## YOUR GUIDE TO

## **Glossary of Terms** Brain Injury











## **GLOSSARY OF BRAIN INJURY TERMS**

The information in this booklet is supplied by Headway Victoria an information and advocacy service for people with brain injury in Victoria and The Journey Place for Living and Learning Inc providing education for people working with people with brain injury.

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This glossary contains many of the terms commonly associated with acquired brain injury and is designed for people with a brain injury and their family members. Headway Victoria maintains a comprehensive collection of glossaries relating to Acquired Brain Injury (ABI) and other information in its library.

## A

## Abstract thinking

Understanding concepts that are not related to the "here and now", or that can not be easily seen or understood.

### Activities of Daily Living

All tasks relating to daily life including personal care, meal preparation and domestic tasks such as cleaning and community tasks such as shopping.

#### Adynamia

Difficulty initiating activities or starting a task, gives the appearance of lethargy.

#### Affect

Observable emotion in a person and how they present.

**Ageusia** Loss of the sense of taste.

#### Agnosia

Complete or partial loss of the ability to recognise objects.

#### Agraphia

Loss of the ability to write.

#### Alexia

Loss of the ability to read including language, symbols and music.

#### Ambulation

The ability to walk.

#### Amnesia

Loss of the ability to remember (can be retrograde which is the loss of ability to remember past experiences or can be antero-grade which is the loss of ability to make new memories).

#### Aneurysm

A balloon-like weakness on the wall of a vessel in the body that can burst. This includes blood vessels in the brain.

#### Anarthria

Loss of speech due to impairment of muscles caused by injury to brain area that controls the nerves supplying speech muscles.

#### Anomia

Inability to recall the names of things.

#### Anosmia

Complete or partial loss of the sense of smell.

#### Anoxia

Lack of oxygen to tissue in part of the body such as the brain.

#### Aphasia

Loss of ability in understanding and/ or expression of language.

#### Apraxia

Loss of the ability to perform and control purposeful movements while still having the ability to move and be aware of movement.

#### Arousal

Degree of being wakeful and alert.

#### Aspiration

Food or fluid entering the lungs from the wind pipe.

#### Ataxia

Abnormal movements due to loss of coordination of the muscles.

#### Atrophy

Shrinking in size of a cell, tissue, organ, or part of the body.

#### Attention span

Length of time one can concentrate on a task.

#### Auditory

Related to hearing.

#### Automatic speech

Involuntary words spoken without conscious thought such as a greeting or swearing.

## B

#### Bilateral

Relating to both sides (of the body).

#### Brain Injury, Closed

The brain is damaged within the skull cavity but the membranes covering the brain are intact.

#### Brain injury, Focal

Injury restricted to one region (as opposed to diffuse).

#### Brain Injury, Open

The skull and membranes are damaged and the brain itself may be exposed.

#### Brain Injury, Penetrating

A foreign body enters the brain such as a splinter of metal or bullet.

#### Brain Injury, Traumatic

Damage to the brain caused by an external force.

#### Brain stem

The lower extension of the brain where it connects to the spinal cord. The brain stem controls the functions necessary for survival such as breathing, heart rate and alertness.

#### Burr hole

A surgical drill hole made through the skull.

# C

#### **Case Management**

Working with a person to plan and coordinate the appropriate treatment, services and support.

#### Catheter

A tube which is inserted into any body part to withdraw or introduce fluids.

#### Cerebellum

Located at the base of the brain near the brain stem. The Cerebellum helps coordinate movement. Injury may result in ataxia.

### Cerebral

Concerning the brain.

#### Cervical

Neck area of the spinal column. Cervical injuries can result in quadriplegia.

## Cerebral Angiogram

An x-ray picture of the blood vessels inside the head. A drug which outlines these cerebral vessels is injected via an artery in the groin.

## Cerebro-spinal fluid (CSF)

Liquid which fills the ventricles (or cavities) of the brain and surrounds the brain and spinal cord.

## Cerebrovascular

The blood vessels (the veins, arteries and capillaries) and circulation within the brain.

## Cerebrovascular accident

See Stroke.

## Cerebrum

The main part of the brain which sits in the upper part of the skull cavity.

