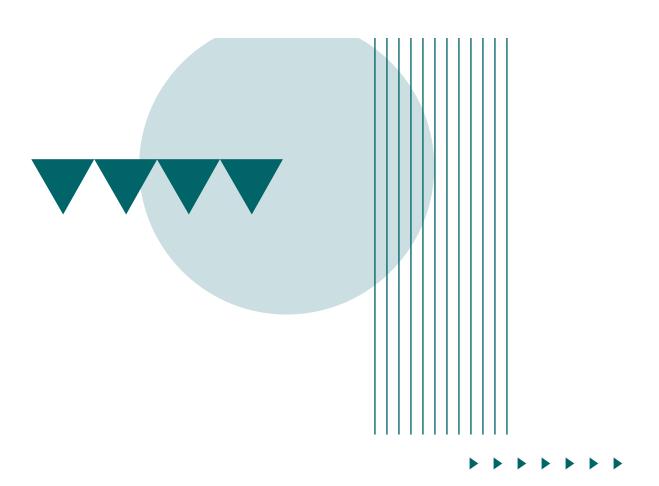


# **Understanding Brain Injury**

A Guide for Employers



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## Understanding brain injury

*Understanding Brain Injury: A Guide for Employers* is one of the most-requested publications offered by the Department of Physical Medicine and Rehabilitation at Mayo Clinic. This useful guide for employers provides information about what to expect, what to watch for, and how to help employees who have sustained brain injuries adjust to the workplace.

Thousands of employees with brain injuries enter the work force each year. Those numbers will increase as soldiers with brain injuries return from Iraq and Afghanistan and re-enter the work force. Most do not need special consideration. Their brain injuries have little long-lasting effect. For others, however, the return to work is challenging, if not incredibly difficult.

This second edition of *Understanding Brain Injuries* provides employers with the tools and resources to ease the transition and return to productive, meaningful work for employees with brain injuries. Simple, inexpensive adjustments in the work environment are often all that is necessary to help those employees function successfully in the workplace.

The Americans with Disabilities Act, 20 years old in 2010, gave employers the unique opportunity to support what President George H.W. Bush called a "declaration of equality for people with disabilities" when he signed the bill into law. Employers are required to provide reasonable accommodation to help any employee with a disability achieve vocational success. This publication supports the intent of the law and provides employers with a guide for successful integration of employees who have brain injuries into the workplace.

For more information about techniques and modifications to help employees who have sustained brain injuries thrive in the workplace, contact the Mayo Clinic Brain Rehabilitation Program at 507-255-3116.

#### **Causes**

Acquired brain injury (brain injury) refers to medical conditions that change the function of the brain following birth. These conditions include non-degenerative diseases of the brain such as:

- Aneurysm (ballooning of a weakened wall of a vein, artery or the heart)
- Anoxia (lack of oxygen to brain tissue)
- Concussion (temporary disturbance of brain function, also known as mild traumatic brain injury)
- Contusion (injury on the brain's surface)
- Diffuse axonal injury (pulling, stretching or tearing of brain cells)
- Edema (swelling in brain tissue)
- Encephalitis and meningitis (infection and inflammation of the brain and central nervous system)
- Hematoma (pooled blood inside the brain tissue) and hemorrhage (profuse bleeding from damaged blood vessel)
- Mild traumatic brain injury (disturbance of brain function resulting from an external blow to the head, also known as concussion)
- Skull fracture (break in the bone that covers the brain)
- Stroke (interruption of blood flow to part of the brain)
- Traumatic brain injury (injury to the brain that results from an external force)
- Tumor (abnormal growth of tissue that has no function)

#### **Treatment**

A broad range of therapy, testing and other treatment options are available to help employees who sustain brain injuries. Care is tailored to meet individual needs.

During the early weeks after injury, treatment focuses on stabilizing the employee's physical condition, preventing complications and addressing medical issues that arise.

Many employees with brain injury will receive rehabilitation services in the hospital. Some may need outpatient services (rehabilitation services received through visits to a doctor's office or clinic) for weeks or months.

Rehabilitation encourages the body's natural healing process by stimulating and enhancing physical and thinking abilities and teaching new techniques to compensate for lost physical, cognitive (thinking) and behavioral skills.

