ohs/about/head-start>.
- Find information on how to choose quality child care or preschool programs: <https://www.childcare.gov/consumer-education/child-care-quality-ratings>.
- Additional: _____.

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American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



BRAIN HEALTH

HOW TO HAVE A HEALTHY BRAIN THROUGHOUT LIFE

Our brain controls everything about us: our moods and emotions, our movements, thoughts and words. Some habits like eating junk food, not exercising, smoking and drinking alcohol can harm our brain. Unhealthy habits can lead to early loss of memory and thinking skills and sometimes dementia - a disorder that effects memory, personality and reasoning.

We can make changes right now - no matter what age we are - that will improve our brains and the quality of our lives.

HERE'S WHERE TO START:

Suggestions are based on current research.



EAT WELL

- The best diet for a healthy brain includes lots of vegetables, fruits, whole grains, healthy fats (avocados, nuts and seeds), and legumes (beans, peas and lentils) and NO eggs, meat or dairy. This is a **vegan diet**.
- If you feel that you can't be a vegan, the next best choice for brain health is **vegetarian**, which is no meat or fish. If you can't be a vegetarian, eat as many healthy, meatless meals as you can.
- Beware of trendy diets. They can often help you lose weight in the short term, but may not be good for your body in the long term.

Avoid junk food, fast food restaurants and most processed (man-made, factory-made) foods.

These foods often contain a lot of sugar, salt and fat.

Guidelines for the Prevention of Alzheimer's Disease: "Vegetables, legumes (beans, peas, lentils), fruits, and whole grains should replace meats and dairy products as primary staples of the diet."

Journal of Neurobiology of Aging, 2014

? GREEN TEA: Did you know that **green tea** is both **neuro-protective (protects the brain)** and **neuro-restorative (heals the brain)?**

That means if you drink green tea and have an accident that hurts your brain, it will help protect your brain from injury. Even if you begin to drink the tea *after* the injury, it will help.

PLANT FOODS VS ANIMAL FOODS: Did you know that **plant foods** have **64 times more antioxidants** than animal foods? Antioxidants help protect cells in your body from damage, including brain cells.

DR. GREGER'S DAILY DOZEN APP: This free app helps you **keep track of the healthy foods** that you eat and helps you figure out what you are missing.

EXERCISE

Cardiovascular exercise - **any exercise that raises your heart rate** - is good for your whole body, including your brain. Other exercise, like yoga, is very good for your body and for relaxation. To really benefit your brain, add cardiovascular exercise which will **increase blood flow to your brain**. Examples of this type of exercise are **walking quickly, jogging, dancing and riding a bike**.

Too little exercise actually hurts the brain.

Cardiovascular exercise has been proven to:

- ⊗ Fight Depression
- ⊗ Manage Stress
- ⊗ Control Blood Sugar Levels
- ⊗ Help Fight Colds and Diseases
- ⊗ Increase Focus
- ⊗ Lower Blood Pressure
- ⊗ Maintain a Healthy Weight
- ⊗ Improve Memory



Exercise and better food choices can help you to keep a healthy weight. Studies have shown that having a heavier body makes us have a smaller brain. **So keep your weight down and your brain healthy!**

BE SOCIAL

Get out and **be with your friends and family**. If you can't visit or they are far away, talk on the phone or use a computer app where you can see each other. Having positive social interactions is very healthy for your brain. Not being social can create negative changes in the brain. Spending time with others has been proven to:

- Help Slow Dementia
- Help Fight Colds and Diseases
- Make Depression Go Away
- Lower Stress
- Help The Brain Make New Connections

Get Hearing Aids if you need them. They help you to stay social and keep the brain healthy!



LEARN

We all need to **keep learning throughout our lives**, not just while we are in school. NEW learning helps keep and make strong connections in our brain. Ongoing learning (something new for you) helps prevent dementia. Besides learning in school, learn for work or learn a new hobby. You don't have to master each thing. The point is to use your brain differently by challenging yourself. Try to learn in different ways - through reading, doing, watching and listening. **Learning can be purely for fun!**



TAKE CARE OF YOUR MENTAL HEALTH

If you are anxious, depressed or have another mental health problem, talk with a doctor or counselor for support. Begin making healthy changes and let your support person know. Many of the tips on these pages can help. For instance, exercise was proven to be just as good as depression medications after 12 weeks. After 10 months, exercise was actually better. Eating healthfully and getting together with friends also improves mental health. It's okay to start small.

Other ways to improve your mental health:

- Adopt a pet or volunteer at an animal shelter
- Meditate
- Do deep breathing exercises

Let go of stress and worry. Instead of worrying, take steps to make the situation better. Or, if there is nothing to be done, realize that and relax. Most of the time when we worry, the thing we worry about never happens. **Recognize your own Automatic Negative Thoughts (ANTS)** and replace those ANTs with happy and positive thoughts or do something active like going for a walk. For more help with ANTs, see Dr. Daniel Amen, amenclinics.com.

