<u>Acoustic Nerve:</u> The vestibulocochlear nerve or the auditory nerve. The VIIIth cranial nerve which runs from the inner ear to the brainstem and contains fibers carrying both auditory and vestibular information.

<u>Acoustic Reflex:</u> The reflex of the stapedial muscle that occurs when the ear is exposed to loud sounds. Testing the acoustic reflex tests portions of the VII and VIII cranial nerves.

Acuity: In hearing terms, it refers to the clarity or audibility of sound.

AD: Right ear.

<u>ADA:</u> American with Disabilities Act is an important piece of legislation giving individuals with disabilities, including those with hearing loss, specific rights.

<u>Air-Conduction Thresholds:</u> The lowest level that an individual can hear a pure tone stimulus presented through headphones or insert earphones. During a hearing test a patient's air-conduction thresholds are measured at several frequencies associated with the normal pitch range of the human voice and graphed out onto an audiogram.

<u>Amplifier:</u> An electronic sound processor located inside of a hearing aid that increases the incoming signal to improve the audibility of the outgoing signal.

AS: Left ear.

<u>Assistive Listening Devices (ALD):</u> Non-hearing aid devices used by a hearing impaired individual to improve communication and the performance of activities in specific environments. ALDs include devices such as infrared and FM personal amplifiers, alerting devices, and closed captioning equipment.

Atresia: The absence of the ear canal and/or middle ear space.

Au.D.: Doctor of Audiology. A clinical doctorate degree.

<u>Audiogram:</u> A chart onto which is graphed the results of a hearing test. The chart has intensity levels listed on one axis and frequencies (pitches) listed on the other axis.

<u>Audiometer:</u> The electronic piece of equipment used by a hearing healthcare professional to test the ability to hear and understand.

<u>Audiometric Evaluation Or Audiometry:</u> Another name for a hearing test or hearing evaluation.

<u>Audiologist:</u> A hearing healthcare professional who has earned a Masters Degree (M.S. or M.A.) or Doctorate Degree (Au.D. or Ph.D.) in audiology. Some activities that audiologists are involved with are the assessment and treatment of hearing and vestibular disorders, the dispensing of hearing aids, research, industrial consultation, and/or teaching.

<u>Auditory Brainstem Response (ABR) Testing:</u> Also know as Brainstem Auditory Evoked Response (BAER) testing and Auditory Evoked Response testing. A test requiring specialized equipment that measures the electrical activity in the brainstem in response to a signal. This test is used to test the pathway of the nerves used for hearing. It can also be used to test the hearing of infants or those with difficulty responding.

<u>Auditory Meatus:</u> Another name for the external ear canal through which sound travels from the concha of the pinna to the eardrum.

<u>Aural Rehabilitation:</u> Therapy or training sessions designed to improve communication skills.

<u>Auricle:</u> The pinna. The cartilaginous structures of the external ear located on the outside of the skull.

<u>Behavioral Audiometry:</u> A hearing test that requires some type of consistent response from the individual being evaluated.

<u>Behind-The-Ear Hearing Aid:</u> A style of hearing aid in which the electronic portion of the hearing aid (including battery, microphone, speaker, amplifier, etc.) is located on top of or behind the ear. The electronic portion is connected via a piece of tubing to an earmold, which is in the ear.

<u>Bilateral:</u> A term used to signify that both sides of the head are involved (i.e., He has *bilateral* hearing loss.).

<u>Binaural</u>: Refers to when sound is presented to both ears (i.e., She wears *binaural* amplification.).

<u>Binaural Advantages:</u> The benefits derived by the average patient, with equal or fairly equal hearing loss, from the use of hearing aids on both sides. Including:

<u>Binaural Summation:</u> an increase in intensity of a sound of 3 to 9 dB when hearing the sound through both ears compared to just one.

<u>Binaural Squelch</u>: the improvement of intelligibility of a desired sound in the presence of noise when you hear it through both ears.

Localization: Improved ability to determine the location of the source of a sound.

<u>Blocked Or Inflamed Eustachian Tube:</u> Eustachian tube dysfunction. A condition in which the tube that connects the throat and middle ear cavity is not allowed to open and close as it would in a normal ear system for the purpose of pressure equalization. When the eustachian tube becomes blocked or inflamed it will not allow a person to "pop" their ears and can lead to negative pressure, fluid in ear, and/or middle ear infections.

<u>Body Hearing Aid:</u> An older style of hearing aid in which the electronic components and batteries are located in a single casing located on the body, away from the ear. The device is connected to the earmold via a wire. Body worn aids are generally used to provide amplification for special populations.

<u>Bone-Conduction Thresholds:</u> The lowest level that an individual can hear a pure-tone stimulus presented through a vibrator placed on the mastoid bone or forehead. Bone-conduction threshold testing assesses the ability of the sensory and neural auditory systems without the sound passing through the outer and middle ear.

<u>Calibration:</u> The regular tuning of an audiometer to set the presentation values at levels consistent with (inter)national standards.