The brain controls all body functions, including thought, movement, feeling, and the ability to communicate. Rehabilitation addresses functional changes that may occur as a result of brain injury.

How much and what rehabilitation therapy the employee who has a brain injury receives depends on factors such as level of awareness, other injuries such as fractures, the ability to participate in therapy, and the ability to carry over information learned from day to day.

It is important for employees with brain injuries to return to former roles and activities. The return to routine often provides motivation and stimulates the rehabilitation process. The achievement of short-term goals helps patients with brain injuries achieve long-term goals.

Learn more about brain injuries at http://www.mayoclinic.com/health/traumaticbrain-injury/DS00552.

#### Recovery

Traumatic brain injury is often called an invisible injury. Employees with brain injuries may seem fully recovered, especially if they have no physical disabilities, but cognitive, emotional, and behavioral problems may linger and appear when the employee is stressed.

Recovery following a brain injury may be measured in weeks, months or years. Many employees with mild brain injuries experience complete recovery. Some with severe brain injuries experience only mild long-term difficulties. Others may require care or special services for the rest of their lives.

It is not exactly clear what happens in the brain during the later stages of recovery. New research, however, is shedding light on brain tissue and its capacity to repair itself. For example, although the total number of brain cells may not change, it is thought that surviving brain tissue has the capacity gradually to learn how to perform some functions of destroyed cells. Current treatment methods are based on a growing understanding of the brain's recovery processes.

Although the outcome for employees with brain injuries may initially seem dire, many recover. Rehabilitation helps promote recovery through a return to work, family and community. Most employees will adapt over time in a structured, supportive environment.

Learn more about brain rehabilitation at Mayo Clinic at http://www.mayoclinic.org/brain-rehabilitation/.

# Employing people who have brain injuries

A brain injury is a life-altering event that may affect many areas of an employee's life. Many people, including family, friends and employers, play important roles in an employee's recovery after a brain injury. An employee may be eligible for accommodations under the law when a brain injury leads to impairment in major life activities, including work.

Brain injury is considered a form of disability. It is covered by the provisions of the 1990 Americans with Disabilities Act (ADA). The ADA definition of disability is broad: A physical or mental impairment that substantially limits one or more major life activities.

The ADA does not contain a list of medical conditions that constitute disabilities. It requires that private sector employers with 15 or more employees provide reasonable accommodations for employees with disabilities. All state and local government agencies, regardless of employee numbers, must do the same.

Reasonable accommodations might include:

- Making work areas accessible
- Allowing flexible work schedules
- Reassigning some tasks to others

Most people of working age want to work, including employees with brain injuries. Work provides a sense of productivity, meaningfulness, income and social connection. Employees with brain injuries usually want to return to the job they held before their brain injuries occurred. If the employee cannot continue to perform that job successfully, even with adaptations, alternatives may include a new position within the company, a new setting, or a temporary return through practice before the employee resumes former responsibilities. Sometimes employees cannot return to their former positions, but may stay involved through part-time employment or volunteering.

Accommodations are not based on the diagnosis, but on the employee's specific impairment. It is important for an employee with particular needs related to a brain injury to discuss accommodation options with the employer.

Many accommodations are simple and inexpensive, such as providing a notebook in which the employee can write important information to compensate for memory difficulties, or cue cards to help an employee remember the steps for a particular process.

Employers are not required, however, to make accommodations that would cause their company undue hardship. Employers are also not required to hire people who are unable to perform the requirements of a job.

Employers may accommodate employees with brain injury who do not meet the ADA definition of disability if they choose to do so.

To help determine if an employee with a brain injury meets the ADA definition of disability, visit the U.S. Equal Employment Opportunity Commission Guidance Section 902 Definition of the Term Disability at http://www.eeoc.gov/policy/docs/902cm.html.

# Working with employees who have brain injuries

In general, employees who return to work after brain injuries become healthier and have higher self-esteem than those who do not. Work, defined as productive activity, provides:

- · A sense of achievement
- Recognition
- Responsibility
- Financial independence
- Social interaction
- Structure

Returning to work is a goal that drives most survivors of brain injury through the rehabilitation process. Yet when employees finally achieve this goal, they may have difficulty adjusting to expectations of the workplace. Sometimes simple adjustments in the work environment may ensure that an employee with a brain injury is successful on the job.