Be Grateful - Our brains send positive chemicals out when we are grateful. These chemicals are good for our brain and the rest of our body. Journaling, or **writing down what you are grateful for each day** has been shown to produce positive changes in our lives. No matter what is going on in our lives, we can find something or someone to be happy or grateful for.

BE RESILIENT

Resilience is our ability to recover quickly from difficulty. Staying in a negative state causes unhealthy stress in our bodies. Try to deal with what's wrong, then get back to your normal, happier state. You are not alone. Everyone's life includes hard times. **Moving in a positive direction helps us to limit the bad effects of stress in our bodies.** Ways to be resilient:

- Commit to finding meaning in a struggle
- Believe that you can create a positive outcome
- Be willing to grow
- CHOOSE to laugh and be grateful (Bonano)

To Become More Resilient, Ask Yourself

1. "What could possibly be right about this situation?"
2. "What in my life or myself can I be grateful for right now?"

MJ Ryan

FIND PURPOSE AND JOY

Having a sense of purpose is very good for the brain. Purpose helps to hold off Alzheimer's disease (a type of dementia) from showing up in your life, even if you already have the changes in your brain.

You may already have something in your life that gives you a feeling of purpose. It can be something simple like taking care of a child, a pet, getting together with friends or knitting blankets for those in need.

If you don't have that feeling of purpose, look for ways to create it through a job, a hobby or relationships. Joy is important because, without it, purposeful things often don't feel purposeful anymore. **It may seem like it should come naturally, but it is okay to branch out and actively find your joy.**



PREVENT BRAIN INJURIES

As you might expect, all types of brain injuries, (strokes, falls, being violently shaken, car accidents, and tumors) can change your brain.

After one brain injury, people are more likely to have another because of changes in physical abilities and decision-making. **Avoid rough sports and risky situations.**

Think first with any activities about how to avoid another injury. **Always** wear a helmet when needed and **always** wear a seatbelt. Many tips on these pages, like eating right and exercising, can help you avoid a stroke.

AVOID THINGS THAT ARE TOXIC

Things that are toxic can harm the brain. Toxic things might include pesticides on food, hormones injected into meat, and some chemicals used in beauty products like shampoos and creams.

- 🌀 Buy organic fruits and vegetables when you can. Be aware of what you are putting on your body.
- 🌀 An app like Think Dirty can help you figure out if your housecleaning and beauty products are safe.
- 🌀 Avoid smoking, vaping, illegal drugs and alcohol which are **all** toxic to your body and brain.
- 🌀 **You may need support to make these changes.** You might benefit from a local support group. If you smoke or use recreational drugs (including opioids), make a plan to quit, set a date, and tell your family or friends so they can help you stay on track.

End smoking: <https://www.cdc.gov/tobacco/campaign/tips/> and <http://www.tnquitline.org/index.php>

Alcoholics Anonymous: <https://aa.org> and

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

Narcotics Anonymous: <https://na.org> and <https://natennessee.org/>

- 🌀 Even toxic people (including family members) and relationships can harm your healing and cause further symptoms and damage.
- 🌀 For mental health and/or substance use disorders, call SAMHSA's National Helpline, 1-800-662-HELP (4357) or TTY: 1-800-487-4889 or search <https://www.samhsa.gov/find-help/national-helpline>

GET ENOUGH SLEEP

Did you know that your brain cleans itself of toxins and plaques as you sleep? If not cleaned, you develop brain fog, memory issues or dementia. **Get enough sleep for your age.**

<http://bit.ly/4lDhgZj>

- Treat sleep apnea (loud snoring and short periods of not breathing)
- Get 7-8 hours of sleep a night (if you are an adult)
- Reduce/manage stress
- Reduce use of electronic devices at night
- Stick to a regular schedule
- Reduce caffeine, especially at night
- Drink chamomile tea
- Get rid of your Automatic Negative Thoughts (see Mental Health section)



MAKING CHANGE

Changing from old, unhealthy habits to new, healthier ones can be hard. But improvements in your health will be worth it. The best way to change someone else's habits - like a child, a spouse or a friend - is to **change yourself first**. There are several ways you can get started.



- Make **one small change** at a time. Maybe you stop drinking soda this month and give up red meat next month. Keep adding to the changes.
- Clean up **one area** at a time. This month you switch to veganism or vegetarianism and next month you work on adding cardiovascular exercise to your routine.
- Change **everything** at once. Focus on food choices, add exercise, change your cleaning products, start a gratitude journal, etc.