#### Cognition

The processes of thinking, reasoning, and understanding.

#### Coma

The state of not being responsive or able to be aroused. The person does not open their eyes, follow commands or speak.

### Comprehension

Ability to understand.

## Computerised Tomography Scan (CT scan)

A series of x-rays at different levels of the brain producing images of crosssections of the brain.

#### Concentration

The ability to maintain attention on a task without being distracted.

#### **Concrete thinking**

Taking things literally or being stuck in the "here and now" (see abstract thinking).

#### Concussion

Temporary alteration of mental state that may or may not be associated with a loss of conciousness caused by trauma to the head.

#### Confabulation

Unconsciously making up information to give a fluent answer that may not relate to actual events.

#### Confusion

Not able to orientate self to time, place and person (e.g. not being able to accurately give personal details such as age or name).

#### Contra coupe

Bruising of the brain tissue on the side opposite where the blow was struck.

#### Contracture

A shortening of tissues causing loss of movement and deformity of joint.

#### Contusion

Bruising of the brain.

#### Crainiectomy

Surgical removal of the skull in small pieces.

#### Craniotomy

Surgical removal of a sizeable piece of skull. In effect, a window made in the skull to allow access to the brain and its coverings.

## D

#### Demylination

Removal of the protective Myelin sheath around the nerves.

#### Diffuse brain injury

Injury to cells in many areas of the brain rather than in one specific location.

#### **Diffuse Axonal Injury**

Tearing / shearing of nerve fibres throughout the brain, which is common after trauma.

#### Diplopia

Double vision.

#### Disinhibition

Loss of the ability to inhibit responses and control what is said or done.

#### Disorientation

Not being aware, or being confused about time, place, person. May be some or all of these.

#### Distractibility

Inability to concentrate in the presence of distraction.

#### Dysarthria

Difficulty speaking due to injury to the brain area that controls the nerves supplying the muscles for speech.

#### Dysgraphia

Difficulty with writing.

## Dysphagia

Difficulty in swallowing.

### Dysphasia

Difficulty in the comprehension and/ or expression of language.

#### Dyspraxia

Difficulty with performing purposeful movements while still having the ability to move and be aware of movement.

## E

#### Echolalia

Repetition of sounds or words said by others but without comprehension. This is a normal stage of language development in infants but is abnormal in adults.

## Electroencephalogram (EEG)

EEG is a test used to record any changes in electrical activity of the brain by placing electrodes on the scalp. An EEG is used in the testing for epilepsy.

## Embolism

Something that blocks a blood vessel (can be air, fat, blood clot).

## Encephalitis

Inflammation of the brain. Can be caused by infection or disease.

## Endotracheal tube

A tube into the airway through the mouth or nose to allow air into lungs and help breathing.

## Epilepsy

There are many varied presentations. May involve uncontrolled movement involving parts of, or the complete body, or can involve a temporary lack of responsiveness. Also known as having seizures or fits.

### **Executive functions**

High level brain functions that help us undertake goal directed activities. Examples of executive functions include planning, initiating, stopping or inhibiting inappropriate actions, monitoring ourselves.

## F

## Flaccidity

Limpness caused by a lack of muscle tone.

## Frontal lobes

Part of the brain at the front of the cerebrum. Frontal lobe is involved in planning, organising, problem solving, selective attention, personality and a variety of higher cognitive functions.

## G

**Gait** Walking style.

#### Glasgow Coma scale

Standardized scoring system of best motor, speech and eye opening responses which is used to estimate severity of brain injury at the time of injury.

## Η

Haematoma

A collection or clot of blood.

#### Hemianopia

Loss of sight in the same sides of both eyes. This can cause an inability to see things on the left or right side.

#### Hemiparesis

Weakness on one side of the body.

**Hemiplegia** Paralysis of one side of the body.

## Hydrocephalus

Increasing pressure in the head due to enlargement of the ventricles from an abnormal increase of cerebrospinal fluid.

### Нурохіа

Lack of oxygen to tissue in part of the body such as the brain.

## Impulsivity

A tendency to rush into something without reflecting or thinking first..

#### Impulse control

The ability to control and inhibit inappropriate speech or actions.