For people with brain injuries, a return to work depends on:

- Overall health
- Desire to work
- Physical abilities, including fatigue and endurance levels
- Ability to adjust to changes
- Social and behavioral abilities, such as behavioral control and getting along with co-workers (may be related to depression and anxiety)
- Thinking and problem-solving abilities
- Self-awareness of deficits and limitations
- Vocational interests and capabilities
- Willingness to receive further training
- The employer's willingness to provide a proper initiation and adapt the job or workplace to the employee who has a brain injury

Some state agencies help people with disabilities reach their vocational goals. The agencies may provide rehabilitation teams that work to determine what employment is the best fit for each employee. Other services may include:

- Physical and vocational evaluations
- Training
- Assistive devices
- Transportation
- Help finding jobs

A solution that works well for one employee may not work for another. Often the best approach is to try one solution for two or three weeks. If that solution does not work, try another.

Sometimes employers and employees develop unique solutions to address challenges in their workplace. Employers are encouraged to:

- Actively take steps to understand and nurture the self-esteem of employees who have brain injuries
- Avoid labeling, categorizing or stereotyping a behavior or communication skill that was altered by an employee's brain injury
- Learn as much as possible about brain injuries
- Exercise patience and compassion

### Use a team approach to care

Whether an employee can return to work successfully following a brain injury depends on the employee and the extent of the injury. Keeping the same job held prior to injury may be possible, but may be challenging. Brain injuries may cause many changes in behavior, emotions, and communication and thinking skills.

The employee with brain injury is at the center of a team that includes family, health care professionals, employers and others.

If, after trying several solutions for a problem, the employer or employee finds that nothing seems to work, employers may recommend that employees who have brain injuries seek advice from brain rehabilitation professionals.

A team of health care professionals is an important source of information and support that can help employers and employees develop a plan for a successful return to work. Health care team members may analyze the special features of a situation and develop a workable approach to the challenges the employee faces.

The health care team will help educate employers, other employees and brain injury survivors about brain injuries. Health care team members may include:

- Physiatrists (physicians) who specialize in physical medicine and rehabilitation, including brain injury rehabilitation.
- Neuropsychologists with training and expertise in evaluating and treating cognitive, behavioral and emotional changes caused by a brain injury.
- Rehabilitation nurses with training and expertise in brain injury who coordinate care throughout the recovery process.
- Occupational therapists who evaluate and treat thinking and perception problems, and help maintain or learn independent living skills.
- Physical therapists who evaluate and treat changes in physical abilities and mobility.
- Speech language pathologists or speech therapists who evaluate and treat communication and thinking problems.
- Social workers who help guide the adjustment to brain injury and provide information on financial and community resources.
- Hospital-based vocational coordinators who help align therapy goals with vocational goals. The vocational coordinator is likely to be the primary liaison among the employer, the employee with a brain injury and the health care team.

# Strategies to help employees with brain injuries compensate for changed capabilities

Cognitive, behavioral and emotional changes and changes in communication style may occur after an employee has a brain injury. Speech language therapists work closely with employees with brain injuries to teach and refine communications skills. Employer support for their efforts is crucial to the employee's successful return to the workplace.

Compensation strategies help employees with brain injuries cope with these changes by building on the employee's strengths and working around deficits or problems that result from brain injuries. Occupational and physical therapists are often involved in efforts to develop effective compensation strategies.

Employers who work to help nurture the self-esteem of employees who have brain injuries:

- Avoid labeling, categorizing or stereotyping a behavior or communication skill that was altered by the injury.
- Learn as much as possible about brain injuries.
- Exercise patience and compassion.

Compensation strategies work best with a team approach that includes the employee who has a brain injury, family members, friends, employers, and coworkers. Consistent and frequent repetition of compensation strategies by all increases the chance of success.

#### Prepare a plan of action

- Involve the employee with a brain injury in planning.
- Define the employee's responsibilities.
- Work with the employee to determine the best way to talk with coworkers about the brain injury, resulting disabilities and any work modifications.
- Incorporate compensation tools such as calendars and notebooks in the planning process.

#### Keep it simple

- Break tasks into small steps.
- Keep the employee's work environment as free from distractions as possible.

