

Glossary of Terms Common in Brain Injury Rehabilitation

A

A.B.I.: Acquired Brain Injury.

A.B.P.P.: American Board of Professional Psychologists

ABNORMAL POSTURAL TONE: Greater than normal tone of muscles used to hold the body in ordinary positions such as sitting or standing.

ABSCESS: A localized collection of pus in a cavity.

ABSTRACT: Refers to concepts that may be difficult to understand, concepts that are theoretical or detached, dealing with things that cannot actually be seen. Some persons with brain injury can only understand concepts that are 'concrete' or related to something tangible in the environment.

ABSTRACT THINKING: A style of thinking in which language is interpreted conceptually. The ability to reason and to solve problems.

ACALCULIA: The inability to perform simple problems of arithmetic.

ACCELERATION, DECELERATION, ROTATION: Movement of the brain when the skull sustains an impact. Acceleration is a sudden increase in movement inside the skull; deceleration is the sudden slowing and stopping of movement; and rotation refers to the turning of the brain on its axis or stem.

ACQUIRED BRAIN INJURY (ABI): An injury to the brain as the result of an event occurring some time after birth, e.g., a motor vehicle accident, fall, lack of oxygen to the brain, a stroke, etc. Also referred to as Closed Head Injury (CHI). Traumatic Brain Injury (TBI), Traumatic Acquired Brain Injury (TABI), and Head Injury (HI).

ACTIVE RANGE OF MOVEMENT (AROM): The amount of motion in a joint achieved from a person's own muscle strength alone. (Also see Passive Range of Motion).

ACTIVITIES OF DAILY LIVING (ADL): Refers to personal care activities. Includes showering or bathing, dressing, oral care, and homemaking tasks. Therapists in a rehabilitation setting may retrain the injured person in ADLs through daily practice, and use of adaptive equipment where required.

ACUITY: Sharpness or quality of a sensation.

ACUTE CARE: Care provided during the very early stages following injury, including surgery and intensive care. The focus is on the patient becoming medically stable.

ACUTE REHABILITATION PROGRAM: Primary emphasis on the early rehabilitation phase which usually begins as soon as a person is medically stable. The program is designed to be comprehensive and based in a medical facility with a typical length stay of 2-3 months. Treatment is provided by an identifiable team in a designated unit.

ADAPTIVE EQUIPMENT: Devices which allow a person to perform a task which they otherwise would be unable to perform due to a physical disability. Examples of devices include button hooks and reachers.

ADIADOCHOKINESIA: Inability to stop one movement and follow it immediately with movement in the opposite direction.

AFFECTIVE BEHAVIOURS: Mental illness is characterized principally by abnormalities in mood. Following brain injury these behaviours may not be consistent with what is socially acceptable in a given situation. The two principal categories are mania and depression.

AFTEREFFECTS: The problems, difficulties or limitations which persist after a severe brain injury.

AGITATION: Increased physical movement, usually non-productive but can be an indication of how the person is feeling or thinking. Can be accompanied by shouting or complaining, e.g., pulling at clothes, excessive restlessness, waving arms or legs, and pacing.

AGNOSIA: Failure to recognize familiar objects although the sensory mechanism is intact. This could include the senses of hearing, vision, and touch. May occur for any sensory modality.

AGRAPHIA: Inability to express thoughts in writing.

AKINETIC MUTISM: A condition of silent, alert-appearing, immobility that characterizes certain subacute or chronic states of altered consciousness. Sleep-awake cycles have been retained, but externally obtained spontaneous motor activity is lacking; patient appears to be aware but inactive. This is exhibited by patients with high brain stem lesions.

ALERTNESS: State of being watchful or ready. (See Rancho Los Amigos Scale).

ALEXIA: Inability to read.

AMBULATION: To walk.

AMNESIA: Refers to any of several types of memory impairment.

<i>Post Traumatic Amnesia:</i>	Amnesia resulting from altered consciousness after injury
<i>Retrograde Amnesia:</i>	Amnesia for events prior to the incident causing the disorder

Anterograde Amnesia: Amnesia for events following the incident causing the disorder

ANESTHESIOLOGIST: A Physician who administers anesthesia for surgery and special procedures. This physician usually meets with patients and family members before surgery.

ANEURYSM: A balloon-like deformity in the wall of a blood vessel. The wall weakens as the balloon grows larger, and may eventually burst, causing a hemorrhage.

ANOMIA: Inability to recall names of objects. Patients with this problem often speak fluently but have to use other words to describe familiar objects.

ANOSMIA: Loss of the sense of smell.

ANOSOGNOSIA: Lack of awareness of deficits.

ANOXIA: A lack of oxygen to the brain which can cause damage to the brain. This can result when blood flow is reduced.

ANTEROGRADE AMNESIA: Inability to consolidate information about ongoing events
Difficulty with new learning.

ANTIBIOTICS: Medication used to treat or prohibit a variety of infections.

ANTIDEPRESSANTS: Medication used to treat depression. It is intended to be used in conjunction with education and counselling.

ANTICOAGULATION: Process of "thinning the blood," medication (Heparin, Coumadin) is used to slow down normal blood clotting and thus prevent blood clots from forming in the veins.

ANTICONVULSANT MEDICATION: Medication used to decrease the possibility of seizures/convulsions. These could include: Dilantin, Tegretol, and Phenobarbital.

ANXIETY: Physical and psychological distress. Exhibited through:

- muscle tension (inability to relax, jitteriness, trembling)
- physical symptoms (seating, heart pounding, dry mouth, upset stomach, light headed, dizziness, rapid pulse, and respiration, shallow breathing)
- apprehension
- worry
- fear
- feeling of being "on edge"
- difficulty falling asleep, or interrupted sleep
- difficulty concentrating

APALLIC SYNDROME: (See Persistent Vegetative State) The behaviour that accompanies diffuse bilateral degeneration of the cerebral cortex that sometimes follows anoxic head injury. It describes patients with absent neocortical function but with relatively intact brain stem function.

APATHY: Feeling lethargic or have a lack of interest. A person exhibiting apathy may refuse to participate in, or be disinterested in, activities and spend much of their time sitting or lying around.

APHASIA: A total or partial loss of ability to understand and use words or symbols. This is caused by brain injury, disease or stroke. Aphasia is a language disturbance that affects comprehension, speaking, reading, writing, spelling, gesturing and numerical calculations.

APHASIA, EXPRESSIVE: Inability to find or formulate the words to express oneself even though knowing what one wants to say.

APHASIA, GLOBAL: Severely limited residual ability to communicate with others. This includes both expressive and receptive aphasia.

APHASIA, NON FLUENT: Characterized by awkward articulation, limited vocabulary, hesitant, slow speech output, restricted use of grammatical forms and a relative preservation of auditory comprehension.

APHASIA, RECEPTIVE: Problems in understanding what others attempt to communicate.

APHASIA, SUBCLINICAL: Refers to evidence of impaired linguistic processing on testing, in the absence of clinical manifestation on linguistic impairment.

APRAXIA: The inability to initiate and sequence voluntary movements without the loss of muscle power, sensation or coordination, i.e., the person with apraxia has the muscle strength and the coordination to do a task and knows what they want to do, but the brain is unable to program the movements necessary to complete the task.

APRAXIA, CONSTRUCTIONAL: Inability to assemble, build, draw, or copy accurately, not due to apraxia of single movements.

APRAXIA, IDEOMOTOR: Deficits in the execution of a movement due to inability to access the instructions to muscles stored by previous motor experiences.

APRAXIA OF SPEECH: An impairment of speech caused by damage to the area of the brain responsible for planning orderly movements of the speech muscles; the partial or total inability to initiate or sequence speech sounds, in the proper order, despite the fact that the muscles of speech themselves may have adequate strength. For example, an attempt to say the word banana may result in the following types of errors: falano, banano or banais. This disorder is easily recognized by the struggle and groping of the speech muscles that occur in an attempt to produce words.

ARCHITECTURAL BARRIERS: Physical objects (steps, doors, turnstiles, etc.) which make access to places or activities difficult or impossible for persons with a physical disability.

AROUSAL: Being awake. Primitive state of alertness managed by the reticular activating system, extending from medulla to the thalamus in the core of the brain stem. Activates the cortex. Cognition is not possible without some degree of arousal.

ART THERAPY: Use of techniques such as painting, crafts and group activities to develop motor skills, perceptual abilities and self-esteem.

ARTERIAL LINE: A very thin tube (catheter) inserted into an artery to allow direct measurement of the blood pressure, oxygen and carbon dioxide concentrations in arterial blood.

ARTERIO-VEINUS MALFORMATION: A "tangle" of blood vessels present from birth, which may be prone to bleeding.

ARTICULATION: Movement of the lips, tongue, teeth and palate into specific patterns for purposes of speech.

ASPIRATION: This term is used when food or fluid enters the airways, into the lungs instead of going down the esophagus into the stomach. This can cause lung infection or pneumonia.

ASPIRATION PNEUMONIA: A type of pneumonia that may occur as a result of food or fluid entering the lungs.

ASSESSMENT: Measures used to systematically observe and record a person's language, cognitive, and physical function. Assessment is employed to gain a complete understanding of the strengths and weaknesses of a person with a brain injury in order to determine areas of deficit and plan a program for treatment.

ASSOCIATED REACTION: A non-purposeful movement that accompanies another movement (e.g., patient's arm may bend involuntarily when the patient yawns).

ATAXIA: A problem of muscle coordination not due to apraxia, weakness, rigidity, spasticity or sensory loss. Caused by lesion of the cerebellum or basal ganglia. This can interfere with a person's ability to walk, talk, eat, and to perform other self care tasks.

ATROPHY: A wasting away or decrease in size of a cell, tissue, organ, or part of the body caused by lack of nourishment or loss of nerve supply.

ATTENTION TO TASK: Ability to focus on a given activity.

ATTENTION SPAN: The length of time one is able to concentrate on a task at hand (a sound, sight, sentence, etc.) to the exclusion of other stimuli.

ATTENTION/CONCENTRATION: The ability to focus on a given task or set of stimuli for an appropriate period of time.

ATTENTION/CONCENTRATION, DISTRACTIBILITY: Refers to the patient's inability to sustain attention, because of competing internal or external stimuli. Typically, the head injury survivor has decreased ability to inhibit inappropriate responses. For example, a restrained patient may focus more on his arm restraint than on a task presented by a therapist; a patient asked to complete arithmetic problems may focus more on construction work taking place outside.

ATTENTION/CONCENTRATION, AROUSAL: The ability to respond consistently to sensory stimulation by eye opening, localizing, and tracking with head and eye movement. To assess a comatose patient's level of arousal one might determine if the patient brushes away a pinching hand; or, if the head turns to a voice or noise.

ATTENTION/CONCENTRATION, LENGTH: Refers to the amount of time a patient is able to focus on a given task. Complexity of task and patient fatigability will affect length of attention.

AUDITORY STIMULATION: Present through the sense of hearing (e.g., loud noises).

AUDIOLOGIST: One who evaluates hearing defects and who aids in the rehabilitation of those who have such defects.

AUGMENTATIVE AND ALTERNATIVE COMMUNICATION: An area of speech-language pathology clinical practice which attempts are made to compensate (either temporarily or permanently) for severe expressive communication disorders. An example would be an alphabet board on which the individual spells out a message.

AUTOMATIC BEHAVIOUR: Behaviour which requires little or no thought, effort or planning. These actions are usually learned in childhood and used frequently throughout life. Examples include reciting the alphabet or days of the week, tying shoelaces, or responding to social conventions ("how are you today?").

AUTOMATIC SPEECH: Words said without much thinking on the part of the speaker, these may include songs, numbers and social communication; or, can be items previously learned through memorization. Spontaneous swearing by individuals who did not do so before their injury is another example.

AWARENESS, LEVEL OF: Degree of acuity in perceiving internal and external stimuli.

AWARENESS: Conscious of stimulation, arising from within or from outside the person.

[Back to Index](#)

B

BALANCE: The ability to use appropriate righting and equilibrium reactions to maintain an upright position. It is usually tested in sitting and standing positions.

BASAL GANGLIA: Cell bodies systematically arranged under the frontal cortex with many connections to both the cortex above and the midbrain structures below. The basal ganglia are involved in muscle movement (posture, gait, initiation and speed of physical movements), cognitive functions (memory), and the learning of behaviour.

BED MOBILITY: Movement in bed which includes rolling to the right and left, sitting to lying, and lying to sitting, vertical and horizontal movements.

BEHAVIOUR: The total repertoire of actions and reactions exhibited by a person.

BEHAVIOUR DISORDER PROGRAM: Primary emphasis is on intervention with the person who exhibits destructive behaviour to self and others. These patterns of behaviour prevent active participation in rehabilitation and are treated through a continuum of controlled settings. The goal is to develop more adaptive behaviour so the person can move to a less structured environment.