#### Incontinence

Inability to control bladder and/or bowel function.

#### Infarct

An area of brain cells which have died as a result of a loss of blood supply.

#### Initiation

The ability to begin an activity without external prompting.

#### Intra-cerebral haematoma

Blood clot in the brain.

## Intracranial pressure (ICP)

The pressure inside the skull.

#### Ischaemia

When the blood supply to tissues is reduced or absent.

## L

#### Lability

Fluctuating emotional responses.

## Locked in syndrome

When a person is completely paralysed but is able to understand and able to receive sensory input.



## Magnetic Resonance Imaging (MRI)

A scan of the brain using radiofrequency waves and magnetic fields instead of Xray. It enables detailed pictures of the brain to be acquired using a non invasive procedure.

## Memory

Collecting and storing information and the ability to retrieve it.

## Motivation

The desire to achieve something and to be able to follow it through.



## Neglect

Not being aware of part of the body, often one side of the body (hemineglect) usually the left side.

#### Neuron

A nerve cell. (the plural term is Neurones / Neurons)

### Neurology

The study of the nervous system.

### Neuropsychology

The study of the relationship between the brain and behaviour.

## Neuropsychological assessment

Provides detailed information about how a brain injury changes the way your brain works by looking at changes to memory and thinking skills.



## Occipital lobes

The region at the back of the brain which processes visual information.

#### Oedema

Increased water content in the brain, causing brain swelling.

## Ρ

## Parietal lobes

Areas on the both sides of the brain, behind the frontal lobe and above the temporal lobes at the top of the brain. Important in receiving and interpreting sensory input.

#### Perception

The ability to make sense of information from each and all of the senses.

#### Perseveration

Getting stuck on a word, an idea or an activity and not being able to move on from it.

#### Photophobia

An abnormal sensitivity to light.

#### Post traumatic amnesia (PTA)

The period after being in a coma when there is confused behaviour and no continuous memory of day to day events.

#### Pre Morbid

Before the illness or injury occurred.

#### Prognosis

Expected outcome of an injury or disease.

#### Proprioception

Sensory awareness of the position of body parts with or without movement.

## R

#### **Retrograde Amnesia**

Not able to remember information which occurred before the injury or disease.

#### Rigidity

Not able to adjust your thoughts or actions in response to changes in the environment.

## S

#### Seizure

Involuntary muscle movement or behaviour as a result of abnormal nerve cell activity in the brain.

#### Sequencing

Being able to do something in the appropriate order.

#### Shunt

A surgically placed tube running from the ventricles of the brain, which takes excess fluid away from the brain and drains it off into the abdomen, heart or veins in the neck.

#### Spasticity

An involuntary increase in muscle tone (tension).

#### Spatial orientation

The ability to find your way around and or know where things are in space.

#### Spontaneous recovery

Healing that occurs regardless of treatment.

## Stroke (also termed Cerebrovascular Accident (CVA)

Interruption to the blood supply to the brain through blockage or rupture of a blood vessel, causing cell damage or death that leads to loss of function of the affected part.

### Subdural

Layer between the outer protective covering of the brain (Dura) and the middle layer of the meninges (Arachnoid).

## Т

#### Temporal lobes

One on each side of the brain located at about the level of the ears. The temporal lobe is involved in hearing, speech, comprehension, naming, visual processing, memory function, spatial awareness.

#### Tinnitus

Ringing in the ears.

### Tracheostomy

A breathing tube inserted through the middle of the neck just below the voice box so that air can get into the lungs.

#### Transitional living

A residential program teaching living skills which provides a transition between hospital and home

#### Tremor – Resting

Involuntary rhythmical movements that increase when resting.

#### **Tremor - Intention**

Involuntary rhythmical movements that occur when you attempt to move intentionally.

## V

#### Vegetative state

State which occurs following very severe brain injury in which the person shows a lack of responsiveness and cognitive ability despite appearing to be awake.

## Ventilator

A machine that does the breathing work for people who are not capable of breathing independently.

#### Ventricles

Cavities (spaces) inside the brain which contain cerebrospinal fluid.

#### Verbosity

Excessive talking.

## FOR INFORMATION CALL

## 1800 677 579 BrainLink