#### Use a problem-solving format (see page 30)

- Recognize, acknowledge and define the problem.
- Determine possible solutions after weighing the advantages and disadvantages of each.
- Choose a solution, try it and evaluate its success.
- Try another solution if necessary.

#### Maintain open communication

- Discuss performance and job expectations.
- Evaluate performance and provide thoughtful, realistic comments about behavior.
- Identify successes and address areas of concern directly, without delay.

Each employee is unique, so a technique that works well for one may not work for another. Try one strategy for two or three weeks. If it does not work, try another suggested strategy or develop a unique solution.

If, after trying several solutions to a problem, nothing seems to work, ask a member of the health care team to help develop a different approach. Consistent and frequent repetition of the techniques listed will increase the chance of success.

#### **Guide to problems, indicators and actions**

Employers should watch for signs of functional change in employees with brain injury. This chart describes problems that may occur, signs that may indicate the problem and what employers can do to help.

#### **Cognitive problems**

Cognitive problems affect the processes employees' brains use to perform tasks. Employees with cognitive problems may have difficulty remembering all of the steps required to complete tasks. They may be distracted or take more time to make decisions.

Cognitive problems	Signs to watch for	What to do
Difficulty remembering	Difficulty remembering tasks from day to day  Difficulty remembering new information	Establish a structured routine of daily tasks.  Encourage the consistent use of memory aids such as calendars and reminder notes to plan, record and check off tasks as completed.  Encourage the employee to write down new information and refer to it frequently.  Try to link new information and tasks with familiar information and tasks.  Provide spoken cues as needed for recall and, if necessary, help fill in memory gaps.
Attention problems	Limited ability to focus  Easily distracted  Difficulty doing more than one thing at a time	Focus on one task at a time.  Be sure you have the employee's attention before beginning a discussion or task.  Decrease distractions when working or talking with the employee. Eliminate or reduce noises.

Cognitive problems	Signs to watch for	What to do
		Gently refocus the employee's attention to specific details of the activity as needed.
		Keep abrupt changes to a minimum.
		Ask the employee to repeat information that was communicated to be sure the employee understands the conversation.
		Schedule brief rest periods between short periods of work or activity (for example, 50 to 60 minutes of work, a five-minute break; 50 to 60 minutes of work, etc.).
Difficulty with decision making	Hesitation with decisions  Inappropriate or potentially harmful decisions	Stop and think. Encourage the employee to stop and think. Many people with brain injury benefit from a note or a stop sign reminding them to stop and think.
	Difficulty reasoning	Use the problem-solving worksheet (included).
	Less effective problem solving	Help the employee explore various options to solving problems.
		Have the employee write possible options in the notebook.
		Discuss advantages and disadvantages of each option.

Cognitive problems	Signs to watch for	What to do
Difficulty with initiation	Has trouble getting started	Help the employee develop and follow a structured daily routine.
	Appears disinterested or unmotivated (this is	Simplify tasks. Break down tasks into simple steps and complete one step at a time.
	rarely intentional)	Encourage use of a calendar to set specific deadlines for tasks to be completed.
		Establish a time frame for accomplishing tasks.
Difficulty carrying out a plan of action	Doesn't follow tasks through to completion  Difficulty planning	Begin with small, realistic projects.  Include the employee in planning the activity.
	Difficulty planning a sequence of tasks  Appears disorganized	Provide a clear explanation of an activity before starting  Break down new or complex tasks into several easier steps.  Have the employee write a step-by-step list as a plan.  Ask the employee to tell you these steps to ensure understanding.  Encourage the employee to refer to the plan and check off each task that is completed.

#### **Perceptual problems**

Perceptual problems may prevent employees who have brain injuries from realizing what they feel, see or hear, even though their senses of touch, sight and hearing may be fine.

Perceptual changes may also impair the ability to judge distance, size, position and speed of movement. These changes may be manageable.

