

Causes of Hearing Loss

There are many different causes of hearing loss. The following are a few examples of some specific causes of hearing loss:

- **Otosclerosis** – a disease that causes bony growth on the ossicles. As a result the stapes becomes immobile and prevents the transfer of sound vibrations to the cochlea.
- **Meniere's disease** – a problem involving fluid pressure within the cochlea resulting in intermittent episodes of hearing loss, dizziness, and tinnitus. These episodes can occur any time and for varying lengths of time. Episodes are often associated with stress.
- **Drug-induced** – prolonged use of some medications (called ototoxic) results in an unwanted side effect of damage to the auditory system. Examples of drugs known to cause hearing loss include: aminoglycoside antibiotics (such as streptomycin, neomycin, kanamycin); salicylates in large quantities (aspirin), loop diuretics (lasix, ethacrynic acid); and drugs used in chemotherapy regimens (cisplatin, carboplatin, nitrogen mustard).
- **Tumors** – one common tumor in the ear develops around the 8th cranial nerve, which is also known as the auditory nerve.
- **Trauma** – trauma to the ear can include fractures of the temporal bone, puncture of the eardrum by foreign objects, sudden changes in air pressure, and very loud noises.
- **Presbycusis** – this hearing loss is caused by natural aging of the human body and begins after age 20 but often, it is not noticed until the ages of 55 to 65. Presbycusis affects the high frequencies in the speech range, making understanding and hearing speech difficult.
- **Noise-Induced Hearing Loss (NIHL)** - this is hearing loss due to exposure to either a sudden, loud noise or exposure to loud noises for a period of time. A dangerous sound is anything that is 85 dB SPL (sound pressure level) or higher.

Dangerous Decibels focuses on noise-induced hearing loss.