BILATERAL: Pertaining to both right and left sides.

BIOFEEDBACK: A process in which information is recorded from the patient and then relayed back instantaneously as a signal to that individual so they can become aware of an alteration, change a particular state such as muscle tone, position or blood pressure.

BLADDER PROGRAM: Since a physical disability often impairs bladder function, an indwelling (Foley) catheter is often put in place soon after the injury to handle bladder drainage. This indwelling catheter may be removed and a bladder program may be established to assist the person in regaining bladder control. This program may include fluid intake restrictions, a toileting schedule, periodic catheterization and/ or medication.

BOLUS: A mixture of food and saliva which is formed into a ball in the mouth. After a bolus is formed, it is ready to swallow.

BOWEL ROUTINE: In some persons, disability causes an impairment in bowel function. In such cases, the person's bowel patterns need to be re-established. This is done through a routine for bowel regulation which incorporates diet, medication and activity. This routine is established to reflect the prior habits of the individual as much as possible.

BRAIN DEATH: A state in which all functions of the brain (cortical, subcortical and brain stem) are permanently lost.

BRAIN PLASTICITY: The ability for structure and functions to be molded and shaped according to the environmental; diminishes with maturation.

BRAINSCAN: An imaging technique in which a radioactive dye is injected into the blood stream and then pictures of the brain are taken to detect tumours, hemorrhages, blood clots, abscesses or abnormal anatomy.

BRAIN STEM: The lower portion of the brain which connects to the spinal column. It is responsible for primitive functions such as those needed for survival (breathing, digestion, heart rate, blood pressure) and for arousal (consciousness, being awake and alert)

[Back to Index](#)

C

C.A.C.C.N.: Canadian Association of Critical Care Nurses

C.A.N.N.: Canadian Association of Neuroscience Nurses

C.A.O.T.: Canadian Association of Occupational Therapists.

C.A.R.C.: Canadian Association of Rehabilitation Centres.

C.A.R.F.: Commission on Accreditation of Rehabilitation Facilities

C.A.R.P.: Canadian Association of Rehabilitation Professionals.

CARRYOVER: Refers to the ability to retain newly learned material or skills and apply them to new situations. In a rehabilitation setting, this applies to voluntarily using strategies and techniques previously performed in therapy. These strategies and techniques have been taught to assist a brain-injured person to compensate for impairment.

CASE MANAGEMENT: Facilitating the access of a patient to appropriate rehabilitation and support programs, and coordination of the delivery of services. This role may involve liaison with various professionals and agencies, advocacy on behalf of the patient, and arranging for purchase of services where no appropriate programs are available.

CATHETER: A flexible tube for withdrawing fluids from, or introducing fluids to, a cavity of the body. Frequently used to drain the urinary bladder (Foley catheter).

C.B.L.C.: Canadian Brain Injury Coalition.

C.C.H.F.A.: Canadian Council on Health Facilities Accreditation.

C.C.H.S.A.: Canadian Council on Health Canadian Council on Health

C.C.R.W.: Canadian Council of Rehabilitation and Work.

CENTRAL NERVOUS SYSTEM (CNC): The set of nervous structures comprising the brain and spinal cord.

CENTRAL VENOUS PRESSURE: The central venous pressure line (CVP) is a very thin tube (catheter) inserted into one of the patient's veins to allow direct measurement of the venous blood pressure (the pressure of the blood as it returns to the heart).

CEREBELLUM: The portion of the brain (located at the back) which helps coordinate movement. Damage may result in ataxia.

CEREBRAL ANGIOGRAPHY: A medical test involving injection of dye into an artery so that the vascular system of the brain can be studied through an x-ray. Can detect aneurysm, tumours, or circulation problems.

CEREBRAL AQUEDUCT: This part of the brain contains cerebrospinal fluid (CSF), is within the midbrain and connects the third ventricle to the fourth ventricle which is between the pons and cerebellum.

CEREBRAL COMPRESSION: The brain substance is pushed aside and compressed by the presence of a brain tumour, aneurysm, swelling or haematoma.

CEREBRAL CORTEX: The cerebral cortex is the layer of the brain often referred to as gray matter. The cortex is gray because nerves in this area lack the insulation that makes most other parts of the brain appear to be white. It covers the outer portion (1.5 mm to 5 mm) of the cerebrum and cerebellum. The cerebral cortex is divided into right and left hemispheres. It encompasses about two-thirds of the brain mass and lies over and around most of the structures of the brain. Most of the actual information processing in the brain takes place in the cerebral cortex. The cerebral cortex is divided into lobes that each have a specific function.

CEREBRAL INFARCT: When the blood supply is reduced below a critical level and the brain tissue in that region dies.

CEREBROSPINAL FLUID: ("CSF") or **Spinal Fluid** ("SF") - Fluid that flows through and around the brain and spinal cord acting like a "shock absorber" for the brain
C.H.C.A.: Canadian Home Care Association.

CHEMICALLY DEPENDENT: Drug dependent.

CHEMOTHERAPY: The treatment of a condition by the systematic administration of chemical compounds.

CHEST TUBES: Tubes inserted into the patient's chest between the lung and ribs to allow fluid and air to drain from the area surrounding the lungs. An accumulation of fluid and air in the lung cavity can cause the lung to collapse. Removing this fluid and air from around the lungs allows them to more fully expand. Chest tubes drain into a large plastic container near the foot of the patient's bed. The patient may have one or more of these tubes in place.

CHRONIC CARE: Long-term care for those individuals who require nursing care, a maintenance program to prevent deterioration of skills, and to provide recreational and

social opportunities in a structured environment. Emphasis is on improving the quality of life, and excursions regarding improvements in abilities are limited.

CLINICAL REHABILITATION PSYCHOLOGIST: A physician who is qualified to assess, diagnose and treat psychological and adjustment disorders following a brain injury or other condition.

CIRCUMLOCUTION: Use of other words to describe specific work or an idea which cannot be remembered.

CLONUS: A sustained series of rhythmic jerks following quick stretch of muscle.

CLOSED HEAD INJURY: Trauma to the head which does not penetrate or fracture the skull but which damages the brain.

C.M.H.C.: Canadian Mental Health Care

COGNITION: The conscious process of knowing, becoming, or being aware of thoughts or perceptions, including understanding and reasoning.

COGNITIVE REHABILITATION/C.T.: Therapy programs which aid head injury survivors in the management of specific problems in thinking and perception. New Strategies and skills are taught to help improve function and/or compensate for remaining deficits.

COMA: A state of unconsciousness from which a person cannot be aroused, even by powerful stimuli.

COMA TREATMENT PROGRAM: Primary emphasis is on active intervention with a person described as being in Ranchos Los Amigos Scale levels 11-IV.

COMA VIGIL: (See Persistent Vegetative State) A patient who neither responds to commands nor moves despite the appearance of cognitive readiness and sustained wakefulness.

COMMUNICATIVE DISORDER: An impairment in the ability to 1) receive and/or process a symbol system, 2) represent concepts or symbol systems, and/or 3) transmit and use symbol systems. The impairment is observed in disorders of hearing, language, and/or speech processes.

COMMUNITY EDUCATION: A program designed to teach a person with a brain injury and their families about resources found in the community and how to use them, including recreation programs, transportation services, and support organizations. Community Education also addresses the rights of the disabled person, as well as accessibility issues.

COMMUNITY REINTEGRATION: Community reintegration is a program of community outings which aid a person, adjusting to independence, feel comfortable in the community, and carrying over skills learned in therapy. Community reintegration outings

include trips to shopping malls, restaurants, movies, recreational activities, and sporting events.

COMMUNITY SKILLS: Those abilities needed to function independently in the community. They may include: telephone skills, money management, pedestrian skills, meal planning and cooking, and use of public transportation.

COMPREHENSION: Understanding of spoken, written, or gestural communication.

C.O.N./C.N.: College of Nurses.

CONCENTRATION: Maintaining attention on a task over a period of time; remaining attentive and not easily diverted.

CONCRETE THINKING: A style of thinking in which the individual sees each situation as unique and is unable to generalize from the similarities between situations. Thinking in which language is interpreted literally.

CONCUSSION: The common result of a blow to the head usually causing unconsciousness, either temporary or prolonged. Physiologic and/or anatomic disruption of connections between some nerve cells in the brain may occur.

CONFABULATION: Verbalizations about people, places, and events with no basis in reality. The patient appears to "fill-in" gaps in memory with plausible facts.

CONFUSION: Disturbances in the ability to accurately interpret or make sense of environmental events. The person who is confused may become agitated or verbally aggressive because they are unable to understand where they are, unable to recognize individuals in the environment and/or the reasons for the pain and discomfort. The language of the individual who is confused may seem unorganized, disconnected and/or meaningless to the listener. The responses of the person with a brain injury may have nothing to do with the topic of conversation.

CONJUGATE MOVEMENT: Both eyes move simultaneously in the same direction. Convergence of the eyes toward the midline (crossed eyes) is a disconjugate movement.

CONSCIOUSNESS: The state of awareness of the self and the environment.

CONSULTING PHYSICIANS: Physicians who are specialists in fields other than neurology and neurosurgery. They may be called in by the attending physician to give their opinions on various aspects of care.

CONTINENT: The ability to control urination and bowel movements.

CONTRACTURES: Loss of range of motion in a joint due to abnormal shortening of soft tissues.

CONTRA LATERAL: Opposite side.

CONTRECOUP: A term which refers to an injury occurring in a part of the brain opposite the point of impact. The 'contrecoup' injury is caused by changes in pressure which travel through the brain.

CONTUSION: A bruising (in this case of the brain) which causes tissue damage and bleeding.

CONVERGENCE: Movement of two eyeballs inward to focus on an object moved closer. The nearer the object, the greater is the degree of convergence necessary to maintain single vision.

COPING SKILLS: The ability to deal with problems and difficulties by attempting to overcome them or accept them.

CORE THERAPIES: Basic therapy services provided by professionals on a head injury rehabilitation unit. Refers to nursing, physical therapy, occupational therapy, speech-language pathology, neuropsychology, social work and therapeutic recreation.

CORONA RADIATA: The corona radiata is the bundle (or sheet) of axons that are involved with finely coordinated movement. The corona radiata is associated with the corticospinal tract.

CORPUS CALLOSUM: A fibrous band linking the brain's right and left hemispheres and providing a means of communication between the two.

CORTEX: The cortex is the largest portion of the brain and is where most thinking and cognitive functioning takes place.

CORTICOSPINAL: The corticospinal or pyramidal tract is a massive collection of axons that travel between the cerebral cortex of the brain and the spinal cord.

CORTICAL BLINDNESS: Resulting from a lesion of the primary visual areas of the occipital lobe. Light reflex is preserved.

COUP DAMAGE: Damage to the brain at the point of impact.

C.P.AL: Canadian Psychological Association

C.P.A.: Canadian Physiotherapy Association, Canadian Paraplegic Association

C.P.O.: College of Psychologists of Ontario

C.R.C.C.: Commission for Rehabilitation Counsellor Certification

C.R.C.D.: Canadian Rehabilitation Council for the Disabled.

C.R.H.C.P.P.: Canadian Register of Health Care Providers in Psychology.

C.R.H.S.P.P.: Canadian Register of Health Service Providers in Psychology.

CRANIAL NERVES: Sensory and motor nerves arranged around the brain stem that communicates sensations and movements of the face, eyes, tongue, and vocal cords.

CT SCAN/COMPUTERIZED AXIAL TOMOGRAPHY: A series of x-rays taken at different levels of the brain that allows the direct visualization of intra cranial structures. A scan is often taken soon after the injury to help decide if surgery is needed. The scan may be repeated later to see how the brain is recovering.

CUE: A signal or direction used to assist a person in performing an activity (telling a person the initial of your first name serves as a cue when he cannot remember your name).

[Back to Index](#)

D

DANCE/MOVEMENT THERAPY: The use of movement to music as a process which enhances, facilitates and integrates physical, cognitive and psycho social function.

DAY CARE: A service provided, during ordinary working hours, for the patient who requires supervision, including assistance with medication, meal preparation, dressing or moving about. However, the family returns the patient to their residence and assumes responsibility for care during the evenings and at night.

DAY TREATMENT PROGRAM: Primary emphasis is on a program based in an outpatient setting with a treatment plan organized and supervised by a team of appropriate health professionals.

DECELERATE POSTURE: (Decelerate rigidity) Exaggerated posture of extension as result of a lesion to the prepontine area of the brain stem, and rarely seen, fully developed in humans. In reporting, it is preferable to describe the posture seen.

