

ALL ABOUT YOUR EARS

The ear is both an internal and external sensory organ with three distinct sections:

Outer Ear

This is the visible portion, as well as the external ear canal that forms a slightly "S" shaped channel to the eardrum. The external canal is about one inch long, formed of cartilage and bone and lined with a thin layer of skin that is very sensitive to pain. The outer ear is subject to infection, injury, wax build-up, foreign bodies, itching, and body growths (called Surfer's Ear).

Middle Ear

This refers to the ear drum, tiny ear bones and air spaces behind the drum. The Eustachian tube connects this portion to the throat. The middle ear is sensitive to pressure changes and easily troubled by nose and throat infections and allergies. Chronic infections, injuries, or very loud noises can lead to hearing loss.

Inner Ear

This is the deepest part of the ear. It controls our balance and houses the nerve endings that carry messages to the brain. The inner ear is susceptible to injury, loud noise, infection, chemical toxicity, chronic disease and birth defects that can cause hearing loss, loss of balance or ringing in the ears.

COMMON EAR PROBLEMS

- **Swimmer's Ear (external otitis)** is inflammation of the lining of the external canal due to either prolonged water exposure or irritation caused by vigorous "cleaning" with Q-tips, hair pins, paper clips, etc. Symptoms vary from mild itching to severe pain, drainage and mild hearing loss. The prescribed treatment is generally antibiotic drops, keeping ears dry, and/or no further use of Q-tips.
- **Surfer's Ear (exostosis)** is found among salt water enthusiasts, usually males aged 20-39. Possibly due to cold water, the bony portion of the external canal becomes thickened and eventually creates a knob-like projection. Over time, several of these growths may close the ear canal causing significant hearing loss. The condition is painless and may go unnoticed for a number of years until hearing loss becomes obvious. Surgical correction by a specialist may be necessary to restore normal hearing.
- **Wax Build-Up (ceruminosis)** consists of a large plug of hard wax that diminishes hearing and may be mildly uncomfortable. Treatment consists of flushing the wax out with a stream of warm water. If you suspect this is the problem, get a medical opinion since it is not wise to try to do this yourself

because other ear conditions may mimic wax build-up. DO NOT use Q-tips, which will only make the problem worse.

- **Middle Ear Infection (otitis media)** is inflammation of the middle ear causing pressure changes (popping), severe pain, fever, hearing loss and sometimes dizziness. If the eardrum perforates, a pus-like or bloody drainage will flow from the affected ear. These symptoms may follow a cold or sore throat. Treatment is usually an antibiotic and a decongestant. Recurring otitis media may require special surgical correction placing tubes in the eardrums.
- **Ringling or Buzzing Noise in the Ear (tinnitus)** may develop due to exposure to loud noise, viral infection, head injury, excessive use of some medications (such as aspirin) and smoking. This symptom should be evaluated by an ear specialist.
- **Barotitis** occurs when middle ear pressure is not equalized after high altitude travel or SCUBA diving. Symptoms are a "plugged" feeling, hearing loss, ringing in ears, and sometimes dizziness. Pain may become intense over a few hours. Anyone with head congestion may be especially prone to barotitis. Use of decongestants and nose sprays may help alleviate the problem. Chewing, yawning, and remaining awake during descent in altitude may also help. SCUBA divers must take extra precautions and never dive when congested.

How to Protect Your Hearing

- Loud, intense noise can lead to permanent hearing loss. For unprotected ears, 80 decibels and up (jet engines, rock concerts, factory noise) can cause nerve deafness that cannot be corrected. Ear plugs, ear protectors and avoiding loud noises may save your hearing.
- If you think you have a hearing loss your health care provider can perform a hearing evaluation and medical exam.
- Earaches require medical attention and strict adherence to medical advice. If you are given an antibiotic, follow the directions and finish all of it.
- SCUBA diving or flying in an unpressurized plane when you have a cold can lead to severe pain and hearing loss. Wait until the symptoms have cleared. Sudafed or a similar decongestant may help. Never wear ear plugs while SCUBA diving.
- Seek medical care if you feel your ears are plugged or something is stuck in your ear. Don't use cotton swabs, a pencil, bobby pins, etc. That only pushes materials deeper into the ear.