THE SEVEN DEGREES OF HEARINGLOSS

Hearing is a very complex mechanism that involves all three parts of the human ear. A number of disorders and injuries can affect hearing in both children and adults, resulting in a certain degree of hearing loss. Very few symptoms are originally associated with the condition, and the individual suffering from hearing loss may originally unaware of the problem.

HEARING LOSS CAN BE CHARECTERIZED BY SEVERAL DEGREES:

NORMAL HEARING

The severity of hearing loss is measured in decibels. People who have normal hearing can identify very quiet sounds of up to 15 decibels at all frequencies. They are capable of conducting a phone conversation without straining themselves. People with normal hearing can participate adequately in conversations, regardless of the level of background noise.

15 DB

SLIGHT

Slight hearing loss is characterized by the inability to distinguish "soft" noises. The range for this degree is 16 to 25 decibels.

16 DB → 25

MILD

Hearing loss in the range from 26 to 40 decibels. People that suffer from mild hearing loss will be incapable of participating in conversations in noisy places. High levels of background noise will interfere with their ability of distinguishing softer sounds.

26 DB → 40

MODERATE

The threshold for moderate hearing loss varies between 41 and 55 decibels. Hearing conversations in the presence of background noise will become a very challenging task. Those affected will also need to turn the TV or radio up, in order to hear the sound clearly. People suffering from moderate hearing loss will experience speech deficiencies, and will find themselves capable of using solely limited vocabulary.

41 DB → 55

MODERATE SEVERE

Moderately severe hearing loss falls in the range from 56 to 70 decibels. People suffering from this degree of hearing loss will find it exceptionally challenging to participate in group conversations.

56 DB → 70

SEVERE

People suffering from severe hearing loss have problems distinguishing quieter sounds in the range from 71 to 90 decibels. Normal conversations become inaudible, and shouting is only partially distinguishable. People suffering from severe hearing loss usually discriminate vowels, but are incapable of recognizing consonants. Severe hearing loss calls for the use of hearing aids.

70 DB → 90

PROFOUND

The threshold for profound hearing loss is 91 decibels and higher. Even amplified speech and the use of hearing aids will do very little to improve the situation. Individuals that suffer from profound hearing loss sense vibrations rather than distinguish the sound itself.

↑ 91 DB

ANACUSIS

A final degree of hearing loss exists. This degree is called **anacusis**. **Anacusis** is defined as the total loss of hearing and the lack of any response to audio stimuli. Anacusis could be unilateral (present in just one of the ears) or bilateral, meaning that it affects both ears.

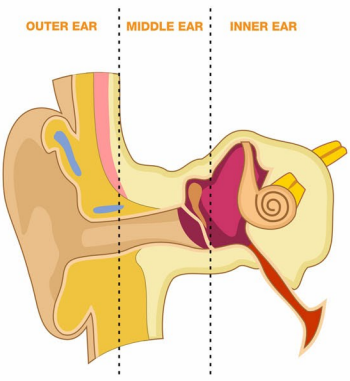
Self-testing and an audiologic evaluation will be needed to identify the degree of hearing loss. Pure tone and speech testing are both used to identify the faintest tones that a patient is capable of hearing, thus coming to a conclusion about the degree of loss to which a person is suffering.

HOW WE HEAR

Hearing is one of the five senses. It is a complex process of picking up sound and attaching meaning to it. The ability to hear is critical to understanding the world around us. The human ear is a fully developed part of our bodies at birth and responds to sounds that are very faint as well as sounds that are very loud. Even before birth, infants respond to sound.

SO, HOW WE HEAR?

The ear can be divided into three parts leading up to the brain – **the outer ear, middle ear and the inner ear.**



The brain then interprets these electrical signals as sound.

OUTER EAR

The outer ear consists of the ear canal and eardrum. Sound travels down the ear canal, striking the eardrum and causing it to move or vibrate.

MIDDLE EAR

The middle ear is a space behind the eardrum that contains three small bones called ossicles. This chain of tiny bones is connected to the eardrum at one end and to an opening to the inner ear at the other end. Vibrations from the eardrum cause the ossicles to vibrate which, in turn, creates movement of the fluid in the inner ear.

INNER EAR

Movement of the fluid in the inner ear, or cochlea, causes changes in tiny structures called hair cells. This movement of the hair cells sends electric signals from the inner ear up the auditory nerve (also known as the hearing nerve) to the brain.

Symptoms of Hearing Loss

If you or someone you know experience one or more of the following, hearing sensitivity should be checked.

- Frequently Asking People to Speak up or Repeat Themselves.
- Difficulty Hearing When Sound Sources Are Far from You.
- Others Complain That the Volume of the TV, Radio, or Stereo is Too Loud.
- Difficulty Understanding a Conversation, Especially in a Group of People or a Crowd (eg. an evening of playing cards, church, business meetings, eating at a restaurant, etc.)
- Difficulty Hearing on the Telephone.
- Turning One Ear Toward the Speaker to Hear Better.
- Difficulty Hearing or Understanding Women or Young Children.
- Feeling That People Mumble or Do Not Speak Clearly.
- The Presence of Noise (eg. ringing, humming, buzzing, whooshing, etc.) in the Ear(s) When No Sound Is in the Listening Environment.
- Strained Personal Relationships (Others often notice a hearing loss long before the affected individual does.)
- Denial
- Social Withdrawal Due to Feelings of Anxiety and Tension.
- Fatigue and Stress
- Irritability

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