DECORTICATE POSTURE: (Decorticate rigidity) Exaggerated posture of upper extremity flexion and lower extremity extension as a result of a lesion to the mesencephalon or above. In reporting, it is preferable to describe the posture seen.

DECUBITUS: Pressure areas, bed sores, skin openings. and skin breakdown. A discoloured or open area of skin damage caused by pressure. Common areas most prone to breakdown are buttocks or backside, hips. shoulder blades, heels, ankles and elbows.

DEEP VEIN THROMBOSIS (DVT): A blood clot in a vein, located deep from the skin, most commonly seen in the calf or thigh. Veins lying just beneath the skin are called superficial veins.

DEFICIT: A deficiency in amount or quality of functioning.

DEPRESSION: The major feature of depression is a significant persistent change in mood characterized by symptoms such as sadness, hopelessness, "down in the dumps," irritability. Depression is often accompanied by a loss of interest or pleasure in most all usual activities or pastimes. A depressed individual may complain of loss of energy, feelings of inadequacy or worthlessness, difficulty concentrating, and may often express thoughts of suicide or death. These symptoms are often accompanied by social withdrawal, decreased effectiveness in activities, tearfulness, pessimistic attitude and sleep disorders. Even though most individuals have a sense of what it means to feel depressed, the actual diagnosis of depression is complicated. Medical complications, medications, or environmental factors often result in symptoms which imitate depression.

DIAPHORESIS: Excessive sweating. This is common following injury to the brain stem which is responsible for temperature control.

DISCASES: A theoretical state following brain injuries in which health areas connected to the damaged area show a transitory arrest of function.

DIFFICULTY IN ABSTRACTION: A cognitive impairment characterized by the emergence of concrete thought and the loss of ability to form concepts, use categories, or apply general principles.

DIFFUSE AXONAL INJURY: (DAI) A shearing injury of large nerve fibres (axons covered with myelin) in many areas of the brain. It appears to be one of the two primary lesions of head injury, the other being stretching or shearing of blood vessels from the same forces, producing hemorrhage.

DIFFUSE BRAIN DAMAGE: Injury to cells in many areas of the brain rather than in one specific location due to the brain moving about and tissue being torn, stretched and bruised.

DIFFUSE INJURY: This term refers to an injury to the brain which impairs the functioning of large areas of the brain tissue. (Contrast with focal injury).

DIPLOPIA: Seeing two images of a single object; double vision.

DISABILITY: According to the World Health Organization, this term refers to the restriction or lack of ability (resulting from an impairment) to perform an activity in the manner or within the range considered normal.

DISCRIMINATION, SENSORY: A process requiring differentiations of two or more stimuli.

DISCRIMINATION, AUDITORY: The ability to differentiate and recognize sounds. This involves distinguishing between words, noises, and sounds that might be similar. A patient with poor auditory discrimination might answer the phone in his room although the actual ringing came from an alarm clock.

DISCRIMINATION, TACTILE: The ability to identify and distinguish between objects and stimuli solely through touch. This involves the ability to ascertain shape, size and texture. For example, patients with impaired tactile discrimination might not be able to distinguish between a quarter and a dime in their pocket.

DISCRIMINATION, VISUAL: Involves the differentiation of items using sight. An individual with impaired visual discrimination may not be able to distinguish between a red and green light while driving or may have difficulty distinguishing between the letter "e" and the letter T.

DISINHIBITION: Inability to suppress (inhibit) impulsive behaviour and emotions.

DISORIENTATION: Not knowing where you are, who you are, or the current date. Health professionals often speak of a normal person as being oriented "times three" which refers to person, place and time.

DISPOSITION: Plans for where the person will live after discharge from the hospital and who will be able to help that individual.

DISTAL: Far from the point of attachment.

DOLL'S EYE MANEUVER: The eyes appear to move in the direction opposite to the motion of the head, when the head is gently rotated.

DORSI FLEXION: When applied to the ankle, the ability to bend at the ankle, moving the front of the foot upward.

DRESSINGS: Protective coverings used for wounds.

DURA: Tough covering around the brain tissue and spinal cord

D.V.A.: Department of Veterans Affairs (U.S.A.).

DYSARTHRIA: Difficulty in forming words or speaking them because of weakness of muscles used in speaking. Speech is characterized by slurred, imprecise articulation. Tongue movements are usually laboured and the rate of speaking may be very slow. Voice quality may be abnormal, usually excessively nasal; volume may be weak; drooling may occur. Dysarthria may accompany aphasia or occur alone.

DYSMETRIA: Inability to stop movements at the desired point; also known as past-pointing.

DYSPHAGIA: A problem with swallowing. When it occurs, a person may not be able to take enough nourishment by mouth, or they may be at risk of aspiration.

[Back to Index](#)

E

ECHOLALIA: Imitation of sounds or words without comprehension. Is a normal stage of language development in infants, but is abnormal in adults.

EDEMA: Collection of fluid in the tissue causing swelling.

EDUCATION PROGRAM: Primary emphasis is on primary, secondary and higher education programs. Realistic academic goals are set, based upon professional knowledge of deficits resulting from head injury.

ECG/EKG/ELECTROCARDIOGRAM: Usually three small, round electrode pads located on the patient's chest to monitor heart rate and rhythm. These are connected to a monitor and used routinely in the intensive care unit.

EEG/ELECTROENCEPHALOGRAM: A procedure that uses electrodes on the scalp to record electrical activity of the brain. Used for detection of epilepsy, coma and death.

EMBOLISM: The sudden blocking of an artery or a vein by a blood clot, bubble of air, deposit of oil or fat, or small mass of cells deposited by the blood flow.

EMESIS: Vomiting.

EMG/ELECTROMYOGRAPHY: An insertion of electrodes into muscles to study the electrical activity of muscle and nerve fibres. It may be somewhat painful to the patient. Helps diagnosis partial denervation.

EMOTIONAL LIABILITY: Exhibiting rapid and drastic changes in emotional state (laughing, crying, and anger) with apparent reason.

EMPATHY: The ability to put oneself in the place of another and understand how he or she feels.

EMPLOYMENT PROGRAM: Primary emphasis is on vocational rehabilitation services that are designed to lead to an employment goal. Services range from assessment to basic on the job supports.

ENCEPHALOGRAPHY: Non-invasive use of ultrasound waves to record echoes from brain tissue. Used to detect a haematoma, tumours, and ventricle problems.

ENDOTRACHIAL TUBE: A tube that serves as an artificial airway and is inserted through the patient's mouth or nose. It passes through the throat and into the air passages to help breathing. To do this it must also pass through the patient's vocal cords. The patient will be unable to speak as long as the endotrachial tube is in place. It is this tube that connects the respirator to the patient.

ENGRAM: A lasting mark or trace. The term is applied to bioelectrical trace associated with storage of a memory in the nervous system.

ENSURE: Liquid nutrition given to a patient as an oral supplement.

EPILEPSY: Following brain injury, a disturbance in the electric activity of the brain, occasionally leading to a change in the state of consciousness and convulsions.

EQUILIBRIUM: Normal balance reactions and postures.

ERROR CORRECTION: Should follow error recognition and refers to the ability to replace an inappropriate response with an appropriate one.

ERROR RECOGNITION: Refers to a patient's awareness that a response is inappropriate for a task. The patient may simply state, for example, "I know this is wrong," or show a confused, quizzical look after making an inappropriate response.

EUPHORIA: An exaggerated feeling of well-being, mild elation.

EVALUATION PROGRAM: Comprehensive assessment of the problems and capabilities of an individual, complete with recommendations for dealing with the problem.

EVOKED CEREBRAL RESPONSES: A test to measure the brain's response times to something a person sees, hears, or touches.

EVOKED POTENTIAL: Registration of the electrical response of brain cells as detected by electrodes placed on the surface of the head at various places. The evoked potential, unlike the waves on an EEG, is elicited by a specific stimulus applied to the visual, auditory or other sensory receptors of the body. Evoked potentials are used to diagnose a wide variety of central nervous system disorders.

EVOKED RESPONSES, BRAIN STEM: Auditory brain stem responses provoked by discrete sounds delivered to the ears through headphones. These sound waves are converted to nerve impulses by receptors in the ear. A machine is used to test whether the brain stem has received the signals. The quality of the brain stem's response in a comatose patient is thought to be an important indicator of the degree and site of brain injury. Because this test requires very specialized and expensive equipment, it is not available at all hospitals. A more common test is the EEG.

EXECUTIVE FUNCTIONS: Planning, prioritizing, sequencing, self-monitoring, self-correcting, inhibiting, initiating, controlling or altering behaviour.

EXERCISE: Refers to the generalized physical training of the individual with a head injury. May include a mat program, transfer training or mobility training.

EXPRESSIVE LANGUAGE: This refers to the part of language skills used to communicate one's thoughts or feelings. (Also see receptive language).

EXTENDED CARE FACILITY: A residential facility for the patient who requires 24 hour nursing care (IV, intramuscular injections, special feeding tubes, skin care, oxygen) or rehabilitation therapy, such as physical therapy, occupational therapy, or speech therapy on a less intensive basis than as an inpatient in a comprehensive rehabilitation centre. An extended care facility is usually a short-term alternative (2-3 months) prior to placement at home (with outpatient therapy) or in a nursing home.

EXTREMITY: Arm or leg.

EYE TAPE: Tape used to close the eyes of a patient who has lost the ability to blink. To protect the eyes and to prevent them from drying out, eye drops may be put into the eyes and the eye tapes may be used to close them.

[Back to Index](#)

F

FIELD CUT: See hemianopsia.

FIGURE-GROUND: The difference between the foreground and the background of a scene; this refers to all sensory systems, including vision, hearing, touch.

FIXATION, VISUAL: A pause of the line of sight on something of interest in the visual world.

FLACCIDITY: Lack of muscle tone which results in the inability to perform any movement.

FLEXION: Bending a joint.

FOCAL: Restricted to one region (as opposed to diffuse) focus. Eye can imply: 1) Convergence of the two eyes. 2) Accommodation of the lenses of the two eyes. 3) Tracking something by moving the eyes. 4) Attended to something. Because the term has several meanings its use should perhaps be avoided.

FOLEY CATHETER: An indwelling catheter used to provide drainage of urine when bladder function is impaired.

FRONTAL LOBE: The area of the brain located in the front left and right sides. This area plays a role in controlling emotions, motivations, social skills, expressive language, planning, problem solving and more.

FRONTAL LOBE SYNDROME: This refers to a combination of deficits which are common following injury to the frontal lobes. Frontal lobe syndrome includes deficits in planning, problem solving, sequencing, evaluating information, comparing two sets of information, decision making, as well as lack of motivation, lack of expression of emotions and slowed information processing.

FRUSTRATED TOLERANCE: The ability to persist in completing a task despite apparent difficulty. Individuals with a poor frustration tolerance will often refuse to complete tasks which are the least bit difficult. Angry behaviour, such as yelling or throwing things while attempting a task is also indicative of poor frustration tolerance.

FUNCTIONAL ABILITY: Capacity for performing an act that results in a practical end result.

FUNCTIONAL INDEPENDENCE MEASURE (FIM): An instrument which allows systematic and standard measurement of recovery of ability to perform routine tasks according to a seven-point rating scale:

Independent:

7. **Complete Independence:** All the elements of the task are typically performed safely, without modification, assistive devices, or aids, and within reasonable time.
6. **Modified Independence:** Activity requires any one or more one of the following: An assistive device, more than reasonable time, or there are safety (risk) consideration.

Modified Dependent: Another person is required for either supervision or physical assistance in order for the activity to be performed. The injured person performs half (50%) or more of the effort.
5. **Supervision or Setup:** The person requires no more help than standby, cuing, or coaxing, without physical contact. Or, helper sets up needed items or applies orthoses (an assistive device).
4. **Minimal Contact Assistant:** With physical contact the person requires no more help than touching, and the person expends 75% or more of the effort required to complete the task.
3. **Moderate Assistant:** The person requires more help than touching, or expends half (50%) or more (up to 75%) of the effort required to complete the task.

Complete Dependence:

The person expends less than half (less than 50% of the effort required. Maximum or total assistance is required, or the activity is not performed. The levels of assistance are:

2. **Maximal Assistance:** The person expends less than 50% of the effort but at least 25%
1. **Maximal Assistance:** The person expends less than 25% of the effort.

FUNCTIONAL REHABILITATION: The stage in an injured person's rehabilitation program aimed at the attainment of optimal independence in daily living tasks, work and leisure activities.

[Back to Index](#)

G

GAIT TRAINING: Instruction in walking, with or without equipment; also called "ambulation training."

GASTROTOMY TUBE: A tube inserted through a surgical opening into the stomach. It is used to introduce liquids, food, or medication into the stomach when the patient is unable to take these substances by mouth.