Find a way that works best for you to stay on track, like setting goals for every month. If you can, get a family member or friend to make healthy changes with you.

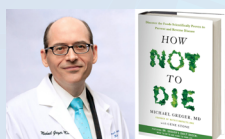
MORE BANG FOR YOUR BUCK

COMBINE two or more healthy changes to get more benefits:

- Begin a new hobby that also helps others
- Exercise with a friend or your pet
- Have meatless Monday meals with a partner
- Stop smoking with a coworker
- Go for a walk to a healthy grocery store
- Go to a farmer's market and plan a healthy meal or picnic
- Turn off television earlier at night and make a short gratitude list before bedtime
- Limit caffeine or trade last cup of coffee for decaf green tea and challenge a friend to do the same



ADDITIONAL RESOURCES



Book: How not to Die
by Dr. Michael Greger

Dr. Greger's Daily Dozen App
[Nutritionfacts.org](https://nutritionfacts.org)

National Alliance on Mental Illness:
<https://www.nami.org/home>



Book: Memory Rescue by
Dr. Daniel Amen

<https://forksoverknives.com>

**There are many good books and websites with information
and recipes for vegan or vegetarian cooking.**



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

[@BrainLinksTN](https://www.facebook.com/BrainLinksTN)



SALUD CEREBRAL

CÓMO TENER UN CEREBRO SALUDABLE DURANTE TODA SU VIDA

Nuestro cerebro controla todo de nosotros: nuestros estados de ánimo y emociones, nuestros movimientos pensamientos y palabras. Algunos hábitos como comer alimentos chatarra, no hacer ejercicio, fumar y tomar alcohol, pueden dañar nuestro cerebro. Los hábitos no saludables pueden llevar a una pérdida temprana de memoria y de habilidades del pensamiento, y algunas veces demencia: una enfermedad que afecta la memoria, la personalidad y el razonamiento.

Podemos hacer cambios justo ahora - sin importar qué edad tengamos - eso mejorará nuestros cerebros y la calidad de nuestras vidas.

ASÍ ES CÓMO PUEDE EMPEZAR:

Las sugerencias están basadas en las investigaciones actuales.



COMA ADECUADAMENTE

- La mejor dieta para un cerebro saludable incluye muchos vegetales, frutas, granos enteros, grasas saludables (aguacates, nueces y semillas) y legumbres (frijoles (porotos), guisantes y lentejas) y **NO INCLUYE** huevos carne ni lácteos. Esta es una **dieta vegana**.
- Si siente que no puede ser vegano, la siguiente mejor elección para la salud cerebral es ser **vegetariano**, es decir no consumir carne ni pescado. Si no puede ser vegetariano, coma tantos alimentos saludables sin carne como pueda.
- Tenga cuidado con las dietas de moda. Pueden ofrecerle ayuda para perder peso en un corto plazo, pero pueden no ser buenas para su cuerpo en el largo plazo.

Evite comida chatarra, como restaurantes de comida rápida y la mayoría de la comida procesada (hecha por el hombre, hecha en fábrica). Estos alimentos a menudo contienen mucha azúcar, sal y grasa.

Directrices para la prevención de la enfermedad de Alzheimer. “Los vegetales, las legumbres (frijoles, guisantes, lentejas), frutas y granos enteros deben reemplazar las carnes y productos lácteos como artículos imprescindibles en la dieta”.

Journal of Neurobiology of Aging (Publicación científica, Neurobiología del Envejecimiento, 2014)

? TÉ VERDE: ¿Sabía que el té verde es tanto un **neuroprotector (protege al cerebro)** como **neuro-restaurador (sana al cerebro)**?

Eso significa que si toma té verde y tiene un accidente que lastime a su cerebro, el té le ayudará a proteger su cerebro de una lesión. Incluso si usted comienza a tomar el té *después* de la lesión, le ayudará.

ALIMENTOS PROVENIENTES DE PLANTAS VS. ALIMENTOS DE ORIGEN ANIMAL: ¿Sabía que los alimentos que **proviene de plantas tienen 64 veces más antioxidantes** que los que provienen de animales? Los antioxidantes ayudan a proteger las células de su cuerpo de daños, incluyendo las neuronas.

APP “DAILY DOZEN” DEL DR. GREGER: Esta app gratuita le ayuda a **mantener un registro** de los alimentos saludables que usted come y le ayuda a entender qué le está faltando.

EJERCICIO

Ejercicio cardiovascular - **cualquier ejercicio que eleve su pulso cardiaco** - es bueno para todo su cuerpo, incluyendo su cerebro. Otros ejercicios, como el yoga, son buenos para su cuerpo y para relajarse. Para realmente beneficiar su cerebro, haga ejercicio cardiovascular, el cual incrementará el flujo sanguíneo a su cerebro. Algunos ejemplos de este tipo de ejercicio son: **caminar rápidamente, trotar, bailar y andar en bicicleta**. Muy poco ejercicio de hecho es dañino para el cerebro.

