



Fraser Valley Brain Injury Association

An Employers Guide to Acquired Brain Injury





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Understanding the Brain

Here is a simplified analogy of how the brain works:

“I find it helps to understand how the brain works if you think of the brain as a company. The company runs at peak efficiency when all the parts are working.

Up at the front of the company (frontal temporal lobes) are the vice presidents, and there are several vice presidents. They make the plans for the company and they decide who’s going to do what and when. As things get underway, they get feedback or information as to how well things are going and they judge it - that looks good or not so good; and they make further decisions - change that, keep this; and show appreciation or annoyance. So, up at the front you have planning, organization, decision making, judgement and appreciation.

In the middle (parietal association cortex) are the managers and each manager runs his own department. On the left side of the brain is a speech department (move the tongue and lips and throat muscles), a language department (find the words that you want, know what the words mean) and a motor department - move the right arm and right leg. On the right side is another motor department - move the left arm and left leg; and a spatial reasoning department - (find your way around a building, know where you are when driving a car, down to the basic getting your arm through a sleeve). Also over there, is a music department and a few incidentals. The right side is the picture side and the left side is the talking side.

Now, the managers, they know what the plan is from the vice presidents, and they make sure it gets carried out. And in order to do this, they communicate frequently with each other, they send messages back and forth. At the bottom, (limbic region, amygdala, basal ganglia) are the workers. They don’t know what the plan is from the vice presidents, but they know their job and they do the same job day in and day out. Things like appetite control, need for water, staying alert and awake or going to sleep, and basic emotions - turn on the tears, make the face red, increase the pulse rate.

Basically, in a brain injury, someone gets fired. It can be a vice president, a manager or a worker, depending on the injury. You can also have someone go on a leave of absence; that occurs when there is a temporary swelling or loss of blood supply that is returned in a short time. The result of the injury is to reduce the efficiency of the company. Messages get sent but aren’t picked up. The vice presidents get annoyed; the managers get fatigued; and the emotional workers get overwrought. Confusion reigns.

A primary purpose of rehabilitation is to find out who got fired and who is still on the job, so messages can be re-routed and the company can become more and more efficient again.”

Verna Amell, Ph.D, Psychologist

<http://www.vch.ca/Documents/Brain-as-Company.pdf>

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Employers Guide to Acquired Brain Injury

Understanding brain injury – not all individuals with brain injuries have long-lasting effects and need accommodations.

Causes:

There are many causes. Acquired brain injury (ABI) refers to medical conditions that change the function of the brain following birth. These conditions include but are not limited to these non-degenerative diseases of the brain:

Aneurysms – 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 (mTBI)

Contusion – injury on the brain's surface

Meningitis – infection and inflammation of the brain and central nervous system

Hematoma – pooled blood inside the brain tissue

Hemorrhage – profuse bleeding from damaged blood vessel

Stroke – interruption of blood flow to part of the brain

Traumatic brain injury – injury to the brain that results from an external force

Tumors – abnormal growth of tissue that has no function

Treatment

A range of types of therapy, testing and other treatment options are available, however, care is tailored to the individuals needs.

Initial treatment focusses on stabilizing the individual's physical condition, preventing complications and addressing medical issues that arise. Some individuals will receive rehabilitation services in the hospital; however, some will continue to receive services outside the hospital for weeks or months (potentially even their entire life)

Rehabilitation is incredibly important to an individual's recovery as it helps to encourage the body's natural healing process by stimulating and enhancing physical and thinking abilities as well as, teaching the individual how to compensate for lost physical, cognitive (thinking) and behavioral skills).



Because the brain is so important (think of it like our own personal computer) if it does not work properly, a lot of things will not work properly. Rehabilitation helps to address these challenges.

It's important for employees to return to former roles and activities as returning to routine provides motivation and aides in the rehab process. This also helps with goal setting.

What does recovery look like? How does it vary?

An acquired brain injury is called an invisible injury. A brain injury survivor may appear fully recovered and functional, especially if their body appears to be fully functioning. However, their cognitive, emotional and behavioral challenges may linger, and present themselves when the individual is stressed out or fatigued.

Many individuals with mild brain injuries experience complete recovery, however those with more severe brain injuries may be left with some mild to moderate long-term challenges and others may require assistance for the duration of their lives.

Although there may be a push for the employee to return to work, ensure that the employer is working within the individual's abilities and following the rehabilitation plan as well as the return-to-work plan recommended by the rehabilitation specialist/brain injury specialist to prevent setbacks.