GLASGOW COMA SCALE: A standardized system used to assess the degree of brain impairment and to identify the seriousness of injury in relation to outcome. The system involves three determinants: eye opening, verbal responses and motor response - all of which are evaluated independently according to a numerical value that indicates the level of consciousness and degree of dysfunction. Scores run from a high of 15 to a low of three. Persons are considered to have experienced a "mild" head injury when their score is 13 to 15. A score of nine to 12 is considered to reflect a "moderate" head injury and a score of eight or less reflects a "severe" head injury.

GLASGOW OUTCOME SCALE: A system for classifying the outcome of head injury survivors. The categories range from "Good Recovery" in which the patient appears to regain the re injury level of social and career activity (even if there are some minor residual abnormal neurological signs); "Moderate Disability" in which the patient does not regain the former level of activity but is completely independent with respect to the activities of daily living; "Severe Disability" is defined as a state wherein the conscious, communicating patient is still dependent on the help of others. The original scale had five outcome categories. This scale relates to functional independence and not residual deficits

GOAL DIRECTED, PURPOSEFUL BEHAVIOUR: Actions directed toward the accomplishment of specific objectives or fulfilment of intention or desire. Such behaviours appear organized, controlled and efficient.

H

[Back to Index](#)

HAEMATOMA: The collection of blood in tissues or a space following rupture of a blood vessel.

- Epidural - Outside the brain and its fibrous covering, but under the skull.
- Subdural - Between the brain and its fibrous covering.
- Intracerebral - In the brain tissue.

HALO: A metal ring used for patients with spinal cord injuries which encircles the patient's head to allow proper alignment of the neck and spinal column. It is important that the patient with a broken spine remain still in order to prevent further injury to the spinal cord.

HANDICAPPED PERSON: Any individual who: 1) has a physical or mental disability which for that individual constitutes or results in a substantial handicap to employment; and 2) can reasonably be expected to benefit in terms of employability from the provision of vocational rehabilitation services.

HEAD-INJURED (HI - see Acquired Brain Injury): A person who has a definite history of a blow to the head, a laceration of the scalp or forehead, and/or altered consciousness, no matter how brief. This excludes facial lacerations, fractures of the lower jaw, and foreign bodies in the eye, nose, or ear, unless they were associated with one of the "head injury" features.

HEAD INJURY, CLOSED: Occurs when the head collides with another object (for example the windshield of a car) and brain tissue is damaged, not by the presence of a foreign object within the brain, but by violent smashing, stretching, and twisting, of brain tissue. Closed head injuries cause diffuse tissue damage that result in disabilities which are generalized and highly variable.

HEAD INJURY, MILD: Patients who have been unconscious for less than 20 minutes, have a Glasgow Coma Score of 13 to 15 at time of admission, are neurologically normal within 48 hours, are hospitalized for 48 hours or less and have no significant complicating multiple injury, and have normal CT scans. Also called "mild" head injury.

HEAD INJURY, MODERATE: A Glasgow Coma Score of nine to 12 at the time of admission. Two-thirds of moderately injured persons remain moderately or severely disabled three months post injury.

HEAD INJURY, PENETRATING: Occurs when an object (for example a bullet) fractures the skull, enters the brain and rips the soft brain tissue in its path. Penetrating injuries tend to damage relatively localized areas of the brain, which result in fairly discrete and predictable disabilities.

HEAD INJURY, SEVERE: Severe injury is one that produces at least six hours of coma; Glasgow Coma Score of eight or less within first 24 hours.

HEAD INJURY, TRAUMATIC: Damage to living brain tissue caused by an external, mechanical force. It is usually characterized by a period of altered consciousness (amnesia or coma) that can be very brief (minutes) or exceedingly long

(months/indefinitely). The resulting tissue damage impairs an individual's physical, mental, and/or psychosocial abilities. Also called traumatic brain injury (TBI).

HEMIANOPSIA: Blindness of one-half of the field of vision caused by brain damage. Hemianopsia is not blindness in one eye, but it indicates blindness in one half of each eye - either the right or left half and normal vision in the other half of each eye.

HEMIPARESIS/HEMIPLEGIA: Paralysis of one side of the body as a result of injury to neurons carrying signals to muscles from the motor areas of the brain. For example, an injury to the right hemisphere might cause paralysis (hemiplegia) or weakness (hemiparesis) of the left side of the body.

HEMISPHERES: The brain is divided into two hemispheres. The right, which is responsible primarily for visuospatial skills (recognizing faces, complex geometric shapes) as well as processing music and sounds. The left which is primarily responsible for processing of language and the production of verbal skills (speech, reading, writing, mathematics), and logical thought.

HEMORRHAGE: (See Hematoma) Bleeding that occurs following damage to blood vessels. Bleeding may occur within the brain when blood vessels in the brain are damaged.

H.F.A.C.: Human Factors Association of Canada.

H.I.: Head Injury.

H.I.A.: Head Injury Association.

HIGH LEVEL THOUGHT PROCESSES: Includes conversion thinking, deductive and inductive reasoning, divergent thinking, and high-level problem solving, including comprehension of a problem, formulation of several alternative solutions based on past experiences or long-term memory, generation of a solution and evaluation of a solution. This differs from organization in that high level thought processes involve the use of multiple strategies.

HOME CARE PROGRAM: Primary emphasis is on a team-integrated home program. A comprehensive program which is designed with training and case management services in place before an individual returns home.

HOYER LIFT: Equipment used to transfer a person safely to and from bed, and wheelchair.

H.R.P.A.O.: Human Resource Professionals Association of Ontario.

HYDROCEPHALUS: Enlargement of fluid-filled cavities in the brain, not due to brain atrophy.

HYDROTHERAPY: Treatments using water as a means of promoting relaxation and healing, increasing flexibility, and decreasing pain. Treatments may involve use of a variety of water tanks, including Hubbard tanks, walking tanks, whirlpools, and lowboys.

HYPERVENTILATION SYNDROME: A group of symptoms brought on as the result of shallow rapid breathing. Physiological changes include:

- Increased alkalinity of nerve cells, which causes them to be more excitable. This is experienced as a feeling of nervousness or 'the jitters'.
- Decreased carbon dioxide in the blood which can cause your heart to pump harder and faster as well as making lights see brighter and sounds louder.
- Increased constriction of blood vessels in your brain, which can cause feelings of dizziness, disorientation, and even a sense of unreality or separateness from your body.

HYPER TONICITY: An increase in muscle tone.

HYPOTHALAMUS: Part of the limbic system which governs drives such as hunger, and sex.

HYPOTONICITY: A decrease in muscle tone.

HYPOXIA: A decrease in oxygen supply to the brain.

[Back to Index](#)

I

I.C.D.: See International Classification of Disease.

I.C.N.: International College of Nurses.

I.C.P.: See Intra cranial Pressure.

I.C.U.: See Intensive Care Unit.

I.I.O.: Insurance Institute of Ontario

ILPSILATERAL: Same side of the body

IMPAIRMENT: According to the World Health Organization, this term refers to the loss or abnormality of psychological, physiological or anatomical structure or function.

IMPERCEPTION: Refers to a failure to perceive stimulation on one side of the body when both sides are being stimulated simultaneously (double simultaneous stimulation).

It is not due to a primary sensory deficit such as deafness or blindness but appears to be an attentional deficit. It is less severe than "neglect" and may occur in a patient recovering from neglect.

IMPULSE CONTROL: Refers to the patient's ability to withhold inappropriate verbal or motor responses while completing a task. Patients who act or speak without first considering the consequences are viewed as having poor impulse control.

INCONTINENT: Inability to control bowel or bladder functions. Many people who are incontinent can become continent with training.

INCOORDINATION: A problem with coordination of movement of parts of the body, resulting from dysfunction of the nervous system rather than weakness of muscles.

INDEPENDENT: The ability to perform a task without assistance or supervision.

INDEPENDENT LIVING PROGRAM: Primary emphasis is on community-based services to maximize a person's ability to be empowered and self-directed. An independent living program allows an individual to live in a residence with maximum personal control over how services are delivered.

INFLEXIBILITY: Inability to adjust to changes.

INHIBITION: A psychological mechanism that allows us to control or suppress socially unacceptable behaviour.

INITIATIVE: Refers to the individual's ability to begin a series of behaviours directed toward a goal.

INSIGHT REGARDING IMPAIRMENT: The extent to which an individual accurately judges one's own strengths and weaknesses. A patient's ability in this area may be judged on the basis of actions or statements regarding intended actions. Patients with brain injuries often overestimate their strengths and underestimate their limitations. For example, a patient with right hemisphere damage may attempt to drive a car while out on a pass and get involved in a serious accident. A head injured patient with two broken legs in casts may state that he can't walk because he's "too tired."

INTELLECT: Pertains to many of the higher functions of the brain.

INTENSIVE CARE UNIT: Hospital unit that utilizes highly sophisticated equipment and specially trained nurses to care for patients who are in such serious condition that they must be continuously monitored.

INTENSIVE REHABILITATION: An active, multi disciplinary rehabilitation program provided for several hours daily. Using a team approach. Focus is often on skill development, rather than on treatment of specific deficits.

INTERCEREBRAL: Between the cerebral hemispheres.

INTERMITTENT CATHETERIZATION PROGRAM (ICP): Bladder training program where a catheter is inserted to employ the bladder at regular time intervals.

INTERN (MEDICAL): A physician who has finished medical training and is usually in the first year of specialty training. Interns work under the supervision of attending physicians and residents.

INTERNATIONAL CLASSIFICATION OF DISEASE (ICD): A three digit "N" code indicates the pathological nature of an injury. The ninth revision of this classification (ICD-9) has been in use for several years. Unfortunately, the term "head injury" does not appear as a category. There are ten rubrics which cover most head injuries. The ICD is less useful than desired because rubrics are not mutually exclusive. Differences occur in coding from one institution to another. A new version, ICD-10, is under preparation.

INTERNIST: A physician who specializes in internal medicine.

INTERPERSONAL SKILLS: The ability to relate to others in a socially appropriate, meaningful way.

INTRACEREBRAL: A term which refers to the inside of the brain itself. (For example, an intracerebral hemorrhage is bleeding within one or both of the brain's hemispheres).

INTRA CRANIAL: A term which refers to the cavity inside the skull which contains the brain.

INTRA CRANIAL PRESSURE (ICP): Cerebra-spinal fluid (CSF) pressure measured from a needle or bolt introduced into the CSF space may be defined as the pressure which must be exerted just to prevent the escape of fluid. The ICP is thus defined as the pressure of the cerebrospinal fluid.

INTRA CRANIAL PRESSURE MONITOR: An ICP monitor. A monitoring device to determine the pressure within the brain. It consists of a small tube (catheter) attached to the patient at the skull by either a Ventriculostomy, Subarachnoid Bolt, or Screw and is then connected to a transducer, which registers the pressure.

INTRA CRANIAL INSULTS: Includes haematomas (intraparenchymal and extraparenchymal; immediate or delayed) elevations of Intra cranial pressure (ICP), brain swelling, edema, and vasospasm.

INTRAVENOUS: Tubing inserted into a vein through which fluids and medications can be given.

INTRAVENOUS BOARD: A simple wooden or plastic board usually attached with tape to the patient's forearm. It prevents bending and dislocation of the intravenous, arterial or CVP lines.

ISCHEMIA: A severe reduction in the supply of blood to body tissue.

ISOLATION: Precautionary procedures undertaken and designed to protect the person with a brain injury, and others, usually from the spread of infection. ‘

I.V.: See Intravenous

[Back to Index](#)

J

JARGON: Spoken language that has a normal rate and rhythm but is full of nonsense words.

J.C.A.H.C.O.: Joint Commission on Accreditation of HealthCare Organizations.

JEJUNOSTOMY TUBE (J TUBE): A type of feeding tube surgically inserted into the small intestine.

JEVITY: Liquid nutrition with fibre fed to a patient usually through a G Tube.

JUDGEMENT: Process of forming an opinion, based on an evaluation of the situation at hand in comparison with personal values, preferences and insights. The ability to make appropriate decisions.

JUDGEMENT OF SAFETY: The extent to which an individual can correctly judge the dangers and risks in a variety of situations. A patient with poor judgement may smoke in bed late at night, touch a red hot stove burner, or show extreme friendliness to complete strangers. Brain- injured persons with poor insight regarding their impairments are also likely to show poor judgement of safety.

[Back to Index](#)

K

KINESTHESIA: The sensory awareness of body parts with movement. (See position sense and proprioception).

KINESTHESIA STIMULATION: Stimulation presented through movement (e.g., range of motion).

[Back to Index](#)

L.....