Perceptual problems	Signs to watch for	What to do
Unilateral neglect (neglect of one side of the body)	Bumps into objects on the affected side  Ignores objects on the affected side	Stand on the affected side to encourage the employee to look toward that side.  Arrange the workstation to encourage looking toward the affected side.
Visual field cut (each eye sees only half or a portion of its visual field)	Suddenly notices objects that seem to appear or disappear  Bumps into objects on the affected side  Turns the head toward the unaffected side  Loses track of the last location on a page where the employee was reading or writing  When reading, cuts words in half and they cannot be understood	Remind the employee to look around the environment, especially on the affected side.  Mark "on" and "off" switches of frequently used items with bright pieces of tape so the employee can easily know when equipment is on or off.  Position bright objects or most commonly used things to the affected side and ask the employee to turn his or her head until he or she spots the objects.  Draw a straight, brightly colored line down the right side of a book or notebook page if the employee's right side is affected. Draw the line down the left side of the paper if the employee's left side is affected.

Perceptual problems	Signs to watch for	What to do
Apraxia (inability to use an object or do familiar tasks)	Uses objects incorrectly; for example, might use a screwdriver to comb hair or a fork to eat soup  Fails to follow directions due to inability to motor program the response to follow through with what was asked	Stop the employee from continuing a task the wrong way.  Show the employee what to do by demonstrating the position or movement.  Place your hand over the employee's hand and move it through the correct motions to perform a task.
Difficulty with spatial relations	Mistakes the location of a chair when sitting down  Has difficulty finding items in a cluttered work area  Misjudges space between steps when going up or down stairs  Reaches too far or not far enough to get objects  Stands too close or too far away from others in social situations	Limit clutter; keep the work area organized and neat.  Keep items used often in the same location.  Provide cues with words and pictures.  Place brightly-colored tape across the edge of each step on stairways.  Remind that handrails should be used when available.  Encourage using both hands to feel for objects.  Provide gentle reminders and ask the employee to move when standing too close or too far away.

#### **Behavioral change problems**

An employee with a brain injury may experience behavioral changes that affect self-control, self-awareness and response to social situations.

Behavioral change problems	Signs to watch for	What to do
Difficulty with self-control	Acts or speaks without all the information or without considering the consequences  Impulsiveness or poor judgment  Lack of inhibition  Gets stuck on one idea or activity and repeats it instead of moving on to other, different activities	Limit the employee's choice of options.  Suggest alternatives for behavior.  Explain the reasons for tasks.  Be fair in your expectations.  Respond immediately to inappropriate ideas but maintain the original focus of the discussion.  Encourage the employee to slow down and think through tasks or responses.  Provide feedback.  If undesired behavior occurs, calmly and confidently discuss the consequences in private.  Praise and reward desired behavior.
Impaired self-awareness	Reduced awareness of deficits and limitations (rarely intentional, but common following brain injury)	Anticipate lack of insight.  Prompt accurate self-statements.  Use feedback generously and supportively.

Behavioral change problems	Signs to watch for	What to do
	Overestimates abilities; under- estimates problems	Give realistic feedback as you observe behavior.
	Inaccurate image or perception of self	

#### **Emotional change problems**

Brain injuries may affect the areas of the brain that control emotions. Depression may arise as the employee struggles to adjust to temporary or lasting disabilities caused by a brain injury. If the employee shows symptoms of depression, mental health professionals, including rehabilitation psychologists and social workers, may help provide effective treatment. Early treatment may help prevent needless suffering.

Emotional change problems	Signs to watch for	What to do
Difficulty controlling emotions	Mood swings ranging from anxious to sad to angry  Inappropriate laughing or crying  Lower tolerance for frustrating situations	Expect the unexpected.  Remain a model of calm assurance and confidence if an emotional outburst occurs.  Take the employee to a quiet room or area for time to calm down and regain control.  Provide feedback gently and supportively after the employee regains control.  Avoid comparing past and present behaviors.  Gently redirect behavior to a different topic or activity.

Emotional change problems	Signs to watch for	What to do
		Recognize that the employee may use negative comments or refusal as a means of control.
		Understand that a brain injury may limit the employee's ability to feel guilt or empathy.
Depression	Persistent sadness	Encourage the employee to
Feelings of sadness, frustration and loss	Irritability, moodiness	talk with a physician about mood difficulties or physical symptoms
	Anxiety	Talk with the employee to
	Loss of interest or pleasure in life	determine whether specific job-related challenges or difficulties are contributing to the employee's frustration.
	Neglect of personal responsibilities or personal care	If an employee expresses suicidal thoughts or threatens
	Changes in eating habits or sleeping patterns	self-harm, call 911 or your local emergency provider immediately.
	Fatigue, loss of energy, lack of motivation	
	Extreme mood changes	
	Feeling helpless, worthless or hopeless	

