

Adult Hearing Loss

Hearing loss is a common problem among older individuals. Approximately 25% to 40% of adults older than 65 years have some degree of hearing loss, and it is estimated that 40% to 66% of people aged 75 years and older have hearing loss. Hearing loss is the third most common chronic health condition among older Americans after high blood pressure and arthritis.

The April 16, 2003, issue of *JAMA* includes 2 articles on adult hearing loss.

TYPES OF HEARING LOSS

There are 2 major forms of hearing loss: **conductive** and **sensorineural**.

Conductive hearing loss is usually due to abnormalities in the middle or external ear, such as a punctured eardrum, presence of fluid in the middle ear, or accumulation of **cerumen** (ear wax) in the external ear canal. These problems require evaluation by a doctor and can often be successfully treated.

Sensorineural hearing loss is caused by damage to the tiny hairs inside the **cochlea** that are crucial for picking up sound vibrations and translating them into nerve impulses. These impulses are relayed by the **acoustic nerve** to the brain, which interprets them as sound. Sensorineural hearing loss accounts for about 90% of hearing loss related to aging. Sensorineural hearing loss usually occurs gradually in both ears. Patients with sensorineural hearing loss often have a hard time filtering out background noises and tend to hear lower-pitched sounds better than higher-pitched sounds. Sensorineural hearing loss may be prevented by limiting exposure to loud noise. Ear protection (such as ear plugs) should be worn to dampen sound if loud noise is unavoidable.

Treatment of sensorineural hearing loss may involve the use of sound amplification devices like hearing aids. In cases of severe sensorineural hearing loss, a surgical procedure called **cochlear implantation** may be suggested. This procedure allows sound vibrations to bypass the hair cells and directly stimulate the acoustic nerve to transport sound signals to the brain.

Individuals with hearing loss should be evaluated by their primary care physician, who may refer them to an **otolaryngologist** (a doctor specializing in the ears, nose, and throat) or an **audiologist** (an expert in hearing testing and hearing aids) for further evaluation and treatment.

Sources: National Institute on Deafness and Other Communication Disorders, American Academy of Otolaryngology–Head and Neck Surgery, American Academy of Audiology, American Speech-Language-Hearing Association

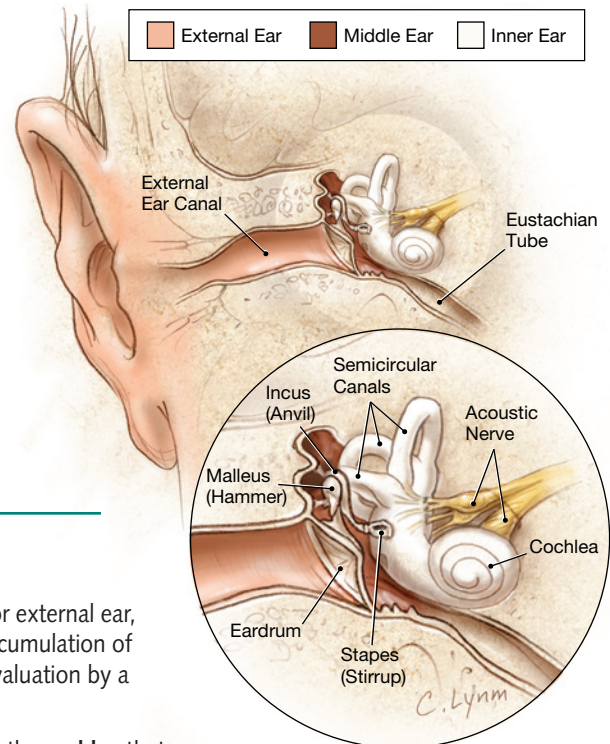
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Anatomy of the Ear



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