LIABILITY: Emotional instability that may be the result of brain damage disrupting the control over emotions. A person affected this way may show alternating states of gaiety and sombreness, break into laughter or tears for no apparent reason, and tend to get excited or be very impulsive.

LACERATION: A ragged tear.

LACK OF INSIGHT AND DENIAL: Lack of awareness of problems which warrant change. A person may completely deny his/her disability because he/she is unaware of existing cognitive problems. When this condition persists, it may seriously interfere with a person's ability return to a previous lifestyle. (See anosognosia).

LANGUAGE: Any means of expressing or communication thoughts and feelings; can include hand gestures and facial expressions, as well as speech, writing, and numbers. Language also refers to structure (grammar) and meaning (semantics) of thoughts and feelings and their expression. A brain injury or stroke may disrupt thought processes and result in confused or disturbed language expression.

LATENCY OF RESPONSE/RESPONSE DELAY: The amount of time it takes a person to respond after the stimulus has been presented.

LEFT SIDE NEGLECT: See unilateral neglect.

LEG BAG: A small, thick plastic bag that can be tied to the leg and collects urine. It is connected by tubing to a catheter that is inserted into the urinary bladder.

LEISURE COUNSELLING: The exploration of how a person felt about leisure/recreation before the injury and how the person feels about it now; how to make the best of leisure time, what recreational resources are available in the community and how to take advantage of them; and what changes have to be made to continue past leisure pursuits.

LEISURE SKILLS: The ability to participate in recreational activities and to independently make effective use of one's leisure time and opportunities.

LETHARGIC: Awakens with stimulation.

LEVELS OF FUNCTION: Description of a person's abilities according to the Functional Independence Measure (FIM), and instrument used to track progress in motor functions and corresponding progress in increased ability to perform daily tasks. (See Functional Independence Measure).

LIFELONG LIVING PROGRAM: Primary emphasis is for persons discharged from rehabilitation who need ongoing lifetime support. Structured activities are provided on both an individual and group basis, usually in a residential or skilled nursing environment.

LIMBIC SYSTEM: Governs needs, drives and emotions.

LOCKED-IN SYNDROME: A condition resulting from interruption of motor pathways in the ventral pons, usually by infarction. This disconnection of the motor cells in the spinal cord from controlling signals issued by the brain leaves the patient completely paralyzed and mute, but able to receive and understand sensory stimuli; communication may be possible by code using blinking, or movements of the jaw or eyes, all of which are spared.

LOGBOOK: A diary-like listing of the individual's daily activities which can be used to help remember what happened during the course of the day, names of persons with whom contact occurred, and the order in which events occurred. The brain-injured person, family members and staff are encouraged to make entries. Used to compensate for memory deficits.

LOGICAL ABILITY: Ability to formulate a general rule or principle which one can use to objectively solve a problem. Also the ability to plan, regulate and control one's own activities.

LONG TERM MEMORY: Events which have occurred prior to an individual's injury. For instance, previous employment, family members and residential history represent long-term memory events. This type of past information is typically, partially or wholly preserved in many persons with a brain injury. (Also see Amnesia, retrograde, and Short-term memory).

LOWER SEXUAL INHIBITION: Following brain injury, a disturbance in control mechanisms over sexual behaviour, resulting in unrestrained action or loss of control (contacts or overt advances, etc.) which violate social norms.

LUCID INTERVAL: A period shortly after injury when the patient was reported to have talked.

[Back to Index](#)

M

MAGNETIC RESONANCE IMAGING (MRI): The process of creating images of the body without the use of ionizing radiation. During MRI, a magnet is used to pull on the nuclei of the body's hydrogen atoms. This magnet causes the nuclei to line up and repeatedly absorb and release radio waves. A computer then translates these radio waves to images of the areas examined. The images are projected on to a video screen and recorded on film for interpretation by a radiologist (a physician specialized in Diagnostic Imaging).

MANUAL DEXTERITY: Ability to coordinate one's hands to accomplish basic, specific tasks. Such tasks include typing, dialing a phone, manipulating buttons and zippers, tying shoes, opening packages, etc.

M.C.S.S.: Ministry of Community and Social Services (Ontario).

MEDULLA OBLONGATA: The lower portion of the brain stem.

MEDICALLY STABLE: Reaching a point in a medical treatment where life threatening injuries and disease have been brought under control.

MEMORY: The process of perceiving events, organizing and storing representations of the events and recalling these representations to consciousness at a later time.

MEMORY, AUDIO-VISUAL: Auditory memory is the ability to recall a series of numbers, lists of words, sentences, or paragraphs orally. Visual memory requires input of information through visuo-perceptual channels. It refers to the ability to recall text, geometric figures, maps, and photographs. A head-injured survivor with impaired visual memory may have to refer to a road map numerous times to reach a nearby destination. A brain injured inpatient may need frequent assistance from staff to locate his room. A patient with impaired auditory memory will likely require frequent reminders of orally presented task instructions from staff. Notably, information may be encoded in memory using words or visual images independent of the mode of presentation.

MEMORY, DELAYED: The ability to recall information several minutes following presentation. There is no particular specification of the required time interval; typically it is ten minutes or more. This type of memory is most important because patients are often required to recall instructions related to their medical care after hours, days, weeks, or months. For example, patients with impairments in delayed memory may forget where they have left things. Additionally, preserved information in immediate memory becomes part of delayed memory.

MEMORY, EPISODIC: Memory for ongoing events in a person's life. More easily impaired than semantic memory, perhaps because rehearsal or repetition tends to be minimal.

MEMORY, FUND OF INFORMATION: A type of remote memory as well as a measurement of the amount of information an individual retains about past experiences. The information can include, for example, knowledge regarding current events, politics, and book learning.

MEMORY, IMMEDIATE: The ability to recall numbers, pictures, or words immediately following presentation. Patients with immediate memory problems have difficulty learning new tasks because they cannot remember instructions. Relies upon concentration and attention.

MEMORY, LEARNING: Acquisition of new information determined by the extent to which an individual benefits from repetition, rehearsal, or practice. For example, a patient who learns quickly will likely remember an entire set of instructions after hearing them several times. A patient with severely-impaired learning ability will show little gain in recall after numerous repetitions. Learning and memory are interdependent. If immediate memory is poor, learning will be poor because only a portion of the

information will be available for rehearsal/repetition. It is important to note that patients may have intact learning ability, but poor delayed memory. For example, a brain-injured patient may learn a set of instructions after several repetitions, but forget them the next day.

MEMORY, LONG TERM: In neuropsychological testing, this refers to recall thirty minutes or longer after presentation. Requires storage and retrieval of information which exceeds the limit of immediate span.

MEMORY, RECALL: Ability to retrieve information without renewed exposure to the stimulus.

MEMORY, RECOGNITION: Ability to retrieve information when a familiar stimulus is presented.

MEMORY, REMOTE: A measurement of the amount of information an individual correctly recalls from the distant past. There is no specific requirement for the amount of elapsed time, but it is typically more than six months to a year. Preserved information from delayed memory becomes part of remote memory.

MEMORY, SEMANTIC: Memory for facts, usually learned through repetition.

MENTAL COMPETENCE: The quality or state of being competent; having adequate mental abilities; legally qualified or adequate to manage business affairs. An individual found by a court to be mentally incompetent has a guardian appointed to make business and legal decisions on their behalf.

METACOGNITION: The process of examining and thinking about the ways in which one thinks and processes information.

MODALITIES: General term used to describe treatments using heat, cold, light, water, etc. These treatments are commonly used to help reduce pain, increase function movements, promote healing, and more. Examples of modalities are ultraviolet light, ultrasound, hot packs, and functional and electrical stimulation.

M.O.H.: Ministry of Health (Ontario).

MONITOR, INTENSIVE CARE: A TV-like screen with a continuous picture of different wave forms representing different pressures and activities in the body such as blood pressure, intra cranial pressure, and EKG. It may also show a corresponding number value for them.

MOTIVATION: Requires initiative and refers to the extent to which an individual desires to reach a goal and demonstrates actual follow-through. A greater level of motivation is required for completion of difficult tasks. A brain injured person with reduced motivation may need frequent cueing from staff to finish dressing even though they are able to verbalize the complete procedure.

MOTOR: Pertaining to movement.

MOTOR CONTROL: Regulation of the timing and amount of contraction of muscles of the body to produce smooth and coordinated movement. The regulation is carried out by operation of the nervous system.

MOTOR CONTROL, FINE: Delicate, intricate movements as in writing or playing a piano.

MOTOR CONTROL, GROSS: Large, strong movements as in chopping wood or walking.

MOTOR LAG: A prolonged delay between stimulus and initiation of motor response.

MOTOR PLANNING: Action formulated in the mind before attempting to perform.

MOVEMENT THERAPY: Using bodily expression, dance and exercise to facilitate movement, self-expression and self-esteem.

MULTI-DISCIPLINARY TEAM MEETING (MOT): A meeting between the family and any/all members of the rehabilitation team which may take place at any time during a patient's recovery. MDT's are used to discuss progress, report findings, discuss family concerns about the patient's program or discharge plans.

MUSCLE TONE: Used in clinical practice to describe the resistance of a muscle to being stretched. When the peripheral nerve to a muscle is severed the muscle becomes flaccid (limp). When nerve fibres in the brain or spinal cord are damaged, the balance between facilitation and inhibition of muscle tone is disturbed. The tone of some muscles may become increased and they resist being stretched - a condition called HYPER TONICITY or spasticity.

MUSIC THERAPY: Use of music and singing to develop language and movement skills.

MYELOGRAPHY: A medical test involving injection of dye into the spinal subarachnoid space so that an x-ray of the spinal cord can be taken. Used to detect spinal cord tumours, anatomical defects and disc problems.

[Back to Index](#)

N

N.A.R.P.: National Association of Rehabilitation Professionals.

NDT: See Neuro Developmental Treatment.

NPO: Latin initials that stand for "Nothing by Mouth". This means no food or liquids for a set period usually in preparation for certain tests or when the person cannot safely swallow.

NASOGASTRIC TUBE- NG TUBE: A tube which passes through the patient's nose and throat and ends in the patient's stomach. This tube allows for direct "tube feedings" to maintain the nutritional status of the patient or removal of stomach acids.

NEOLOGISM: Nonsense or made-up word used when speaking.

NEURO DEVELOPMENTAL TREATMENT (NDT): A therapeutic approach based on the normal development of movement and emphasizing the restoration of normal movement in performing functional activities.

NEUROLOGIST: A physician who specializes in diseases of the brain, spinal cord, nerves, and muscles. This type of physician does not perform surgery.

NEURONS: The nerve cells of the brain and the spinal cord. They do not multiply or regenerate following their destruction.

NEUROPHYSIOLOGY: The study of the functions of the nervous system.

NEUROPSYCHOLOGIST: A psychologist who is an expert in working with patients who have experienced brain injuries. Neuropsychologists often carry out special tests on brain functions, may provide cognitive rehabilitation and work very closely with the rehabilitation team.

NEUROPSYCHOLOGICAL EVALUATION: An assessment using psychological tests, interviews, and behavioural observation, to determine a person's cognitive, emotional, and behavioural state, with particular emphasis on deficiencies of intellect, personality and behaviour as outcomes of brain injury. Such assessments attempt to determine brain/behaviour relationships, locations of injury, and brain systems involved.

NEUROSURGEON: A surgeon who is an expert in nervous systems diseases. Neurosurgeons operate on the brain and spinal cord and are often attending physicians for patients with brain injuries.

NON-AMBULATORY: Not able to walk.

NON-PURPOSEFUL MOVEMENT: Movement a person may make with no apparent goal.

NUMERICAL ABILITY: Ability to solve numerical problems using the four fundamental rules of arithmetic: addition, subtraction, multiplication and division.

NURSE: A person with special training in the care of patients with various problems. As part of the brain injury team, nurses also have special training and experience in caring for patients with diseases and injuries of the brain and spinal cord.

NURSING HOME: A residential facility for the patient who requires supervision in all activities, including assistance with medication, meal preparation, breathing, dressing, and moving about; the patient may also require special nursing care and /or ongoing therapy. There are nursing homes that provide minimal to maximum care.

NUTRITIONIST: An expert in the nutritional requirements of patients. Nutritionists are also adept at various methods of feeding, for those unable to take in food and fluid by mouth.

NYSTAGMUS: Involuntary horizontal vertical or rota movement of the eyeballs.

[Back to Index](#)

O

O.A.C.C.P.P.: Ontario Association of Consultants, Counsellors, Pscychometrists & Psychotherapists.

O.A.C.E.T.T.: Ontario Association of Certified Engineering Technicians & Technologists.

O.A.P.S.W.: Ontario Association of Professional Social Workers.

O.A.S.I.P.A.: Ontario Association of Speech-Language Pathologists and Audiologists.

