

**Agnosia** – Failure to recognize familiar objects although sensory mechanism is intact. May occur for any sensory modality.

Alexia - Inability to read.

**Aneurysm** – A balloon-like deformity in the wall of a blood vessel. The wall weakens as the balloon growns larger, and may eventually burst, causing a hemorrhage.

**Anomia** – Inability to recall the names of objects. Persons with this problem often can speak fluently but have to use other words to describe familiar objects.

Anosmia - Loss of the sense of smell.

**Anoxia** – A lack of oxygen. Cells of the brain need oxygen to stay alive. When blood flow to the brain is reduced or when oxygen in the blood is too low, brain cells are damaged.

**Anterograde Amnesia** – Inability to consolidate information about ongoing events. Difficulty with new learning.

**Anticoagulation** – Process of slowing down normal blood clotting and thus preventing blood clots from forming. Sometimes referred to as "thinning the blood." Common medications utilized to accomplish this are Coumadin and Herapin.

**Aphasia** – Loss of the ability to express oneself and/or to understand language. Caused by damage to brain cells rather than deficits in speech or hearing organs.

**Aphasia, Expressive** – Inability to find or formulate the words to express oneself even though knowing what one wants to say.

**Aphasia, Fluent** – Characterized by spontaneous use of language at normal speed that conveys little meaning.

**Aphasia, Global** – Severely limited residual ability to communicate with others. 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.

**Apraxia** – Inability to carry out a complex or skilled movement; not due to paralysis, sensory changes, or deficiencies in understanding.



**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. Can interfere with a person's ability to walk, talk, eat, and to perform other self care tasks.

**Augmentative and Alternative Communication** - Use of forms of communication other than speaking, such as: sign language, "yes, no" signals, gestures, picture board, and computerized speech systems to compensate (either temporarily or permanently) for severe expressive communication disorders.

**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.

**ADL** – Activities of daily living. Routine activities carried out for personal hygiene and health (including bathing, dressing, feeding) and for operating a household.

**Bilateral** – Pertaining to both right and left sides.

**Biofeedback** – A process in which information not ordinarily perceived (such as heart rate, skin temperature or electrical activity of muscles) is recorded from a person and then relayed back instantaneously as a signal so that the individual becomes aware of any alteration in the recorded activity.

**Brain Injury, Acquired** – The implication of this term is that the individual experienced normal growth and development from conception to birth, until sustaining an insult to the brain at some later time which resulted in impairment of brain function.

**Brain Injury, Closed** – Occurs when the head accelerates and then rapidly decelerates or 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 brain injuries typically cause diffuse tissue damage that result in disabilities which are generalized and highly variable.

Brain Injury, Mild – A patient with mild traumatic brain injury is a person who has had a traumatically-induced physiological disruption of brain function, as manifested by at least one of the following: 1) any period of loss of consciousness, 2) any loss of memory for events immediately before or after the accident, 3) any alteration in mental state at the time of the accident (e/g/, feeling dazed, disoriented, or confused), 4) focal neurological deficit(s) which may or may not be transient; but where the severity of the injury does not exceed the following: a) loss of consciousness of approximately 30 minutes or less; b) after 30 minutes, an initial Glasgow Coma Scale of 13-15; c) Post Traumatic Amnesia not greater than 24 hours.

Brain Injury, Moderate – A Glasgow Coma Scale score of 9 to 12 during the first 24 hours post injury.



**Brain Injury, Penetrating** – Occurs when an object (for example a bullet or an ice pick) 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.

**Brain Injury, Severe** – Severe injury is one that produces at least 6 hours of coma; Glasgow Coma Scale of 8 or less within the first 24 hours.

**Brain 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 very long (months/indefinitely). The specific disabling condition(s) may be orthopedic, visual, aural, neurologic, perceptive/cognitive, or mental/emotional in nature. The term does not include brain injuries that are caused by insufficient blood supply, toxic substances, malignancy, disease-producing organisms, congenital disorders, birth trauma or degenerative processes.