Providing the employee with a supportive, and structured environment will also facilitate a more successful return to work.



Return to Work following an ABI

Basic Strategies

- Making work areas accessible (lighting (dimmers, etc., computer screens)
- Allowing flexible work schedules (when less people are in the office, if employee doesn't do well in mornings, etc.)
- Reassigning some tasks to others, working in pairs
- Providing a notebook for writing down important info
- Cue cards for specific processes they tend to forget
- Follow up on conversations by sending an email with notes

Prepare of plan of action

- Involve the employee with brain injury in planning
- Define the employees' 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

- Recognize, acknowledge and define the problem
- Determine possible solutions after weighting 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 provide thoughtful, realistic comments about behaviour
- Identify successes and address areas of concern directly, without delay.

Remember every individual is unique, and every brain injury is unique. If one solution doesn't work, try another. If nothing seems to work, ask a member of a health care team to help with a different approach. Consistent and frequent repetition of the techniques with increase the chance of success.



Further Strategies for Accommodations

Cognitive Difficulties

Cognitive difficulties affect the processes employees' brains use to perform tasks. A person with difficulties with cognition may have difficulty remembering all the steps require to complete tasks, get distracted, or take more time to make decisions.

Cognitive Concern:	Potential Solutions:
Difficulty with memory	<ul style="list-style-type: none"> • Create a structured routine and stick to it. • Consistent use of memory aids (reminder notes, to do lists) • Encourage employee to write down new information • Provide spoken cues as needed
Attention problems	<ul style="list-style-type: none"> • Focus on one task at a time, avoid multitasking • Make sure you have their attention at the beginning of the discussion or task • Decrease distractions • Gently refocus employee's attention • Keep abrupt changes to a minimum • Get employee to repeat info to ensure understanding • Schedule brief rest periods (50-60 mins work, 5-10 min break)
Difficulty with decision making	<ul style="list-style-type: none"> • Encourage employee to stop and think • Explore various options to solve problems • Talk through the solution with the employee
Difficulty with initiation	<ul style="list-style-type: none"> • Simplify tasks – break tasks down to one step at a time • Use a calendar and alarms • Structured daily routine • Establish time frame for completing tasks
Difficulty carrying out a plan of action	<ul style="list-style-type: none"> • Start with small reasonable tasks • Include the employee in planning • Provide clear explanation • Break down new tasks • Have the employee write a step-by-step plan & check if off • Ask the employee to tell you the steps to ensure understanding



Perceptual Difficulties

Perceptual difficulties 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 concerns:

Unilateral neglect (doesn't notice or use one side of the body)	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Bumps into objects on the affected side • Ignores objects on the affected side 	<ul style="list-style-type: none"> • 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)	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Suddenly notices objects that seem to disappear or appear • Bumps into objects on the affected side • Turns head towards the unaffected side • Loses track of the last location on the page where they were reading or writing • When reading they may cut words in half or cannot be understood 	<ul style="list-style-type: none"> • Remind employee to look around the environment, especially on 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 brightly coloured objects or commonly used things to the affected side and ask the employee to turn their head until they spot the object. • Draw a straight, brightly coloured line down the right side of a piece of paper if the employee's right side is affected and vice versa for the left side.



Apraxia (inability to use an object or do familiar tasks)	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Uses objects incorrectly; for example, uses a screw driver to comb hair or fork to eat soup • Fails to follow directions due to inability to motor program the response to follow through with what was asked (initiate the body in what was asked) 	<ul style="list-style-type: none"> • Stop the employee from continuing the task the wrong way • Show the employee what to do by demonstrating • Place your hand over the employee's hand (with consent) and move it through the correct motion to perform the task.

Difficulty with spatial relations	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • 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 far away from others in social situations 	<ul style="list-style-type: none"> • Limit clutter; keep the work area organized and neat • Keep items used often in the same location (see the pattern? ROUTINE) • Provide cues with words and pictures • Place brightly-coloured tape across the edge of each step on stairways • Remind the employee to use handrails 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.