Se ha demostrado que el ejercicio cardiovascular:

- ⊗ Lucha contra la depresión
- ⊗ Ayuda a manejar el estrés
- ⊗ Controla los niveles de azúcar en la sangre
- ⊗ Ayuda a luchar contra resfriados y enfermedades
- ⊗ Incrementa la concentración
- ⊗ Baja la presión
- ⊗ Mantiene un peso saludable
- ⊗ Mejora la memoria



El ejercicio y mejores decisiones alimenticias pueden ayudarle a mantener un peso saludable. Los estudios han mostrado que tener un cuerpo más pesado, hace que tengamos un cerebro más pequeño **¡Así que mantenga su peso bajo y su cerebro saludable!**

SEA SOCIABLE

Salga y **pase tiempo con sus amigos y familiares**. Si no puede visitarlos o ellos están lejos, hable por teléfono o use una aplicación para computadora, donde puedan verse el uno al otro. Tener interacciones sociales positivas es muy saludable para su cerebro. No ser sociable puede crear cambios negativos en el cerebro.

Pasar tiempo con otros ha demostrado:

- Ayudar a retardar la demencia
- Ayuda a luchar contra resfriados y enfermedades
- Hacer que la depresión se retire
- Bajar el estrés
- Ayuda al cerebro a crear nuevas conexiones

Consiga aparatos auditivos si los necesita. ¡Estos le permitirán mantenerse en contacto social y mantener el cerebro saludable!



APRENDA

Todos necesitamos **mantenernos aprendiendo a través de nuestras vidas**, no sólo mientras estamos en la escuela. El aprendizaje de cosas NUEVAS nos ayuda a crear conexiones fuertes en nuestro cerebro. El aprendizaje continuo (algo nuevo para usted) ayuda a prevenir la demencia. Además de aprender en la escuela, aprenda para su trabajo o aprenda un nuevo pasatiempo. No es necesario que domine cada cosa. El punto es que use su cerebro de maneras diferentes para desafiarse a sí mismo. Intente aprender de diferentes maneras: A través de la lectura, haciéndolo, mirando y escuchando. **¡Aprender puede ser por mera diversión!**

CUIDE SU SALUD MENTAL

Si está ansioso, deprimido o tiene otro problema de salud mental, hable con un doctor o terapeuta para obtener ayuda. Comience a realizar cambios saludables e infórmelos a alguien de confianza. Muchas de las sugerencias en estas páginas le pueden ayudar. Por ejemplo, el ejercicio ha demostrado ser tan bueno como los medicamentos para la depresión después de 12 semanas. Después de 10 meses, de hecho el ejercicio fue mejor. Comer saludablemente y reunirse con amigos también mejora su salud mental. Está bien comenzar con poco.

Otras maneras de mejorar su salud mental:

- Adoptar una mascota o servir como voluntario en un refugio para animales
- Meditar
- Hacer ejercicios de respiración profunda

Deje ir el estrés y las preocupaciones. En vez de preocuparse, tome los pasos que harán que mejore su situación. O si no hay nada que hacer, acéptelo y relájese. La mayoría de las veces cuando nos preocupamos, aquello por lo que estamos preocupados nunca sucede. **Reconozca sus propios Pensamientos Negativos Automáticos (ANT, por sus siglas en inglés, “Automatic Negative Thoughts”)** y reemplace esos ANTs con pensamientos alegres y positivos o haga algo de actividad como ir a caminar. Para más ayuda con los ANTs, consulte al Dr. Daniel Amen, amenclinics.com.

Sea agradecido - nuestros cerebros envían químicos positivos cuando somos agradecidos. Estos químicos son buenos para nuestro cerebro y para el resto de nuestro cuerpo. Escribir un diario, o **escribir por qué está agradecido cada día** está demostrado que produce cambios positivos en nuestras vidas. No importa lo que suceda en nuestras vidas, podemos encontrar alguna cosa o a alguien con quien estar feliz o por quien estar agradecido.

SER RESILIENTE

La resiliencia es nuestra capacidad de recuperarnos rápidamente de las dificultades. El mantenerse en estado negativo ocasiona estrés perjudicial en nuestros cuerpos. Intente abordar lo que está mal, luego regrese a su estado normal más feliz. No está solo. La vida de todos incluye tiempos difíciles. **Moverse hacia una dirección positiva nos ayuda a limitar los efectos malos del estrés en nuestros cuerpos.** Maneras de ser resiliente:

Comprométase a encontrar significado en una lucha • Crea que puede crear un resultado positivo • Esté dispuesto a crecer • ESCOJA reír y ser agradecido (Bonano)

Para hacerse más resiliente, pregúntese

1. “¿Qué podría estar bien acerca de esta situación?”
2. ¿De qué puedo estar agradecido en mi vida o en mí mismo ahora mismo?