**Brain Plasticity** – The ability of intact brain cells to take over functions of damaged cells; plasticity diminishes with maturation.

**Brain Stem** – The lower extension of the brain where it connects to the spinal cord. Neurological functions located in the brain stem include those necessary for survival (breathing, heart rate) and for arousal (being awake and alert).

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

**Cerebral-spinal Fluid (CSF)** – Liquid which fills the ventricles of the brain and surrounds the brain and spinal cord.

**Cognition** – The conscious process of knowing or being aware of thoughts or perceptions, including understanding and reasoning.

**Cognitive Impairment** – Difficult with one or more of the basic functions of the brain: perception, memory, attentional abilities, and reasoning skills.

**Cognitive Rehabilitation** – Therapy programs which aid persons in the management of specific problems in perception, memory, thinking and problem solving. Skills are practiced and strategies are taught to help improve function and/or compensate for remaining deficits. The interventions are based on an assessment and understanding of the person's brain behavior deficits and services are provided by qualified practitioners.



**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. Language and perceptions are interpreted literally so that a proverb such as "a stitch in time saves nine" cannot be readily grasped.

**Concussion** – The common result of a blow to the head or sudden deceleration usually causing an altered mental state, either temporary or prolonged. Physiologic and/or anatomic disruption of connections between some nerve cells in the brain may occur. Often used by the public to refer to a brief loss of consciousness.

**Confabulation** – Verbalizations about people, places, and events with no basis in reality. May be a detailed account delivered.

**Continent** – The ability to control urination and bowel movements.

Contracture – Loss of range of motion in a joint due to abnormal shortening of tissues.

**Contralateral** – Opposite side.

Contusion, Brain – A bruise. The result of a blow to the head which bruises the brain.

**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.

**Cortical Blindness** – Loss of vision resulting from a lesion of the primary visual areas of the occipital lobe. Light reflex is preserved.

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

**Coup Damage** – Damage to the brain at the point of impact.

**Decubitus** – Pressure area, bed sore, skin opening, skin breakdown. A discolored 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.

**Diffuse Axonal Injury (DAI)** – A shearing injury of large nerve fibers (axons covered with myelin) in many areas of the brain. It appears to be one of the two primary lesions of brain injury, the other being stretching or shearing of blood vessels from the same forces, producing hemorrhage.

**Diplopia** – Seeing two images of a single object; double vision.



**Disinhibition** – Inability to suppress (inhibit) impulsive behavior 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.

**Dysarthria** – Difficulty in forming words or speaking them because of weakness of muscles used in speaking or because of disruption in the neuromotor stimulus patterns required for accuracy and velocity of speech.

**Dysphagia** – A swallowing disorder characterized by difficulty in oral preparation for the swallow, or in moving material from the mouth to the stomach. This also includes problems in positioning food in the mouth.

**Echolalia** – Imitation of sounds or words without comprehension. This is a normal stage of language development in infants, but is abnormal in adults.

**Emotional Lability** – Exhibiting rapid and drastic changes in emotional state (laughing, crying, anger) inappropriately without apparent reason.

**Endotracheal 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 endotracheal tube is in place. It is this tube that connects the respirator to the patient.

**Executive Functions** – Planning, prioritizing, sequencing, self-monitoring, self-correcting, inhibiting, initiating, controlling or altering behavior.

Flaccid – Lacking normal muscle tone; limp.

**Frontal Lobe** – Front part of the brain; involved in planning, organizing, problem solving, selective attention, personality and a variety of "higher cognitive functions."

**GI Tube** – A tube inserted through a surgical opening into the stomach. It is used to introduce liquids, foods, or medication into the stomach when the patient is unable to take these substances by mouth. Also referred to as a PEG Tube.

**Glasgow Coma Scale** – A standard 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. Scorers run from a high of 15 to a low of 3. Persons are considered to have experienced a "mild" brain injury when their score is 13 to



15. A score of 9 to 12 is considered to reflect a "moderate" brain injury and a score of eight or less reflects a "severe" brain injury.