Emotional change problems	Signs to watch for	What to do
	Physical symptoms such as chronic pain or headaches that do not improve  Withdrawal from others	
	Thoughts of death or suicide	
Reduced self-esteem (employee's assessment of self-worth)	Work performance suffers	Focus on the positives.  Allow the employee to express feelings.  When necessary, redirect conversation to positive or neutral thoughts.  Express your concern and desire to understand the employee's feelings.  Point out the employee's successes, even partial successes.  Encourage as much independence as possible.  Do not criticize.  Give supportive, clear, simple feedback.  Choose activities and tasks that the employee can successfully complete.

#### **Changes in communications style**

Communication difficulties may be caused by many factors, including changes in behavior and cognitive skills, problem-solving abilities, judgment, reasoning, general awareness, memory, and self-awareness. Speech and the ability to understand language also may be affected by a brain injury.

Communication problems	Signs to watch for	What to do
Initiating conversation	Does not respond to another employee's conversation, questions or comments  Does not start, or is slow to begin conversations, ask questions, or make comments  Leaves long pauses  Has difficulty with explanations	Encourage the individual to participate. For example, ask, "What do you think about that?"  Ask open-ended questions such as, "Tell me about"  Give the employee time to organize thoughts. Extra time may be necessary to respond to any request or question.  Give the employee your full attention until the thought is completed.  Rephrase what he or she has said, such as, "Do you mean?"
Following conversation	Has difficulty paying attention to what is said  Misinterprets what is said	Get the employee's attention before speaking.  Be clear and concise.  Reduce distractions.  Emphasize important information.  Offer to repeat what was said.  Ask the employee to look at you when speaking.  Invite the employee to ask questions or request clarification.

Communication problems	Signs to watch for	What to do
Taking turns in conversation	Talks nonstop, does not give the listener a turn to speak  Does not appear to adjust communication style or behavior for the situation  Has a hard time selecting topics for conversation  Has a hard time keeping up when topics change  Introduces a new topic abruptly  Does not always stay on topic	Politely interrupt and ask for a chance to speak.  Ask the employee to "please make it brief" or announce that you would like to speak.  Ask about the employee's interests and opinions.  Clarify new topics as they arise.  Ask how the employee's comment relates to the topic, for example, "Do you mean?"  Tell the employee you are confused or getting lost in the conversation.
Intelligibility	Slurred speech  Speaks too loudly or softly, making the message hard to understand  Speaks too rapidly	Tell the employee you did not understand and ask to hear it again.  Establish and use consistent gestures or cues (for example, cup your hand to your ear as a reminder to speak louder).

Communication problems	Signs to watch for	What to do
Nonverbal communication	Does not seem to understand common nonverbal cues  Stands too close or too far from conversational partner(s)  Uncomfortable number or type of physical contacts  Body language that does not seem to match what is said  Facial expressions that do not seem to match what is said  Distracting, repetitive or excessive body movements  Poor eye contact  Staring at others during conversation	Ask the employee to maintain a comfortable distance.  Politely ask the employee to modify his or her physical contacts because you feel uncomfortable; offer an explanation if necessary.  Tell the employee you are confused by the difference in body language and spoken message.  Ask what the employee is feeling.  Politely ask the individual to stop distracting movements.

#### Other changes in the employee's ability to function

Brain injuries may cause cognitive, emotional and behavioral changes. They may also cause changes in the employee's communications style. Brain injuries may result in physical or medical conditions that affect the employee in the workplace, including fatigue and seizures.

#### **Fatigue**

Fatigue may result from the injury and from other injuries in cases of trauma. Fatigue may also result from additional physical and mental effort required to do tasks that once were performed with little or no effort.