OCCIPITAL LOBE: Area in the back of the brain whose primary function is processing visual information. Damage to this area can cause visual deficits.

O.B.E.P.: Ontario Board of Examiners in Psychology.

O.B.I.A.: Ontario Brain Injury Association.

OBTUNDED: Mental blunting: mild to moderate reduction in alertness.

OCCUPATIONAL THERAPISTS (O.T.): A health care professional who work to retrain those with brain injuries to resume the self-care activities important to daily living. They become involved in the acute rehabilitation phase.

O.F.C.P.: Ontario Federation of Cerebral Palsy.

O.H.A.: Ontario Hospital Association.

O.H.H.C.P.A.: Ontario Home Health Care Providers Association.

O.H.N.A.: Occupational Insurance Adjusters Association.

OJ.A.A.: Ontario Insurance Adjusters Association.

OLFACTORY STIMULATION: Presented through the sense of smell (e.g. pleasant/noxious odours).

ONTARIO BRAIN INJURY ASSOCIATION (OBIA): Provincial brain injury association, whose mandate is to provide information and support to individuals with a brain injury and their families and care givers. Regional chapters are located throughout Ontario. Contact OBIA at (905) 641-8877 for the office nearest you.

O.P.H.A.: Ontario Public Health Association.

O.P.A.: Ontario Psychological Association, Ontario Physiotherapy Association.

ORAL/MOTOR FUNCTION: Movement of the lips, tongue and soft palate.

ORAL STIMULATION: Presented around or in the mouth (e.g. Lemon glycerine swabs).

ORGANIC PERSONALITY SYNDROME: A change in personality, marked by impaired judgement and loss of control over emotions, impulses and behaviour. "Organic" personality changes result from a specific physical cause (e.g. brain injury). A person with organic brain syndrome may exhibit sudden temper outbursts, sudden crying, apathy, indifference, loss of initiative, suspiciousness, and anxiety, as well as other behaviour or emotional difficulties.

ORGANIZATION, COGNITIVE: Using selective attention skills, the patient correctly perceives stimulus attributes or task elements, selects a strategy, monitors use of the strategy and reaches a correct solution.

Low-Level: Those patients who are able to sustain attention and appropriately switch sets. Patients with low level organization ability usually "fall apart" in high-stress situations.

High-Level: Those patients who can deal with multiple pieces of information and integrate them for a task in a complex manner. Some patients fall apart in high-stress situations.

ORIENTATION: Refers to the ability to comprehend and adjust one's self in the environment with regard to time, place and identity of persons.

ORIENTATION, ENVIRONMENT: Knowledge regarding the present environment including where the patient is at the time of the evaluation. Accurate awareness of place.

ORIENTATION, LEFT-RIGHT: The ability to discriminate between left and right body parts on oneself and on others, as well as the ability to discriminate between left and right within the environment.

ORIENTATION, PERSONAL: General knowledge related to oneself, includes information regarding date of birth, age, name, and location of home.

ORIENTATION, SITUATIONAL: The ability to accurately describe present circumstances. For example, in the acute stages of injury, brain-injured patients may be unable to respond accurately to questions such as, "Why are you in the hospital?" Situational disorientation is commonly observed during post-traumatic amnesia.

ORIENTATION, TEMPORAL: Knowledge of the current date, day, month and year. For example, a disoriented patient asked to name the next meal at 4 pm, might say, "breakfast."

ORTHOPEDICS: The branch of medicine devoted to the study and treatment of the skeletal system, its joints, muscles and associated structures.

ORTHOISIS: Splint or brace designed to improve function or provide stability.

ORTHOTIST: A skilled craftsman who develops and fits mechanical devices designed to support or supplement a weakened body part, or function, such as a brace, splint or body jacket.

O.S.O.T.: Ontario Society of Occupational Therapists.

O.T.: See Occupational Therapist.

OUTPATIENT: The patient residing outside the hospital but returning on a regular basis for one or more therapeutic services.

OVERNIGHT DRAINAGE BAG (ONDB): A large thick plastic bag that is connected to a urodrain. It hangs on the bed and is used to collect urine at night or when someone needs to be in bed during the day.

OVERPROTECTION: Family and friends or other persons interacting with an injured person exercise undue protection or excessive care.

[Back to Index](#)

P

P.A.: Physician's Assistant

P.T.: See Physical Therapist

PALLIATIVE CARE: A program designed to reduce the severity of symptoms and/or decrease their impact on the individual, and to improve the quality of life.

PARAPARESIS: Weakness of the lower limbs.

PARAPHASIC ERROR: Substitution of an incorrect sound (e.g., tree for free) or related word (e.g. chair for bed).

PARAPLEGIA: Paralysis of the lower limbs (from the waist down).

PARAPNASIAS: Use of incorrect words or word combinations.

PARENTRAL: Not through the alimentary canal (gastrointestinal tract) but rather by injection through some other route, such as subcutaneous, intramuscular or intravenous.

PARIETAL LOBE: The upper middle lobe of each side of the brain, involved in perceiving and understanding sensations, and relates to speech and writing.

PARIETAL LOBE - RIGHT: Damage to this area can cause visual-spatial deficits (e.g., the patient may have difficulty finding their way around new or familiar places).

PARIETAL LOBE - LEFT: Damage to this area may disrupt a patient's ability to understand spoken and/or written language.

PASSIVE RANGE OF MOTION (PROM): The amount of movement in a joint when the joint is moved by another person or by the injured person's functioning limb. (Also see Active Range of Motion).

PATTERN OF MOVEMENT: Motion of particular parts of the body (such as the hand and arm) in a typical, reproducible, sequence and direction.

PENETRATING INJURY: An injury in which the brain is injured through puncture of the skull (e.g. gunshot wound).

PERCEPTION: The ability to make sense of what one sees, hears, feels, tastes or smells. Perceptual losses are often very subtle, and the patient and/or family may be unaware of them.

PERCEPTUAL-MOTOR: Interaction of the perceptual abilities with motor abilities.

PERSEVERATION: Continued repetition of a physical or verbal response.

PERSISTENT VEGETATIVE STATE: A state in which the patient is awake but unaware. There is no cognitive content. There is a return of vegetative (autonomic) function, including control of respiration, digestion, and normal sleep/wake cycle.

PHLEBITIS: Inflammation of a vein.

PHONATION: The production of sound by means of vocal cord vibration.

PHYSICAL THERAPIST: A health professional who works to maintain and improve the movement and function of joints and limbs. Physical therapists may begin to work with patients while they are still in the I.C.U. setting.

PHYSIATRIST: A physician, who is a specialist in physical medicine and rehabilitation. They are responsible for coordinating the rehabilitative needs of the patient.

PLASTICITY: The ability of cellular or tissue structures and their resultant function to be influenced by an ongoing activity.

PLATEAU: A temporary or permanent levelling off in the recovery process.

PONS: The pons is involved in motor control and sensory analysis. It is a relay station for messages from some parts of the brain. It has parts that are important for the level of consciousness and for sleep. It contains important centres for breathing. Some structures within the pons are linked to the cerebellum.

POSEY: A safety harness used to prevent falls.

POSEY ROLL: A bar placed on the wheelchair to prevent a person from standing up or falling out.

POSEY VEST/HOUDINI JACKET: A vest worn to keep the person in bed or in the wheelchair. This is for the person's safety.

POSITIONING: Placing a person in such a position that muscle and joint flexibility is preserved and skin breakdown prevented. Positioning is especially important for persons with the potential for contractures and/or limited mobility. A variety of positions are needed for each individual. A person's position must be changed at prescribed intervals to obtain maximum benefit.

POSITION SENSE: The sensory awareness of body parts in the absence of movement. See kinesthesia and proprioception.

POST TRAUMATIC AMNESIA (PTA): A period of hours, weeks, days or months after the injury when the patient exhibits a loss of day-to-day memory. The patient is unable to store new information and therefore has a decreased ability to learn. Memory of the PTA period is never stored, therefore things that happened during that period cannot be recalled. The length of PTA is regarded as an indicator of eventual recovery. May also be called anterograde amnesia.

POSTURE: The attitude of the body. Posture is maintained by low grade continuous contraction of muscles which counteract the pull of gravity on body parts. Injury to the nervous system can impair the ability to maintain normal posture, for example, holding up the head.

PRE-MORBID CONDITION: Characteristics of an individual present before the disease or injury occurred.

PRESSURE SORES: (Also referred to as decubitus ulcer) Open sores due to prolonged pressure and immobility that often appear on the coccyx (tailbone), sacrum (bottom vertebrae), ankles and elbows. Major methods of pressure sore prevention include good nutrition, correct positioning, frequent turning when in bed, and weight shifting when in a wheelchair.

PRIMARY CARE NURSE: The nurse principally responsible for the nursing care of a given patient. The primary care nurse develops and implements a care plan, participates in conferences, collaborates with the patient, the rehabilitation team, and the family, as well as evaluating the outcome of care.

PROBLEM-SOLVING: The ability to integrate and evaluate the various parts of a situation and to anticipate possible consequences in order to arrive at a productive conclusion.

PROBLEM-SOLVING SKILLS: Ability to consider the probable factors that can influence the outcome of each of various solutions to a problem, and to select the most advantageous solution. Patients with deficits in this skill may become "immobilized" when faced with a problem. By being unable to think of possible solutions, they may respond by doing nothing.

PROGNOSIS: The prospect as to recovery from a disease or injury as indicated by the nature and symptoms of the case.

PRONE: Lying on one's stomach.

PROPRIOCEPTION: Perception of the position of one's limbs in space. For example, a person with proprioception loss may be unaware that his/her arm has fallen off the armrest and is dangling outside of the wheelchair. Combination of kinesthesia and position sense.

PROSODY: The inflections or intonations of speech.

PROSTHESIS: An artificial substitute for a missing body part, such as an arm or leg, eye or tooth, used for functional or cosmetic reasons or both.

PROSTHETIST: A skilled craftsman who designs and makes artificial replacements for missing body parts, for example, an artificial leg.

PROXIMAL: Next to or nearest the point of attachment.

PROXIMAL INSTABILITY: Weakness of muscles of the tile trunk, shoulder girdle or hip girdle which causes poor posture, abnormal movement of the arms or legs and tile inability to hold one's head up. Strength of muscles of the hands or legs may be normal.

PSYCHIATRIST: A physician who specializes in the prevention and management of emotional and behavioural problems with various means including the prescription of psychotropic medication.

PSYCHOLOGIST: An expert in the diagnosis and management and prevention of emotional and behavioural problems who has a doctoral level education. Psychologists also assess patients' thinking abilities and they work closely with the rehabilitation team.

PSYCHOMOTOR SKILLS: Skills that involve both mental and muscular ability such as playing sports or other activities where practice or concentration are involved.

PSYCHOSOCIAL SKILLS: Refers to the individual's adjustment to the injury and resulting disability, and one's ability to relate to others. Includes feelings about self, sexuality and the resulting behaviours.

PTOSIS: Drooping of a body part, such as the upper eyelid, from paralysis, or drooping of visceral organs from weakness of the abdominal muscles.

PURPOSEFUL/NON PURPOSEFUL MOVEMENT: Motor activity with an apparent goal.

[Back to Index](#)

Q

QUADRIPARESIS: Weakness of all four limbs.

QUADRIPLEGIA: Paralysis of all four limbs (from the neck down). British authors often use the prefix "tetra" to mean four, so they may describe a patient as having tetraplegia.

QUALITY OF LIFE: A rating of what kind of existence a person experiences. In estimating the quality of life the following items should be considered: 1) activities of daily life; 2) mobility and organization; 3) social relationships; 4) work or leisure activities; 5) present satisfaction; and 6) future prospects.

[Back to Index](#)

R

RANCHO LOS AMIGOS COGNITIVE SCALE (Rancho Scale): An eight point scale developed at the Rancho Los Amigos Hospital to describe the stages of Post Traumatic Amnesia, coma recovery. Levels are:

Level I: No response to pain, touch, sound, or sight

Level II:	Generalized reflex response to pain.
Level III:	Localized response. Blinks to strong light, turns toward/away from sound, responds to physical discomfort, inconsistent response to commands.
Level IV:	Confused-agitated. Alert, very active, aggressive or bizarre behaviours, performs physical activities but behaviour is non-purposeful, extremely short attention span.
Level V:	Confused-Non-agitate. Gross (general, non-detailed) attention to environment, highly distractible, requires continual redirection, difficulty learning new tasks, agitated by too much stimulation. May engage in social conversation but with inappropriate verbalizations.
Level VI:	Confused – Appropriate. Inconsistent orientation to time and place, retention span/recent memory impaired, begins to recall the past, consistently follows simple directions, goal –directed behaviour with assistance.
Level VII:	Automatic – Appropriate. Performs daily routines in Highly familiar environments in a non-confused but automatic, robot-like manner. Skills noticeably deteriorate in an unfamiliar environment. Lacks realistic planning for own future.
Level VIII:	Purposeful – Appropriate.