**Handicap** – Describes a condition or barrier imposed by society, the environment, or by one's own self that limits or prevents the fulfillment of a role that is normal, depending on age, sex and social and cultural factors, for the individual. Handicap can be used when citing laws and situations but should not be used to describe a disability. Not a synonym for disability.

**Hemianopsia Hemianopia** – Visual field cut. Blindness for one half of the field of vision. This is not the right eye or left eye, but the rights or left half of vision in each eye.

**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.

**Hemiparesis** – Weakness of one side of the body.

**Hemorrhage** – Bleeding that occurs following damage to blood vessels. Bleeding may occur within the brain when blood vessels in the brain are damaged. See Hematoma.

**Hydrocephalus** – Enlargement of fluid-filled cavities in the brain, not due to brain atrophy.

**Hypoxia** – Insufficient oxygen reaching the tissues of the body.

**Impulse Control** – Refers to the individual's ability to withhold inappropriate verbal or motor responses while completing a task. Persons who act or speak without first considering the consequences are viewed as having poor impulse control.

**Incontinent** – Inability to control bowel and bladder functions. Many people who are incontinent can become continent with training.

**Initiative** – Refers to the individual's ability to begin a series of behaviors directed toward a goal.

Insight Regarding Impairment – The extent to which an individual accurately judges one's own strengths and limitations; also called metacognition. 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 pass and get involved in a serious accident. A patient with two broken legs in casts may state he can't walk because he's "too tired."

**Insured** – See Terms and Definitions Related to Insurance.

**Ischemia** – A severe reduction in the supply of blood to body tissues.



IV - See Intravenous.

Jargon – Spoken language that has normal rate and rhythm but is full of nonsense words.

**Judgment** – Process of forming an opinion, based upon an evaluation of the situation at hand in comparison with personal values, preferences and insights regarding expected consequences. The ability to make appropriate decisions.

Lability – State of having notable shifts in emotional state (e.g. uncontrolled laughing or crying)

**Malingering** – To pretend inability so as to avoid duty or work.

**Memory** – The process of organizing and storing representations of 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 presented 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 brain-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** – Recall of information after a delay, often with other information presented to prevent active rehearsal. There is no particular specification of the required time interval; typically it is ten minutes or more.

**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 an estimate 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 news tasks because they cannot remember instructions. Relies upon concentration and attention.

**Memory, Learning** – Change in a person's understanding or behavior due to experience or practice. Often thought of as acquisition of new information. For example, a person who learns quickly will likely remember an entire set of instructions after hearing them a single time. 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 short term memory.

Memory, Recall – Ability to retrieve information without renewed exposure to the stimulus.

**Memory, Recognition** – Ability to retrieve information when a stimulus cue is presented. Free recall of the information is often deficient if cues must be provided.

**Memory, Remote** – Information an individual correctly recalls from the past, stored before the onset of brain injury. 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.

**Memory, Short Term** – Primary for 'working' memory; its contents are in conscious awareness. A limited capacity system that holds up to seven chunks of information over periods of 30 seconds to several minutes, depending upon the person's attention to task.

**Mental Competence** – The quality or state of being competent; having adequate mental abilities; legally qualified or adequate to manage one's personal affairs. An individual found by a court to be mentally incompetent has a guardian appointed to make personal and/or economic decisions on their behalf.

**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 fibers 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 hypertonicity or spasticity.

**Nystagmus** – Involuntary horizontal, vertical, or rotary movement of the eyeballs.

**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 a person cannot safely swallow.

**Paraplegia** – Paralysis of the legs (from the waist down).



**Parietal Lobe** – One of the two parietal lobes of the brain located behind the frontal lobe at the top of the brain.

- Parietal Lobe, Right Damage to this area can cause visuo-spatial deficits (e.g., the patient may
  have difficulty finding their way around new, or even familiar, places).
- Parietal Lobe, Left Damage to this area may disrupt a patient's ability to understand spoken and/or written language.

