

How's Your Hearing? Ask an Audiologist

Hearing loss affects over 36 million Americans and is the third most common health problem in the United States. Hearing loss is commonly associated with the normal aging process, but more than half of those with hearing loss are younger than 65 years old. Because people often do not realize they have a hearing problem, most wait 7 to 10 years before seeking a solution. The good news is there is help.

The Council on Aging has reported that individuals with hearing loss may show reduced social interaction, depression, anxiety, emotional turmoil, insecurity and general health problems. However, most people with hearing loss can be helped with hearing aids and patients who use them report improved personal relationships, better self-esteem and improved mental health. Hearing aids help millions of people to hear and communicated better, participate in life more fully and enjoy an overall improved quality of life.

<u>How do I know if I have a hearing problem?</u> Hearing loss is invisible. It most often develops over several years, slowly affecting quality of life and creating communication problems with family, colleagues and friends. Hearing loss may occur so gradually that you may not be aware that it is happening. Signs of hearing loss include:

- Asking people to repeat themselves
- o Ringing, buzzing, hissing or roaring sounds (also known as tinnitus) in the ears
- o Misunderstanding conversations
- Staying home to avoid social situations
- o Perceiving that people are mumbling or speech sounds are muffled/dull
- o Undue fatigue and stress at the end of the day
- o Turning the volume up on the television and radio louder than others would like
- Difficulty hearing speech in noisy environments
- Depending on another person to explain what a conversation is about
- Difficulty understanding speakers at public meetings or religious services
- For children and teenagers, poor progress in school, poor attention, fatigue at the end of the day and/or behavioral problems

If you experience one or more of these signs or feel that your hearing is not as good as it should be, it is time to seek help from an audiologist.

How do we hear?

The ear is divided into four sections.

- a. The outer ear collects and directs sound into the ear canal and to the eardrum
- b. The middle ear passes sound through a vibrating eardrum and across the three bones in the middle ear.
- c. The inner ear processes sounds and speech as well as motion and sends it to the 8th nerve
- d. The 8th nerve sends the speech signal to the brain for interpretation.

Types of hearing loss

<u>Sensorineural hearing loss</u> is the most common type of hearing loss which occurs when there is damage to the tiny hair cells in the inner ear or the nerve fibers that travel from the inner ear to the brain. This type of hearing loss not only reduces sounds and speech but can also affect your ability to understand speech clearly.

<u>Conductive hearing loss</u> is caused by some type of blockage either in the outer ear canal (like ear wax); a perforation of the eardrum or blockage or reduced function in the middle ear. The sound cannot conduct through the outer and/or middle ear system. This type of hearing loss is often medically or surgically treatable.

Mixed hearing loss is a combination of conductive and sensorineural hearing loss.

<u>What causes hearing loss?</u> There are a number of causes of hearing loss, all of which create difficulties in communication and daily social activities. The causes can be the normal aging process, exposure to excessively loud noise, certain medications, genetics, family history, ear infections, trauma or disease.

How is hearing evaluated? The first step is visit an audiologist, who can evaluate your hearing and determine the types and degree of your hearing loss. Audiologists are the primary health-care professionals who assess, diagnose, treat and manage hearing loss and balance disorders in adults and children.

Having a complete hearing evaluation is an easy and quick testing procedure. Your audiologist will conduct a comprehensive diagnostic hearing assessment to determine the type and severity of your hearing problem. He or she will ask you questions about your medical and hearing history and will complete a visual examination of you eardrums and ear canals. Then you will sit in a specially built sound room with earphones placed in or over you ears. You will listen to a series of soft tones in each ear and indicate each time you hear the signal. Your audiologist will also evaluate your ability to understand words. Depending on the initial findings of the assessment, specialized equipment may be required to evaluate other aspects of your hearing system, like middle ear measurements. At the completion of the assessment, your audiologist will thoroughly explain the results and help you understand your hearing ability.

<u>How is hearing loss treated?</u> Based on the results of your assessment, the audiologist will make recommendations that may help alleviate your hearing problem. If your hearing problem needs medical or surgical treatment, your audiologist will refer you to a physician.

If significant hearing loss is found that is not medically treatable, the audiologist will discuss various options to help you overcome your loss. Because nearly 90% of all hearing losses are permanent, the most common recommendation is hearing aids. If hearing aids are recommended, the audiologist will schedule a comprehensive hearing aid assessment to determine which type, style and model of hearing aids is most appropriate for your hearing loss and lifestyle. In addition to fitting and programming your hearing aids for your specific hearing loss, you audiologist can provide follow up care, hearing aid accessories and special training for you and your family members to maximize your new hearing aids.

Audiologists are hearing aid experts and the most advanced computerized techniques are used to ensure that the amplified sound is individualized to your listening needs. Audiologists are also experience in counseling and rehabilitation for persons with hearing loss. Expert counseling before and after you obtain hearing aids is vital to your success in hearing.

What is an Audiologist?

Audiologists must obtain a doctor of audiology (Au.D.) or other doctoral degree in the hearing and balance sciences. Audiologists must also be licensed or registered by the state in which they practice. Audiologists are trained to evaluate and diagnose hearing loss and balance disorders; to prescribe, fit, verify and validate hearing aids and other amplification and hearing assistance technology; provide hearing rehabilitation training, such as auditory training and listening skills improvement; assess and treat children and adults with auditory processing disorders; assess and treat individuals with tinnitus (noises in the ear, such as ringing; development newborn hearing screening programs and hearing conservation programs; perform ear and hearing related surgical monitoring and participate on cochlear implant teams.

Information was obtained from The American Academy of Audiology How's Your Hearing? Ask an Audiologist! brochure. For more information visit the following website www.howsyourhearing.org.

American Academy of Audiology 800-AAA-2336 www.audiology.org