MJ Ryan



ENCUENTRE PROPÓSITO Y ALEGRÍA

Tener un sentido de propósito es muy bueno para el cerebro. Tener un propósito ayuda a mantener a raya la enfermedad de Alzheimer (un tipo de demencia) evitando que se muestre en su vida, incluso si usted ya tiene cambios en su cerebro.

Puede que ya tenga algo en su vida que le de un sentimiento de propósito. Puede ser algo simple como cuidar de un niño, una mascota, reunirse con amigos o tejer mantas para las personas necesitadas.

Si no tiene ese sentimiento de propósito, busque maneras para crearlo a través de un trabajo, un pasatiempo o de relaciones personales. El gozo es importante porque sin él, las cosas con propósito a menudo ya no se sienten como tales. **Puede parecer como que debe surgir naturalmente, pero está bien diversificar y encontrar activamente su gozo.**



EVITE LESIONES CEREBRALES

Como puede esperar, todos los tipos de lesiones cerebrales (derrames cerebrales, caídas, sacudidas violentas, accidentes automovilísticos y tumores) pueden cambiar su cerebro.

Después de una lesión cerebral, la gente es más susceptible a tener otra, debido a cambios en las capacidades físicas y en la toma de decisiones. **Evite deportes bruscos y situaciones de riesgo.**

Piense primero, con cualquier actividad, acerca de cómo evitar otra lesión. **Siempre** porte un casco cuando se necesite y **siempre** use el cinturón de seguridad. Muchas sugerencias en estas páginas, como comer correctamente y hacer ejercicio, pueden ayudarle a evitar un derrame cerebral.

EVITE SUSTANCIAS TÓXICAS

Sustancias tóxicas pueden dañar el cerebro. Sustancias tóxicas incluyen pesticidas en la comida, hormonas inyectadas en la carne, y algunos químicos usados en productos de belleza como champús y cremas.

- Compre frutas y vegetales orgánicos cuando pueda. Esté consciente de lo que pone en su cuerpo.
- Una app como *Think Dirty* puede ayudarle a darse cuenta si sus productos de limpieza del hogar o de belleza son seguros.
- Evite fumar, usar cigarros electrónicos, drogas ilegales y consumir alcohol. **Todos** ellos son tóxicos para su cuerpo y cerebro.
- **Quizá necesite apoyo para hacer estos cambios.** Usted podría beneficiarse de un grupo de apoyo local. Si usted fuma o usa drogas recreativas (incluyendo opioides), haga un plan para dejar de fumar, fije una fecha y díglelo a su familia o amigos, para que puedan ayudarlo a mantenerse en el camino.

Dejar de fumar: <https://www.cdc.gov/tobacco/campaign/tips/> y <http://www.tnquitline.org/index.php>

Alcohólicos Anónimos: <https://aa.org> y <https://www.tn.gov/behavioral-health/substance-abuse-services.html>

Narcóticos Anónimos: <https://na.org> y <https://natennessee.org/>

- Incluso las personas tóxicas (incluyendo familiares) y las relaciones tóxicas pueden dañar su recuperación y causar síntomas y daños adicionales.
- Para trastornos de salud mental y de uso de sustancias, llame a la línea de ayuda nacional de SAMHSA 1800-662-HELP (4357) o TELEX: 1-800-487-4889 o busque <https://www.samhsa.gov/find-help/national-helpline>

DUERMA LO SUFICIENTE

¿Sabía que su cerebro se limpia a sí mismo de toxinas y placas mientras duerme? Si no se limpia, desarrollará dificultades para concentrarse, problemas de memoria o demencia. **Duerma lo suficiente para su edad.**

<http://bit.ly/4lDhgZj>

Sometase a tratamiento para la apnea del sueño (ronquidos fuertes y periodos cortos sin respirar)

- | | |
|---|---------------------------------|
| Duerma de 7 a 8 horas por noche (si es un adulto) | • Reduzca/maneje su estrés |
| Reduzca el uso de dispositivos electrónicos durante la noche | • Apéguese a un horario regular |
| Reduzca la cafeína, especialmente durante la noche | • Tome té manzanilla |
| Deshágase de los Pensamientos Negativos Automáticos (consulte la sección de Salud Mental) | |



REALIZANDO CAMBIOS

Puede resultar difícil cambiar los hábitos viejos y poco saludables por hábitos nuevos y más saludables. Pero las mejoras en su salud valdrán la pena. La mejor forma de cambiar los hábitos de otra persona –como un hijo, cónyuge o amigo– es **cambiando uno mismo primero**. Hay varias maneras en que puede comenzar.