Physical functioning, attention and concentration, memory, and communication may be adversely affected by fatigue. Employees may become discouraged by their inability to do as much as they want to do and fatigue can make small problems seem worse than they are. Employers can do many things to help lessen the impact of fatigue for employees with brain injuries:

- Plan for a gradual return to work with a gradual increase in hours and responsibilities. Resume activities gradually, over weeks or even months.
- Encourage the employee to use a calendar or planner to improve organization and help manage mental fatigue.
- Set a schedule that includes regular rest breaks. Rest breaks should not exceed 30 minutes. Gradually decrease the length and number of breaks as the employee's ability to tolerate activities with less fatigue improves.
- Start with familiar tasks that the employee can complete without fatigue.
- Gradually increase the complexity of the task, encouraging breaks as needed, to slowly increase the length of time involved.
- Watch for signs of fatigue, such as increased inattention or distractibility, repetition of tasks or comments, irritability or increased errors. Learn your employee's indicators of fatigue.
- Encourage short breaks as soon as signs of fatigue appear, rather than waiting until the employee is overtired.
- If the health care team recommends, encourage the employee to use assistive aids to conserve energy, such as a cane for walking or a wheelchair for moving long distances.

The health care team can help develop a plan with you and your employee.

#### Seizures

Post-traumatic seizures (seizures) are medical conditions that may occur after a brain injury. The risk of ongoing seizures is related to the severity and characteristics of a brain injury, such as the type and location of the injury.

Risk seems to be greatest in the months just following the injury. It gradually declines with time. Employees' driving privileges may be restricted until a predetermined seizure-free interval has been maintained (often three months, six months, or one year, depending on the state where the employee and the company reside). During this time, take extreme caution with employees working around heavy, complex or dangerous equipment.

Most seizures are self-limited and last only a few minutes. The employee may cry out, stiffen and fall, turn flushed or blue and have some difficulty breathing

#### Seizures may involve:

- Involuntary jerking or shaking of most or all limbs
- Unresponsiveness
- Loss of bladder control

Take the following steps for the employee who has a seizure:

- 1. Remain calm.
- 2. Make certain the area surrounding the employee is safe.
- 3. Lay the employee's head on something soft.
- 4. Loosen tight clothing, such as a necktie or belt, and remove eyeglasses.
- 5. Clear away hazardous objects that may be nearby.
- 6. Position the employee lying on his or her side to keep the chin away from the chest to allow saliva to drain from the mouth.
- 7. Do not force your fingers or any object into the employee's mouth.
- 8. Do not restrain the employee. You cannot stop the seizure.
- 9. After the seizure, the employee usually will be temporarily confused and drowsy.
- 10. Do not offer food, drink or medication until the employee is fully awake.
- 11. Someone should stay with the employee until he or she is fully recovered.
- 12. Check for a medical identification tag on a bracelet or necklace.

Dial 911 for emergency assistance in these situations:

- Breathing does not resume after the seizure and mouth-to-mouth resuscitation is necessary.
- Another seizure begins before the employee recovers from the first seizure.
- The employee has been injured during the seizure.
- The employee awakes and requests an ambulance for emergency medical attention.
- The seizure continues for more than five minutes.

Prompt medical care is also recommended if:

- This seizure is the employee's first.
- The employee's level of alertness continues to be impaired.

#### Partial seizures

Simple partial seizures are involuntary jerking or shaking of one part of the body without loss of consciousness. These movements may spread to other body parts and become generalized. Partial seizures may involve:

- Loss of awareness
- Inappropriate verbal response
- Purposeless movement
- Staring or repetitive chewing
- Swallowing or lip-smacking motions

Take the following steps in this situation:

- 1. Do not try to restrain the employee unless safety is jeopardized.
- 2. Try to remove nearby hazardous or harmful objects.
- 3. Arrange for someone to watch the employee until full awareness returns.

Medical assistance generally is not necessary when partial seizures occur, unless:

- One seizure follows another in a continuous series.
- A partial seizure develops into a more-generalized seizure and the employee is not recovering.

When employees develop seizures following brain injuries, the health care team will work with them to determine treatment options to manage the seizures effectively.

#### Reduced driving skills

An employee with a brain injury may have physical, cognitive, perceptual, or vision impairments or seizures that make driving unsafe. Driving laws vary from state to state. In some cases, an employee with brain injuries may be required to pass written and behind-the-wheel driving examinations before resuming driving.

The privilege of driving may be restricted or revoked temporarily, or in some cases even permanently. With the employee's permission, talk with your employee's health care provider if you have questions about his or her driving ability.

#### **Examples of self-help materials**

Memory aids such as calendars and cue cards may help provide a sense of independence for employees with brain injuries.