RANDOM MOVEMENT: An action or process of moving without obvious aim, purpose, or reason.

RANGE OF MOTION (ROM): Refers to movement of a joint (important to prevent contractures).

RANGE OF MOTION - ACTIVE: The muscles around the joint do the work of moving it.

RANGE OF MOTION - PASSIVE: The muscles are not working and the person or someone else moves the joint.

REASONING, ABSTRACT: Requires that the individual recognize a phrase that has multiple meanings and select the meaning most appropriate to a given situation. The term "abstract" typically refers to concepts not readily apparent from the physical attributes of an object or situation.

REASONING, ASSOCIATION: A skill dependent on a patient's ability to determine the relationship between objects and concepts. A patient with impairment may touch a hot

stove, failing to realize that pain is associated with touching a heated burner. Similarly, a patient given a knife, spoon, fork, and baseball may not be able to discriminate which of the objects "does not belong."

REASONING, CATEGORIZATION: The ability to sort or group objects and concepts based on the shared attribute(s) and apply a label depicting the attribute(s). Task difficulty is greater in circumstances requiring formulation of new categories. Impaired patients may have difficulty sorting clothes or choosing items for a balanced meal. Categorization is similar to association in that patients must understand the relationship between objects or concepts. However, categorization requires an extra step; the ability to provide a label describing the group of objects or concepts.

REASONING, CAUSE AND EFFECT: The ability to perceive and anticipate the consequences of a given action or statement. For example, a patient may sit for a long period in a darkened room without realizing that flipping a light switch will cause the light to turn on. A patient may turn the oven up to make a cake cook faster, not realizing that the increased heat will simply cause the food to burn.

REASONING, CONCRETE: Involves the ability to understand the literal meaning of a phrase.

REASONING, GENERALIZATION: The ability to take information, rules and strategies learned about one situation and apply them appropriately to other, similar situations. For example, a patient who learns to lock his wheelchair brakes in physical therapy may not lock the brakes while sitting in his room; a patient given permission to use a staff phone to make a call on one occasion may attempt to use the phone on other occasions.

REASONING, ORGANIZATION: The ability to arrange or group information in a manner which improves task efficiency. Patients who lack organizational skills often demonstrate a sense of purposelessness and have difficulty effectively utilizing non-structured time. They have difficulty completing a puzzle or arranging materials to cook or shower.

REASONING, PROBLEM-SOLVING: The ability to analyze information related to a given situation and generates appropriate response options. Problem-solving is a sequential process that typically proceeds as follows: identification of problem; generation of response options; evaluation of response option appropriateness; selection and testing of first option; analysis as to whether solution has been reached. A patient may discontinue making a cup of coffee because the sugar bowl is empty, even though sugar is readily available in a nearby cabinet. A brain injured patient may easily navigate his way into a room crowded with furniture, but request staff assistance to navigate his way out.

REASONING, SEQUENCING: The ability to organize information or objects according to specified rules, or the ability to arrange information or objects in a logical progressive manner. Nearly every activity including work and leisure tasks, requires sequencing. For example, in cooking certain foods it is important that ingredients be added and mixed in a specified order, in dressing, undergarments must be put on prior to garments.

RECEPTIVE LANGUAGE: This refers to the part of language skills used to receive and process communications from others.

REFRIG BAG: Device used to help keep males dry when they are incontinent. It is a small plastic bag filled with absorbent tissue that is secured around the penis.

REHABILITATION: Comprehensive program to reduce/overcome deficits following injury or illness, and to assist the individual to attain the optimal level of mental and physical ability.

REHABILITATION COUNSELLOR: Also called Vocational Counsellor. A specialist in social and vocational issues who works to develop the skills and aptitudes necessary for a patient to return to work and the community.

REHABILITATION ENGINEERING: Use of technical advances, physics, computer science and other scientific devices to aid in improving the quality of life for the handicapped person, e.g., computerized communication boards, mechanically assisted wheelchairs.

REHABILITATION NURSE: A nurse specializing in rehabilitation techniques as well as basic nursing care. Nurses assist the patient and family in acquiring new information, developing skills, achieving competence and exhibiting behaviours that contribute to the attainment of a healthy state.

REHABILITATION TEAM: The rehabilitation team, comprised of a group of health care specialists, focuses on providing a logical, practical and complete rehabilitation plan for the patient. Upon admission to the rehabilitation hospital, the patient is evaluated by each team member who defines both short-term and long-term goals for the patient's rehabilitation. Meetings of the rehabilitation team (sometimes called "rounds") are held regularly to discuss the patient's progress and, if necessary, to re-define goals. Additional family conferences may also be scheduled.

REINFORCEMENT: Anything which follows a behaviour and increases the probability of the same behaviour occurring again under the same conditions e.g.) An injured person has been working hard at re-learning to walk Staff and family continuously offer praise and encouragement for all efforts (going to physio, cooperating with exercises, enduring pain, etc).

REMEDICATION: The process of decreasing a handicap by challenging the individual to use and improve deficient skills.

RESIDENT: A physician who has completed medical training and is taking additional training in a specialty, such as neurosurgery. Residents work under the supervision of attending physicians.

R.E.S.N.A.: Rehabilitation Engineering & Assistive Technology Society of North America.

RESPIRATION: Breathing. The exchange of gases in the lungs, where oxygen is absorbed into the blood, carbon dioxide diffuses out of the blood, and the subsequent use of oxygen to produce energy for the body.

RESPIRATOR/VENTILATOR: A machine that does the breathing work for the unresponsive patient. It serves to deliver air in the appropriate percentage of oxygen and at the appropriate rate. The air is also humidified by the respirator.

RESPIRATORY THERAPISTS: Technicians with special skills who work with patients who have breathing problems and operate the necessary equipment.

RESPITE CARE: The temporary care of a disabled individual for the purpose of providing relief to the primary care giver. "Temporary" is usually defined as care not exceeding thirty continuous days, although provision is sometimes made for the extension of services up to ninety days under special circumstances. This is a unique care program, in that the beneficiary of the service is the family.

RESPONSE CONTROL: Development of the ability to recognize and suppress abnormal behaviours in one's self. Two behaviours fall within this category; impulse control, and perseveration.

RETROGRADE AMNESIA: Inability to recall events prior to the accident; may be a specific span of time or type of information.

R.N.A.O.: Registered Nurses Association of Ontario.

RT: See Respiratory Therapist.

[Back to Index](#)

S

S.A.A.Q.: Society Automobile Assurance de Quebec.

SCANNING: The active search of the environment for information; usually refers to "visual scanning" which is a skill used in reading, driving and many daily activities.

SCOTOMA: Area of blindness of varying size anywhere within the visual fields.

SECONDARY INSULTS: Secondary or delayed brain injury; includes all events other than the mechanical injury sustained at the time of impact. Secondary phenomena may be divided into systemic and intra cranial insults. Systemic insults include hypoxemia, anemia, hypotension, hypercarbuam hyperthermia, and electrolyte imbalance.

SEIZURE/SEIZURE DISORDER: A seizure is a disturbance in the electrical chemical activity of the brain due to nerve cell damage or electrolyte imbalance. After brain injury,

scar tissue in the brain may lead to reduced seizure tolerance, also known as a seizure disorder or post traumatic epilepsy. Seizures are usually experienced with unconsciousness and involuntary movement. Seizures are more common during the first two years after injury, and usually decrease in incidence as time goes on. It may be associated with loss of consciousness, loss of bowel and bladder control and tremors. May also cause aggressive or other behavioural change.

SELECTIVE ATTENTION: Ability to focus on the most important aspect of a situation without becoming distracted.

SENSATION: Feeling stimuli which activate sensory organs of the body, such as touch, temperature, pressure and pain. Also seeing, hearing, smelling and tasting.

SENSORY DEPRIVATION: A situation or environment where usual sensory stimuli, such as noise and light, as well as human contact, are absent or substantially decreased. In the case of noise, it may be masked by a continuous dull noise.

SENSORY HALLUCINATION: The perception of sensations such as sights, sounds, smells in the absence of real stimuli. An example of this would be hearing a phone ring where there is none.

SENSORY INTEGRATION: Interaction of two or more sensory processes in a manner which enhances the adaptiveness of the brain.

SENSORY STIMULATION SEQUENCING: Arousing the brain through any of the senses. Reading, listening, expressing thoughts, describing events or contracting muscles in an orderly and meaningful manner.

SERIAL CASTING: A technique used to reduce contractures and control hyper tonicity in and around a joint, usually the ankles and wrists. A series of plaster casts are applied to the area every 3-7 days. When the casts are changed, the joint should be re-cast in an improved position. The casting is usually done until a functional position is gained.

SEXUALITY COUNSELLING: Using supportive techniques and special methods to help head-injured survivors and their families deal with special and intimate relationship issues.

SHOCK, CIRCULATORY: A clinical condition characterized by signs and symptoms which arise when the cardiac output is insufficient to fill the arterial tree with blood under sufficient pressure to provide organs and tissues with adequate blood flow.

SHELTERED WORKSHOP: Work oriented rehabilitation facility with a controlled environment. Such a workshop employs disabled people and provides work experience which may assist the individual in progressing toward a productive vocational status.

SHORT TERM MEMORY: The ability to remember day-to-day events. Short term memory loss may range from occasional forgetting of names to a total loss of events after even a few minutes Short term memory problems are the most common memory impairments exhibited by brain injured persons. Also see amnesia (anterograde).

SHUNT: A procedure to draw off excessive fluid in the brain. A surgically-placed tube running from the ventricles deposits fluid into either the abdominal cavity, heart or large veins of the neck.

SKULL: Hard bone that covers the brain.

SLING: An external device applied to the arm to provide support and proper positioning.

SOCIAL ASSESSMENT: A social assessment includes general background data, description of family or other support group resources - including emotional, financial and environment resources, their availability to the patient, and the patient's position and role in the family (child, parent, spouse) - and educational and employment history. Also included are such topics as interest, lifestyle, friendships, goals, ambition, personality traits, positive and/or negative relationships and previous problems (such as medical, psychiatric, drug abuse, and alcohol). The assessment attempts to reveal the patient's and the family's level of understanding of the patient's current condition, probably long-range outcome, expectations of rehabilitation, degree of disruption in family functioning that the disability has produced, and the ability and interest of the patient and family members to adjust to changed circumstances.

SOCIAL INTEGRATION: Taking one's place in society, or becoming part of the community in which one lives.

SOCIAL INTERACTION/SOCIALIZATION: Socialization refers to the skills needed to participate in the social situations which are part of living. Therapeutic Recreation assists an individual with a brain injury in building such needed social skills. In order to do this, the therapeutic recreation specialist evaluates how the person interacts with other people. Does the person relate better one-on-one, or better in a group? Will the person initiate a conversation with someone, or does he/she always need to have a conversation directed at him/her? Does the person withdraw from others or does he/she seek to be with others? Based on answers to such questions, the Recreation Specialist works with the individual to enhance social skills.

SOCIAL WITHDRAWAL: The tendency to cut oneself off from contact with others.

SOCIAL WORKER: Expert in the social, emotional, and financial needs of families and patients. Social workers often help families locate the services they need, both for themselves and the patient.

"SPACE BOOTS" (SPENCO BOOTS): Padded support devices made of lamb's wool used to position the feet and ankles of the patient. Without this support and alignment, patients who are unconscious for long periods may develop deformities limiting future movement.

SPASMS: Involuntary muscle contractions resulting from excess muscle tone. This excess muscle tone is caused by an interruption of controlling impulses in the brain and spinal cord.

SPASTICITY: An involuntary increase in muscle tone (tension) that occurs following injury to the brain or spinal cord, causing the muscles to resist being moved. Characteristics may include increase in deep tendon reflexes, resistance to passive stretch, clasp knife phenomenon, and clonus.

SPATIAL ABILITY: Ability to perceive the construction of an object in both two and three dimensions. Spatial ability is composed of four components: the ability to perceive a static figure in different positions, the ability to interpret and duplicate the movements between various parts of a figure, the ability to perceive the relationship between an object and a person's own body sphere, and the ability to interpret the person's body as an object in space.

SPEECH: The means by which language is expressed. Speech describes the act of talking or the way in which sounds are combined to form words (articulation). Note that speech is different from language.

SPEECH LANGUAGE PATHOLOGIST: A therapist responsible for the evaluation and treatment of problems with speech and language; auditory, cognitive (comprehension), attention, writing, reading and expression skills.