- Haga **un cambio pequeño** a la vez. Quizá usted deje de tomar gaseosas este mes y abandone la carne roja al siguiente mes. Siga haciendo cambios.
- Limpie **un área** a la vez. Este mes hágase vegano o vegetariano, y el siguiente mes trabaja en añadir ejercicio cardiovascular a su rutina.
- Cambie **todo** a la vez. Enfóquese en la elección de alimentos, añada ejercicio, cambie sus productos de limpieza, comience un diario de gratitud, etc.

Encuentre una manera que le funcione mejor para mantenerse avanzando como establecer metas para cada mes. Si puede, pida a un familiar o amigo que haga los cambios saludables con usted.

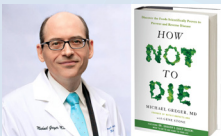
OBTENGA AÚN MÁS BENEFICIOS

COMBINE dos o más cambios saludables para obtener más beneficios.

- Comience un nuevo pasatiempo que también ayude a otros
- Haga ejercicio con un amigo o con su mascota
- Tenga comidas de “lunes sin carne” con su pareja
- Deje de fumar junto con un compañero del trabajo
- Vaya caminando a una tienda de productos saludables
- Vaya a un mercado de agricultores y planee una comida o picnic saludable
- Apague la televisión más temprano en la noche para hacer una lista corta de gratitud antes de dormir
- Limite su consumo de cafeína o cambie la última taza de café por una de té verde descafeinado y rete a un amigo(a) a que haga lo mismo



RECURSOS ADICIONALES



Libro: **Cómo no morir**
por Dr. Michael Greger

App “Daily Dozen” del Dr. Greger
[Nutritionfacts.org](https://www.nutritionfacts.org)



Libro: **Rescate de la memoria** por
Dr. Daniel Amen

<https://forksoverknives.com>

Alianza Nacional para las Enfermedades Mentales:
<https://www.nami.org/home>

Hay muchos buenos libros y sitios web con información y
recetas para cocina vegana o vegetariana.



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

@BrainLinksTN





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.



Brain Injury and Opioid Overdose: *fast facts*

Acquired Brain Injury is damage to the brain occurring after birth and is not related to congenital or degenerative disease. This includes anoxia and hypoxia, impairment (lack of oxygen), a condition consistent with drug overdose.

Opioid Use Disorder, as defined in DSM 5, is a problematic pattern of opioid use leading to clinically significant impairment, manifested by meaningful risk factors occurring within a 12-month period.

Overdose is injury to the body (poisoning) that happens when a drug is taken in excessive amounts and can be fatal. Opioid overdose induces respiratory depression that can lead to anoxic or hypoxic brain injury.

2.8 million brain injury related hospital stays/deaths in 2013

70-80% of hospitalized patients are discharged with an opioid Rx

63,000+ drug overdose-related deaths in 2016

"As the number of drug overdoses continues to rise, doctors are struggling to cope with the increasing number of patients facing irreversible brain damage and other long term health issues."

brain injury and overdose

Substance Use and Misuse is:

- Often a contributing factor to brain injury. History of abuse/misuse is common among individuals who have sustained a brain injury.
- Likely to increase for individuals who have misused substances prior to and post-injury.

Acute or chronic pain is a common result after brain injury due to:

- Headaches, back or neck pain and other musculo-skeletal conditions commonly reported by veterans with a history of brain injury.
- Moderate to severe brain injury, highly correlated with increased risk for chronic pain.
- Risk of chronic pain for individuals with co-occurring brain injury, post-traumatic stress disorder and depression.

Individuals treated for non-cancer chronic pain with opiate therapy are at risk for developing an opiate use disorder and are at risk of overdose.

The frontal lobe is highly susceptible to brain oxygen loss, and damage leads to potential loss of executive function.



Sources: Stojanovic et al 2016; Melton, C. Nov. 15, 2017; Devi E. Nampiaparampil, M.D., 2008; Seal K.H., Bertenthal D., Barnes D.E., et al 2017; www.cdc.gov/traumaticbraininjury/get_the_facts.htm; www.cdc.gov/mmwr/volumes/65/wr/mm655051e1.htm Hammond et al, 2015.

For more information contact Rebeccah Wolfkiel: execdirector@nashia.org 202.681.7840, or visit www.nashia.org

nashia
giving states a voice
National Association of State Head Injury Administrators

recommendations: brain injury & behavioral health

Prevention: Overdose prevention and education initiatives must target individuals living with brain injury, caregivers and providers. State behavioral health and brain injury programs should collaborate to ensure that efforts for prevention target this population. Federal prevention resources/tools should highlight the importance of this issue and recommend strategies for states.