#### **Calendars**

Employees with brain injuries often benefit from using a calendar to plan and organize daily activities, step by step. A calendar serves as a useful memory aid, allowing employees to:

- Record events
- Plan future events
- Review successes
- Remind themselves about uncompleted tasks
- Store needed information

#### **Cue Cards**

Cue cards often help employees with brain injuries to be effective and thorough. Cue cards vary widely, depending on their intent, and may be:

- Carried by employees, posted in their work areas, or both
- Typewritten and laminated for durability
- Developed either for specific processes or general work-related tasks and duties

Brain rehabilitation therapists can assist with development of cue cards.

#### **Cue card examples**

This list reminds an employee with a brain injury about compensation techniques that can be used regularly:

- 1. Stop and think.
- 2. Slow down.
- 3. Take one step at a time.
- 4. Read and follow directions.
- 5. Take notes and refer to them.
- 6. Ask questions.
- 7. Do not assume.
- 8. Pay attention to details.
- 9. Use the problem-solving process.
- 10. Think about the consequences of not finishing a task.
- 11. Keep it simple.

This cue card provides an employee with a brain injury with a more-specific process checklist to complete a project:

- 1. Stop and think.
- 2. Make specific notes in a project notebook, with a timeline and completion date.
- 3. Ask supervisors for help if I have questions.
- 4. Double-check my work.
- 5. Slow down.
- 6. What other choices do I have?
- 7. Do what I need to do to understand.
- 8. Break the project down into smaller parts
- 9. Go one step at a time or do one part at a time.
- 10. Check off things as I complete them.
- 11. Check the details.
- 12. Read and follow any written directions.
- 13. Positive self-talk: "I can do this."
- 14. Take a brain break when I am:
  - a. Getting frustrated
  - b. Feeling irritated
  - c. Having trouble understanding
  - d. Reading material several times to understand it

This self-help work duty list illustrates how a professional with a brain injury, such as a registered nurse, may use a cue card checklist to work effectively:

- 1. Greet patient
- 2. Report
  - a. Write down any important information
- 3. Read nursing notes from prior shift
- 4. Check medications sheet
- 5. Sign out the medications as you give them
- 6. Check off and sign out nursing duties as you complete them
- 7. Do any personal care for the patient and sign off as you do them
- 8. Check vent setting once every other hour
  - a. Sign out and write down as you do
  - b. Change appropriate equipment and clean equipment as directed
- 9. Suction patient as needed
  - a. Write down number of times suctioned
  - b. Vital signs every shift
  - c. Lung sounds every shift
  - d. Write down in chart
  - e. Address any changes or concerns

- 10. Give appropriate feedings and water flushes and write down in chart
- 11. Write down in chart in narrative notes p.m.
  - a. Do not wait until end of shift; write as I go
- 12. Clean up anything needed
- 13. Organize for next shift
- 14. Write down any important information
  - a. Check off as you tell next nurse at report
- 15. Check to make sure all are done and signed off before next shift
  - a. Med sheets
  - b. Treatment sheets
  - c. Nursing duty sheets
- 16. Complete nursing notes

This problem-solving process is developed to help employees with brain injuries address and solve problems:

. Define the problem

2. Ident	tify po	ssible s	olutions.

Possible solution	Advantages	Disadvantages

- 3. Weigh the advantages and disadvantages of each possible solution.
- 4. Choose a solution and try it.
- 5. Evaluate the success of the solution.
- 6. Try another solution if the first one does not work.

#### **Additional resources**

Many community groups and organizations provide vocational assistance to employers who hire people with brain injuries.

The Brain Injury Association, Inc. is a national, nonprofit organization dedicated to brain injury prevention, research, education and advocacy. Telephone 800-444-6443 (toll-free)
Visit its website at www.biausa.org.

Brain Injury Association of Minnesota Telephone 612-378-2742 or 800-669-6442 (toll free) Visit its website at www.braininjurymn.org.

Brain Injury Association of Iowa Telephone 319-272-2312 or 800-475-4442 (toll-free) Visit its website at www.biaia.org.

Brain Injury Association of Wisconsin Telephone 414-790-6901 or 800-882-9282 (toll-free in state) Visit its website at www.tbilaw.com/BIAW.html.

For information about how to contact similar groups in other areas, contact the Mayo Clinic Brain Rehabilitation Program office at 507-255-3116.

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