<u>Central Auditory Processing:</u> The awareness of an auditory signal in the central nervous system, that occurs beyond the peripheral auditory system (outer ear, middle ear, and cochlea), and the interpretation / processing of that signal.

Cerumen: Earwax.

<u>Cholesteatoma:</u> A benign expanding mass which can form in the middle ear cavity. It is made up of skin and cholesterol crystals. If not treated this mass could erode the tiny bones in the middle ear.

<u>Circuit Noise:</u> Extraneous sounds present in the output of a hearing aid that are related to the function of the hearing aid's mechanism, not due to external sounds.

<u>Clinical Audiologist:</u> An audiologist who specializes in the assessment, treatment, and rehabilitation of hearing and balance disorders.

<u>Closed Captioning:</u> The transcription of oral words and sounds, present in a TV or movie broadcast, into written words and displayed for the purpose of improving a hearing impaired individual's access to media presentations.

<u>Cochlea:</u> The snail-shaped portion of the inner ear that contains fluid, hair cells and nerve endings that convert a sound from the mechanical/vibratory movements present in the middle ear into an electrical charge, as the sound travels to the brain for processing.

<u>Cochlear Implant:</u> An electronic device, a portion of which is surgically implanted into the inner ear, that is designed to provide a sensation of sound to deaf individuals.

<u>Communication Disorder:</u> Any consistent difficulty in speech, language, or hearing processes that results in an inefficient exchange of information.

<u>Completely-In-The-Canal (CIC) Hearing Aid:</u> A hearing aid that is designed so that most of the electronics are located in the ear canal. The smallest style of hearing aid currently available.

<u>Compression:</u> An internal feature present in most current hearing aids that helps to control the intensity of higher volumes. There are many varieties of compression and each one has its advantages and disadvantages, but they all in someway make the hearing aid "non-linear".

<u>Concha:</u> The bowl area of the pinna (auricle) that channels sound from the environment to the ear canal.

<u>Conditioned Play Audiometry:</u> A method utilized in the assessment of hearing abilities of pediatric patients. The child participates by responding to sounds, while playing games. This type of testing is appropriate for those who are functionally toddler to preschool age, but will vary depending on comfort level.

<u>Conductive Hearing Loss:</u> A decrease in an individual's ability to hear a particular sound due to an inefficiency or disruption in the outer ear or middle ear system. A conductive hearing loss is when the sounds are somehow "blocked" as they travel from the pinna to the cochlea.

<u>Cone Of Light:</u> A triangular brightness visible on the lower portion of the tympanic membrane (eardrum) during otoscopy due to a reflection of the light coming out of the otoscope.

Congenital Hearing Loss: The presence of hearing loss at or before birth.

<u>Cookie Bite Audiogram:</u> A description of the graph of an individual's hearing thresholds in which the middle frequencies are noticeably poorer than the low and high frequencies.

<u>CROS Hearing Aid (Contralteral Routing Of Signal)</u>: A type of hearing aid designed for individuals with unilateral hearing loss which picks up the sound on the impaired side of the head and delivers it to the normal or near normal hearing ear.

<u>Cued Speech:</u> Various hand shapes utilized by someone who is speaking to a hearing impaired individual to enhance the speech reading information available.

<u>Custom Hearing Aid:</u> A hearing aid made specifically for one individual ear in shape and amount of amplification..

<u>Decibel</u>: A decibel is a unit for expressing the relative loudness of a sound. One-tenth of a bel, the decibel is a designation of a unit of intensity on a logarithmic (non-linear) scale.

<u>Degenerative Hearing Loss:</u> A hearing impairment that worsens over time.

<u>Degree Of Hearing Loss:</u> Terms utilized to represent the thresholds of hearing graphed onto an audiogram to help describe the different degrees of hearing impairment expected. One commonly used scale is: mild = 25 to 40 dB, moderate = 41 to 55 dB, moderately-severe = 56 to 70 dB, severe = 71 to 90 dB, and profound = greater than 90 dB.

<u>Digital:</u> A more current type of hearing aid that digitizes a sound, utilizing an analog-to-digital converter, prior to processing the sound. Sound represented in a digitized format can be manipulated and processed more efficiently.

<u>Diplacusis</u>: Perceiving a single tone as multiple tones or multiple harmonics.

<u>Direct Audio Input:</u> A port, or plug, on a hearing aid that allows a hard-wired input of sound directly from an assistive listening device into the hearing aid's electronic mechanisms (bypassing the external microphone).

<u>Discrimination:</u> In hearing terms, it refers to the ability to distinguish between various tonal or speech sounds.

<u>Dispenser:</u> A hearing healthcare professional who is trained to select, dispense, and adjust hearing aids.

<u>Dri-Aid Kit:</u> Various products containing drying agents or utilizing heat that are used to lessen the amount of harmful moisture built-up in a hearing aid.

DSP: Short for digital signal processing.

<u>Dynamic</u> <u>Range:</u> Refers to the range of volume between the level at which an individual first hears a sound and the level at which that individual perceives the sound to be uncomfortably loud.