Behavioural Changes

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

Behavioural concerns:

Difficulty with self-control	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Acts or speaks without all the information or without considering the consequences • Impulsiveness or poor judgement • Lack of inhibition • Gets stuck on one idea or activity and repeats it instead of moving onto other activities 	<ul style="list-style-type: none"> • Limit the employee’s choice of options • Suggest alternatives for behaviour. • 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 task or responses. • Provide feedback. • If undesired behaviour occurs, calmly and confidently discuss the consequences in private. • Praise and reward desired behaviour.
<ul style="list-style-type: none"> • Reduced awareness of deficits and limitations (rarely intentional, but common following brain injury) • Overestimates abilities; underestimates problems • Inaccurate image or perception of self 	<ul style="list-style-type: none"> • Anticipate lack of insight • Prompt accurate self-statements • Use feedback generously and supportively. • Give realistic feedback as you observe behaviour.



Emotional Changes

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 or other mental health concerns, mental health professionals, including rehabilitation psychologists and social workers may help provide effective treatment.

Emotional Concerns:

Difficulty controlling emotions (Depression, Feelings of sadness, frustration and loss)	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Persistent sadness • Irritability, moodiness • Anxiety • Loss of interest or pleasure in life • Neglect of personal responsibilities or personal care • Changes in eating habits or sleeping patterns • Fatigue, loss of energy, lack of motivation • Extreme mood changes • Feeling helpless, worthless or hopeless • Physical symptoms such as chronic pain or headaches that do not improve. • Withdrawal from others • Thoughts of death or suicide 	<ul style="list-style-type: none"> • Encourage the employee to talk with a physician about mood difficulties of physical symptoms. • Talk with the employee to determine whether specific job-related challenges or difficulties are contributing to the employee’s frustration.

If an employee expresses suicidal thoughts or threatens self-harm, call 911 or your local emergency provider immediately.



Reduced self-esteem (employee's assessment of self-worth)	
Signs to Watch for:	What to do:
<ul style="list-style-type: none">• Work performance suffers	<ul style="list-style-type: none">• 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.





Communication Difficulties

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

Communication Concerns:

Initiating conversation	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 their thought is completed. • Rephrase what they have said to confirm you have understood.

Following conversation	
Signs to Watch out for:	What to do:
<ul style="list-style-type: none"> • Has difficulty paying attention to what is said • Misinterprets what is said 	<ul style="list-style-type: none"> • Get the employee’s attention before speaking and ask them to look at you • Be clear and concise • Reduce distractions • Emphasize important information • Offer to repeat what was said • Invite the employee to ask questions or request clarification



Taking turns in conversation	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Talks nonstop, dominates conversation • Does not appear to adjust communication style or behaviour for 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 	<ul style="list-style-type: none"> • 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 related to the topic, for examples, “Do you mean...?” • Tell the employee you are confused or getting lost in the conversation.

Nonverbal communication	
Signs to Watch for:	What to do:
<ul style="list-style-type: none"> • Does not seem to understand common nonverbal cues • Stands too close or too far from conversations • Body language doesn’t match what is said • Facial expressions don’t match what is said • Distracting, repetitive, or excessive body movements • Poor eye contact • Staring at others during conversation 	<ul style="list-style-type: none"> • Ask the employee to maintain a comfortable distance. • Tell the employee you are confused by the difference in body language and language • Ask what the employee is feeling • Politely ask the individual to stop distracting movements.



Intelligibility	
Signs to Watch for:	What to do:
<ul style="list-style-type: none">• Slurred speech• Speaks too loudly or softly, making the message hard to understand• Speaks too rapidly	<ul style="list-style-type: none">• 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).





Other changes an employee may experience.

Fatigue

May result from the injury and from other injuries in cases of trauma. It can 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 frustrated by their inability to do as much as they want to do and fatigue can make small problems seem much worse.

Employers can do the following 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 potentially 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. These breaks should not be more than 30 minutes, over time decrease the duration and frequency of breaks as employee tolerates activities more.
- Slowly increase the complexity of the task. Encourage 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. This will help to allow the employee to feel better longer.
- 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.



Seizures

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

Typically, the risk for seizures is greatest in the months after the injury, it gradually will decrease over time.

Seizures may involve:

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

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

Reduced Driving Skills

Physical, cognitive, perceptual, vision impairments or seizures can make driving unsafe. Driving laws vary place by place and an individual may be required to pass a driving exam (written or practical) before resuming driving.



Further Resources

<https://biaia.org/wp-content/uploads/2018/06/Employer-guide.pdf>

<https://www.headway.org.uk/media/4989/brain-injury-a-guide-for-colleagues-factsheet.pdf>

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