

### **Common Questions About Hearing**

From time to time we get questions about hearing loss, correction and loss prevention. Perhaps you've had some of the same questions, so we'd like to share some of them with you.

Question: How often should I have my hearing tested?

**Answer:** A good hearing care regimen suggests that you should see an audiologist regularly — on an annual basis — for a thorough hearing test. The key here is "regularly". Hearing loss is usually a gradual process and can be unnoticed over short periods of time. Early detection of a problem is important to correcting it quickly.

Of course, if you notice any loss of hearing muffled words on the telephone, the TV volume always seems too low, or you can't distinguish conversation — call for a hearing test right away.

Question: Is aging the main cause of hearing loss?

**Answer:** No. Although hearing loss can be a normal part of the aging process, prolonged exposure to loud noise is the major cause.

Question: Are there different types of hearing loss?

**Answer:** Yes, there are three basic types:

CONDUCTIVE: Wax buildup, a punctured eardrum or an ear infection are often the causes of conductive type hearing loss. In these cases, the structures in the outer or middle ear do not work properly to conduct sound vibrations to the inner ear. Conductive hearing loss may be corrected surgically or with medical treatment.

SENSORINEURAL: Often called nerve deafness. this is the most common type of hearing loss. It results when the inner ear does not properly process sound vibrations to be passed on to the brain. Sensorineural hearing loss can result from a severe infection (like mumps or German measles), head injury, aging or prolonged exposure to loud noise. It's usually helped with the fitting of hearing instruments.

MIXED: A hearing loss can also be caused by a combination of conductive and sensorineural conditions. An example is when someone with a sensorineural condition develops a wax buildup as well. Both conditions are present so both medical intervention and a hearing instrument may be required.

### NOISE A GREATER MENACE TO YOUR HEARING HEALTH THAN EVER BEFORE.

It's probably no surprise to you, but noise levels Sound vibrations are channeled into the ear canal have steadily risen over the years. The primary to the eardrum. The eardrum vibrates and the reason is technological advances. iPods, loud vibrations travel through the bones of the middle stereos, more jet aircraft and heavier traffic levels ear to the fluid inside the cochlea in the inner ear. are all contributing to the increase in noise around Inside the cochlea are thousands of tiny hair cells us. It is an ever-growing concern because noise is and nerve endings which transfer the vibrations one of the leading causes of hearing loss. into nerve impulses, which are sent to the brain.

#### Why is noise a problem?

Sound is produced by the movement of air molecules generated by a vibrating object. The intensity of the vibration or loudness is measured in units called decibels (dB). For example, a soft whisper registers about 30 dB while an air-raid siren measures as high as 140 dB.



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When a noise is too loud it can damage the hair cells within the cochlea. As the exposure to loud noise increases, more and more of these hair cells are damaged, resulting in a decrease in the quality of hearing. When the damage is severe the hearing loss is permanent.

#### What is the danger?

More than 8 hours of exposure to 90 decibels can cause a temporary hearing loss. Two hours at 100 decibels can mean some permanent hearing loss. At 120 decibels some of the sensitive hair cells in the inner ear that transmit sound will be immediately destroyed. This means irreversible hearing loss.

### What can you do about noise?

In two words: avoid it or at least minimize prolonged exposure to loud noise. If you're exposed to it in the workplace, wear ear protectors

## How loud is it?

or ear plugs. For your office or home, bulky furniture, heavy carpeting and thick drapes all help muffle sound.

Many people are looking to local government to curtail unwanted noise. Please contact your local city officials about noise ordinances and what you can do to help get them enacted.

"Calling noise a nuisance is like calling smog an inconvenience." says William H. Stewart, the former U.S. Surgeon General, "Noise must be considered a hazard to the health of people everywhere."



# Flying can be a pain in the ear!

# What can you do to take the pain out of flying?

If you're a frequent, or even casual air traveler, you know what we mean about a pain in the ear. On take off or descent, pressure can build up inside your ears and you can't seem to "pop" them. This discomfort can build to become downright painful.

Considering that today's jet plane travels at altitudes of thirty to forty thousand feet — where the pressure is significantly less than at sea level — it's easy to understand that the difference in your head and the pressure in the airplane cabin can present problems, in spite of pressurized cabins.

Ear discomfort while flying is a very common problem. Here are a few tips that may prevent or reduce ear problems for you:

- 1) Use nose drops (rather than spray) prior to and during the flight.
- Try pinching your nose shut, closing your mouth and gently blowing out. This technique — called the Valsalva maneuver — forces air into the Eustachian tubes and helps relieve some of the pressure buildup.
- 3) Chew gum or suck on mints. This stimulates a frequent swallowing, which opens up and closes the Eustachian tubes and equalizes air pressure on both sides of the eardrum.



- If you suffer from a serious respiratory infection

   like a severe cold or sinusitis try to avoid
   flying altogether.
- Don't forget the kids. Adults aren't the only ones who suffer ear discomfort while flying. Consider carrying lollipops or chewing gum for them, to promote swallowing that can help relieve the pressure in the ears.

#### If the problem persists

These "ear-clearing" tips should take care of most people's ear problems while flying. If in your attempt to clear them up, the ear and sinus discomfort continues, we advise you to see your physician.