SPEECH-LANGUAGE PATHOLOGY SERVICES: Speech-language pathology services provide for a continuum of services including prevention, identification, diagnosis, consultation, and treatment of patients regarding speech, language, oral and pharyngeal sensorimotor function.

SPLINT: An external device applied to an extremity (usually the hand) to provide positioning to help prevent or correct contractures.

SPONTANEOUS MOVEMENT: A reaction resulting from a natural impulse without obvious planning or premeditation.

SPONTANEOUS RECOVERY: The recovery which occurs as damage to body tissues heals. This type of recovery occurs with or without rehabilitation and it is very difficult to know how much improvement is spontaneous and how much is due to rehabilitative interventions. However, when the recovery is guided by an experienced rehabilitation team, complications can be anticipated and minimized; the return of function can be channelled in useful directions and in progressive steps so that the eventual outcome is the best that is possible.

STATUS EPILEPTICUS: Continuous seizures; may produce permanent brain damage.

STIMULUS/STIMULI: That which causes sensation (i.e., light for vision, salt for taste, sound for hearing, etc.). When a patient first comes out of coma a great deal of controlled stimulation of all kinds is needed. When a patient becomes agitated the amount and intensity of stimulation should be limited (e.g., only one task for one sense at a time).

STIMULUS BOUND BEHAVIOUR: Behaviour in which individuals have difficulty changing their behaviour to adapt to changes in the immediate surroundings. People

have difficulty focusing attention away from whatever is in their perceptual field. They are unable to plan ahead, think creatively, or begin a new activity.

STRABISMUS, EXTERNAL: Outward turning of the eye which may be due to a lesion of the abducens nerve (III) causing paralysis of the lateral rectus muscle.

STRABISMUS, INTERNAL: Inward turning of the eye which may be due to a lesion of the abducens nerve (VI) causing paralysis of the lateral rectus muscle.

STUPOR: Deep sleep; unresponsive but awakens with repeated, often noxious stimulation. Awareness is depressed but present.

SUBACUTE REHABILITATION PROGRAM: Primary emphasis is on the period following the initial comprehensive phase of inpatient rehabilitation. This type of program has the capacity to keep an individual from 6-24 months if necessary and does not have to be hospital based. Treatment is provided by an identifiable team in a designated unit.

SUBARACHNOID SCREW: Also Subarachnoid Bolt. A device for measuring intracranial pressure which is screwed through a hole in the skull and rests on the surface of the brain.

SUBCORTICAL STRUCTURE: The set of structures located in the lower, central part of the brain, of which the most important are the thalamus and hypothalamus.

SUBDURAL: Beneath the dura (tough membrane) covering the brain and spinal cord.

SUBSTANCE ABUSE PROGRAM: A service offered by a program to deal with chemical dependency of an individual. The dependency may have occurred prior to the head injury or as a result of the head injury.

SUCTION MACHINE: Used to remove secretions/mucous from oral or nasal passageways.

SUPERVISION: Refers to the assistance provided when an individual requires no physical help but requires another person nearby for safety.

SUPERVISION-CLOSE: Assistant stands close to person, ready to give assistance if needed.

SUPERVISION-DISTANT: Assistant can see the person and offer verbal assistance but is not close enough to touch the person.

SUPINE: Lying on one's back.

SUPPORT GROUP: A group established for families and/or head injured survivors to discuss the problems they have been having in coping and to seek solutions to those problems.

SUPPORT HOSE: Anti-embolic stockings. Tight knee or thigh-high stockings that support the leg muscles and thus help maintain the circulation in the legs.

SUPPORT EMPLOYMENT: Competitive work in integrated work settings for individuals with severe handicaps for whom competitive employment has not traditionally occurred, or for whom competitive employment has been interrupted or intermittent as a result of a severe disability, and who, because of the handicaps, need on-going support services to perform that work. The term includes transitional employment for individuals with chronic mental illness.

SUPPOSITORY: Medicine inserted into the rectum to help stimulate the muscle to push the feces out. This can be a small solid material or liquid.

SURVIVOR: One who has survived a traumatic injury and consequently is living with a brain injury.

SWAN-GANZ CATHETER: A catheter (tube) similar to the central venous pressure (CVP) line. It allows for pressure measurement of the blood not only in the right side of the heart, but also in the lungs and the left side of the heart.

SYNERGY (MOVEMENT): Combined action of two or more muscles to form a pattern of movement.

[Back to Index](#)

T

TACTILE DEFENSIVENESS: Being overly sensitive to touch; withdrawing, crying, yelling or striking when one is touched.

TACTILE DISCRIMINATION: The ability to differentiate information received through the sense of touch, i.e., sharp/dull discrimination ability to distinguish between sharp and dull stimuli; two-point discrimination - the ability to recognize two points applied to the skin simultaneously as distinct from one single point.

TACTILE STIMULATION: Presented through the sense of touch (e.g., ice, cotton).

TEDS: See support hose.

TELEGRAPHIC SPEECH: Speech which sounds like a telegram. Only the main words of a sentence (nouns, verbs) are present; the small words (ifs, ands, buts,) are missing. This type of speech often gets the message across.

TEMPORAL LOBES: The lower middle part of each side of the brain involved in receiving information from the auditory system and involved in memory.

TEMPORAL - RIGHT: Mainly involved in visual memory (i.e., memory for pictures and faces).

TEMPORAL - LEFT: Mainly involved in verbal memory (i.e., memory for words and names).

THALAMUS: It relays information to the cerebral. It is sort of a requisite 'last pit stop' for information going to cortex. It is important for motor control. The thalamus receives auditory, somatosensory and visual sensory signals.

THIRD PARTY FUNDING: Reimbursement for services rendered to a person in which an entity other than the recipient of the services is responsible for the payments, i.e., an insurance company.

THROMBOSUS: Clot.

TILT TABLE: A table which has the capacity to raise and lower a person from the horizontal to the vertical position and vice versa. This is used for some persons to stretch heel cords and/or to increase standing tolerance in persons who have not been in an upright position for an extended period of time.

TONE, MUSCLE: The tension in resting muscles and the amount of resistance that is felt when a muscle is moved.

TRACHEOTOMY: The surgical procedure whereby an opening is made in the trachea (windpipe) to allow a person to breathe adequately.

TRACKING: Visually following an object as it moves through space.

TRACTION: A weighted traction set-up composed of pulleys and lines used in the care of the patient with broken legs or spine. After the repair of the fractures and application of the appropriate casts, weights used to keep the bones correctly aligned.

TRANSDUCER: A sensitive electronic device which transmits signals and pressures from the patient to the monitor.

TRANSFER: Moving one's body between wheelchair and bed, toilet, mat, or car with or without the assistance of another person.

TRANSITIONAL LIVING PROGRAM: Primary emphasis is to provide training for living in a setting with less dependence on others. There is a greater focus on compensating for skills that have not been restored and an emphasis on functional skills required to live in the community as a transitional step into the community. The typical length of stay is 4 to 18 months.

TRAUMATIC ACQUIRED BRAIN INJURY (TABI): See Acquired Brain Injury.

TREATMENT MODALITIES: Various therapy techniques.

TREATMENT PROTOCOL: The written treatment plan specifying the procedures to be followed by the treatment team.

TREMOR, INTENTION: Course, rhythmical movements of a body part that becomes intensified the harder one tries to control them.

TREMOR, RESTING: Rhythmical movements present at rest and may be diminished during voluntary movement.

TRUNK: Region of the body from the shoulders to the pelvis.

TRUNK CONTROL: The ability of a person to maintain proper alignment of the head, neck, and pelvis; bring the trunk back into alignment after displacement and move the trunk at will (for example, to twist).

TREATMENT: Individual or group therapy designed to improve problem areas identified during assessment.

TUBE FEEDING: Nutrition feedings administered through a gastronomy tube or a nasogastric tube when swallowing is impaired.

[Back to Index](#)

U

UNILATERAL: Pertaining to only one side.

UNILATERAL NEGLECT: Paying little or no attention to things on one side of the body. This usually occurs on the side opposite from the location of the injury to the brain because nerve fibres from the brain typically cross before innervating body structures. In extreme cases, the patient may not bath, dress or acknowledge one side of the body.

UNIT SECRETARY/CLERK: A person who coordinates messages and manages the clerical work of the nurses' station under direction of nurses.

URINARY TRACT INFECTION: When a foreign organism has grown to a large number in the bladder. This can cause fever chills, burning with urination, urgency, frequency, incontinence, or foul smelling urine.

[Back to Index](#)

V

VEGETATIVE STATE: Return of wakefulness but not accompanied by cognitive function; eyes open to verbal stimuli; does not localize motor responses; autonomic function preserved. Sleep-wake cycles exist.

VENTILATION: The process of exchange of air between the lungs and the ambient (room) air.

VENTRICLES: Four natural communicating cavities in the brain which are filled with cerebrospinal fluid. The outline of one or more of these cavities may change when a space-occupying lesion (hemorrhage, tumour) has developed in a lobe of the brain. The four ventricles consist of the two lateral ventricles, the third ventricle and the fourth ventricle. The ventricles are filled with cerebrospinal fluid, which is formed by structures called choroid plexuses located in the walls and roofs of the ventricles.

VENTRICULOSTOMY: A procedure for measuring intra cranial pressure by placing a measuring device within one of the fluid filled, hollow chambers of the brain. Also known as Intra cranial Pressure Monitor or ICP.

VERBAL ABILITY: Composed of verbal understanding and verbal fluency. Verbal understanding is the ability of an individual to understand the subtleties and meaning of words; verbal fluency is the ability to imagine, process and say words without associating them with any particular object. Also the ability to communicate by talking, writing, listening and reading.

VERBAL APRAXIA: Impaired control of proper sequencing of muscles used in speech (tongues, lips, jaw muscles, vocal cords).

VERBAL FLUENCY: The ability to produce words.

VERBAL REQUEST: Asking a person for a specified response.

VESTIBULAR: Pertaining to the vestibular system in the middle ear and the brain, which senses movements of the head. Disorders of the vestibular system can lead to dizziness, poor regulation of postural muscle tone and impaired balance.

VESTIBULAR STIMULATION: Stimulation presented to a person through movement (e.g., rocking).

VIDEO FLUOROSCOPY (COOKIE SWALLOW): A type of X-ray in which a swallow is recorded on videotape. This can show which textures of food a person has problems swallowing. It can also show whether or not they are aspirating.

VISUAL FIELD DEFECT: Inability to see objects located in a specific region of the field of view ordinarily received by each eye. Often the blind region includes everything in the right half or left half of the visual field.

VISUAL IMAGERY: The use of mental pictures to aid in recall.

VISUAL PERCEPTION: The ability to recognize and discriminate between visual stimuli and to interpret these stimuli through association with earlier experiences. For example, to separate a figure from a background, to synthesize the contents of a picture and to interpret the invariability of an object which is seen from different directions.

VISUAL STIMULATION: Stimuli presented through the sense of sight (e.g., photographs).

VISUALLY IMPAIRED PROGRAM: A service offered by a program to deal with an individual who is blind. The blindness may have occurred prior to a head injury or as a result of head injury.

VOCATIONAL COUNSELLOR: See Rehabilitation Counsellor.

VOCATIONAL COUNSELLING: Process of assisting the disabled person in understanding his/her vocational assets and liabilities, and of providing occupational information to help the person choose an occupation suitable to his/her interests and abilities.

VOCATIONAL EXAMINATION: A systematic appraisal or testing of an individual's employability and vocational potential. The evaluation helps to predict what limitations may be removed, corrected, or minimized by specific rehabilitation services. The evaluation is done by a specialist trained in vocational evaluation techniques.

VOICEVOICE FUNCTION: The sound produced by a vibration of the vocal cords. A brain injury or stroke may cause paralysis, weakness, or discoordination of vocal cord movement resulting in hoarseness, breathiness, reduced volume, changed pitch, monotone or absence of voice.

VOIDING: Urinating.

VOLUNTARY OR VOLITIONAL MOVEMENT: Refers to movement purposefully made by the person.

V.R.S.: Vocational Rehabilitation Services (Ontario)

[Back to Index](#)

W

W.C.B.: Workers' Compensation Board (Ontario).

WHEELCHAIR MANIPULATION: Basic wheelchair manipulation is the ability to manoeuvre a wheelchair on level surfaces forward, backward and turning right and left. Advanced wheelchair manipulation would include the ability to manoeuvre a wheelchair

over uneven surfaces (grass, gravel, up and down ramps), as well as the ability to perform those activities considered to be of a basic nature.

W.S.I.B.: Workplace Safety and Insurance Board (Ontario).

WORD RETRIEVAL DEFICIT: Difficulty recalling a specific word or words.

[Back to Index](#)