Substance Use Disorders (SUD) Treatment: Services designed to address SUD must be accessible to individuals with brain injury. Providers should routinely screen for a history of brain injury among consumers served and ensure treatment services are accessible for individuals with cognitive, behavioral and physical disabilities resulting from a brain injury.

Brain Injury Services Programs: Individuals who have sustained a brain injury resulting from an overdose may require specialized services. State programs need to develop capacity and expertise to support a growing number of individuals living with an acquired brain injury from overdose. Understanding best practices in SUD screening, recovery and treatment are critical.

Playground Safety Tips for PARENTS

HEADS UP CONCUSSION

As a parent, you play an important role in keeping your child safe on the playground. This sheet will help you learn how to spot a concussion and protect your child from concussion or other serious brain injury each time you take your child on an outdoor play adventure.

WHAT IS A CONCUSSION?

A concussion is a type of traumatic brain injury—or TBI—caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move quickly back and forth. This fast movement can cause the brain to bounce around or twist in the skull, creating chemical changes in the brain and sometimes stretching and damaging the brain cells.

HOW CAN I HELP KEEP MY CHILD SAFE?

Playgrounds are important places for children to have fun, explore, and grow. Children learn through play and need opportunities to take risks, test their limits, and learn new skills through free play. Playgrounds can also put children at risk for concussion.

On the playground, children are more likely to get a concussion or other serious brain injury when using:

1. Monkey Bars



2. Climbing Equipment

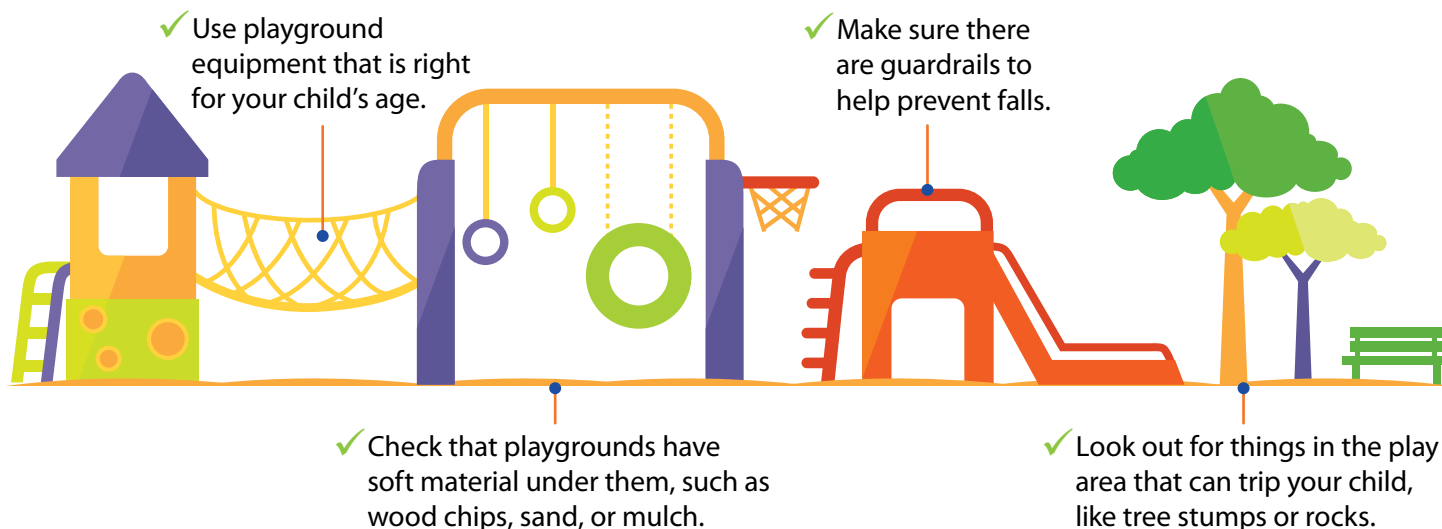


3. Swings¹



¹ Cheng T et al. Nonfatal playground-related traumatic brain injuries among children, 2001-2013. *Pediatrics*, 2015.

To help keep children safe:



Centers for Disease
Control and Prevention
National Center for Injury
Prevention and Control

Be HEADS UP on the Playground

HOW CAN I SPOT A POSSIBLE CONCUSSION?

After a fall or a bump, blow, or jolt to the head or body, look for one or more of these signs and symptoms of a concussion:

Signs Observed by Parents

- Appears dazed or stunned.
- Forgets an instruction, is confused about an assignment or position, or is unsure of the game, score, or opponent.
- Moves clumsily.
- Answers questions slowly.
- Loses consciousness (even briefly).
- Shows mood, behavior, or personality changes.
- Can't recall events prior to or after a hit or fall.