**Perseveration** – The inappropriate persistence of a response in a current task which may have been appropriate for a former task. Perseverations may be verbal or motoric.

**Phonation** – The production of sound by means of vocal cord vibration.

**Physiatrist** – Pronounced Fizz ee at' rist. A physician who specializes in physical medicine and rehabilitation. Some physiatrists are experts in neurologic rehabilitation, trained to diagnose and treat disabling conditions. The physiatrist examines the patient to assure that medical issues are addressed; provides appropriate medical information to the patient, family members and members of the treatment team. The physiatrist follows the patient closely throughout treatment and oversees the patient's rehabilitation program.

**Plateau** – A temporary or permanent leveling off in the recovery process.

**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. May also be called Anterograde Amnesia.

**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** – The sensory awareness of the position of body parts with or without movement. Combination of kinesthesia and position sense.

**Prosody** – The inflections or intonations of speech.

**Proximal** – Next to, or nearest, the point of attachment.

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



**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 Movement** – Motor activity with an apparent goal.

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 to movie it.

**Range of Motion, Passive** – Movement of a joint by means other than contraction of the muscles around that joint' e.g., someone else moves the joint.

**Respite Care** – A means of taking over the care of a patient temporarily (a few hours up to a few days) to provide a period of relief for the primary caregiver.

**Retrograde Amnesia** – Inability to recall events that occurred prior to the accident; may be a specific span of time or type of information.

**Scotoma** – Area of blindness of varying size anywhere within the visual fields.

**Secondary Condition** – People with disabling conditions are often at risk of developing secondary conditions that can result in further deterioration in health status, functional capacity, and quality of life. Secondary conditions are causally related to a primary disabling condition and include, among others, contractures, physical deconditioning, mental depression, cardiopulmonary conditions and decubitus ulcers.

**Seizure** – An uncontrolled discharge of nerve cells which may spread to other cells nearby or throughout the entire brain. It usually lasts only few minutes. It may be associated with loss of consciousness, loss of bowel and bladder control and tremors. May also cause aggression or other behavioral change.

**Selective attention** – Ability to focus on the most important aspect of a situation without becoming distracted.

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

**Spasm** – An involuntary and abnormal muscular contraction; also, a sudden violent and temporary effort or emotion.

**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.



**Speech-language Pathology Services** – A continuum of services including prevention, identification, diagnosis, consultation, and treatment of patients regarding speech, language, oral and pharyngeal sensorimotor function.

**Spontaneous Movement** – A reaction resulting from a natural impulse without obvious planning or premeditation.

**Strabismus, External** – Outward turning of the eye which may be due to a lesion of the oculomotor nerve (III) causing paralysis of the medial 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.

Supine - Lying on one's back.

**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.

**Temperament** – Personal traits consisting of the individual's characteristic mode or inclination of emotional response.

**Temporal Lobes** – There are two temporal lobes, one on each side of the brain located at about the level of the ears. These lobes allow a person to tell one smell from another and one sound from another. They also help in sorting new information and are believed to be responsible for short-term memory.

- **Right Lobe** Mainly involved in visual memory (i.e., memory for picture and faces).
- Left Lobe Mainly involved in verbal memory (i.e., memory for words and names).

**Tone, Muscle** – The tension in resting muscles and the amount of resistance that is felt when a muscle is moved.

**Ventricles, Brain** – Four natural 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, tumor) has developed in a lobe of the brain.

**Verbal Apraxia** – Impaired control of proper sequencing of muscles used in speech (tongue, lips, jaw muscles, vocal cords). These muscles are not weak but their control is defective. Speech is labored and characterized by sound reversals, additions and word approximations.

**Verbal Fluency** – The ability to produce words.



**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 inability to detect quick movements of the head.

**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 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.

**Vocational Evaluation** – A comprehensive process that systematically utilizes work, real or stimulated, as the focal point for assessment and vocational exploration, the purpose of which is to assist individuals in vocational development. Vocational evaluation incorporates medical, psychological, social, vocational, educational, cultural and economic data in the attainment of the goals of the evaluation process.