Symptoms Reported by Children

- Headache or "pressure" in head.
- Nausea or vomiting.
- Balance problems or dizziness, or double or blurry vision.
- Bothered by light or noise.
- Feeling sluggish, hazy, foggy, or groggy.
- Confusion, or concentration or memory problems.
- Just not "feeling right," or "feeling down."

If you see any of these signs or symptoms and think your child has a concussion, or other serious brain injury, seek medical attention right away. Remember, signs and symptoms may show up right after the injury, or may not appear or be noticed until hours or days after the injury. While most children with a concussion feel better within a couple of weeks, some will have symptoms for months or longer.

WHAT ARE SOME MORE SERIOUS DANGER SIGNS TO LOOK OUT FOR?

In rare cases, a dangerous collection of blood (hematoma) may form on the brain after a bump, blow, or jolt to the head or body and can squeeze the brain against the skull. Call 9-1-1 or ensure that the child is taken to the emergency department right away if, after a bump, blow, or jolt to the head or body, he or she has one or more of these danger signs:

- One pupil larger than the other.
- Drowsiness or inability to wake up.
- A headache that gets worse and does not go away.
- Slurred speech, weakness, numbness, or decreased coordination.
- Repeated vomiting or nausea, convulsions, or seizures (shaking or twitching).
- Unusual behavior, increased confusion, restlessness, or agitation.
- Loss of consciousness (passed out/knocked out). Even a brief loss of consciousness should be taken seriously.



You can download the CDC [HEADS UP](#) app to get concussion information at your fingertips. Just scan the QR code pictured at left with your smartphone.

The information provided in this fact sheet or through linkages to other sites is not a substitute for medical or professional care. Questions about diagnosis and treatment for concussion should be directed to your physician or other health care provider.



How can you help your child lower their chance of getting a concussion?

Plan ahead. ✓

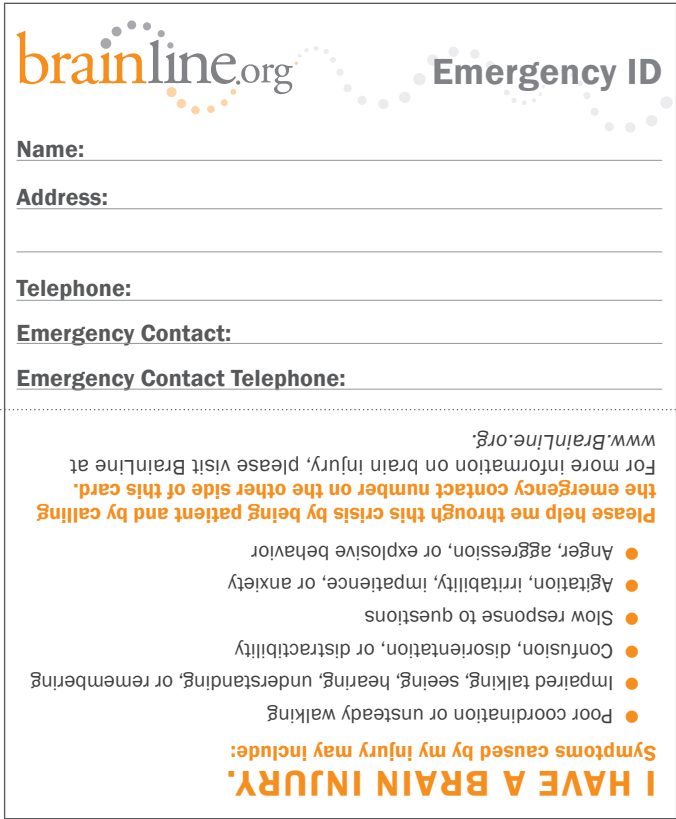


Centers for Disease
Control and Prevention
National Center for Injury
Prevention and Control

To learn more, go to www.cdc.gov/HEADSUP

Instructions:

1. Print Emergency ID card.
2. Cut out card around solid black line.
3. Fold card in half along dotted line.

**Emergency ID**

Name: _____

Address: _____

Telephone: _____

Emergency Contact: _____

Emergency Contact Telephone: _____

I HAVE A BRAIN INJURY.
Symptoms caused by my injury may include:

- Poor coordination or unsteady walking
- Impaired talking, seeing, hearing, understanding, or remembering
- Confusion, disorientation, or distractibility
- Slow response to questions
- Agitation, irritability, impatience, or anxiety
- Anger, aggression, or explosive behavior

Please help me through this crisis by being patient and by calling the emergency contact number on the other side of this card.
For more information on brain injury, please visit Brainline at www.Brainline.org.

Thank You!

We're here to help.

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



Contact us:

tbi@tndisability.org

Check out our website:

www.tndisability.org/brain

Follow us on social media:

