



# HEARING LOSS

## What causes hearing loss?

Hearing loss can occur suddenly as with a head injury; or it can occur over a period of weeks and months, being the side effect of noise exposure and certain medications. Everyone experiences a certain decline in hearing over a lifetime as part of the normal aging process.

It is only when hearing loss interferes with everyday life that professional help becomes necessary. Signs of hearing loss may be:

- If you hear voices loud enough but don't understand what people mean.
- When you frequently ask people to repeat what they said.
- When you turn up the radio or TV louder than other people need.
- If you complain that people mumble.
- If you don't laugh at jokes and stories because you didn't "catch" all the details.
- When you don't hear someone approaching you, or worse, you don't notice when the doorbell or phone rings.
- If you find that looking at people makes it easier to understand what they say.
- If you ask people later the details of a meeting or conversation that you didn't understand.
- When you notice ringing or noise in your ears.

## What are the symptoms?

There are two kinds of hearing loss. Each is defined by different causes and therefore different symptoms. A conductive hearing loss is caused by problems in the middle ear, or the space behind the eardrum. A sensorineural hearing loss is caused by problems occurring in the inner ear, closer to the brain where lies the auditory nerve.

Anything that creates a disruption in the mechanics of processing sound from the eardrum to the inner ear causes a conductive hearing loss. Middle ear infections, or head injuries that lead to dislocation of the tiny bones in the middle ear (called ossicles), are common causes of conductive hearing loss.

Conductive losses often interfere with hearing lower pitched sounds. These losses often interfere with hearing lower pitched sounds. These losses usually have a sudden onset, where sensorineural losses commonly happen more gradually.

A sensorineural loss is often accompanied by "ringing", "clicking", or "rushing" noises in one or both ears. Such noises are called tinnitus. This kind of hearing loss usually affect high pitched sounds, so it may be easier to hear a man's deep voice than a woman's high voice. Furthermore, the sounds of speech that have high frequency consonants are affected; so that words with consonants like "f", "s", and "sh" are not distinct. And to make matters ever worse, speech may be heard, but it may not be clear enough to be understood.

Listening in rooms with poor acoustics, or in places with competing background noise, may make understanding speech more difficult.

Frequently, it is not the hearing impaired person that notices a hearing loss first. Friends and family often become the encouraging and deciding factor in finally seeking out professional assistance. When sensorineural losses occur over a period of time, a person can gradually learn to compensate for the loss (often without realizing it) by relying on visual information while watching people talk.

It becomes easy to blame others for “mumbling” before recognizing what the real problem is. But, when frequent repetitions are necessary, when the volume of the radio or TV is so high it disturbs others, or when withdrawal and isolation occurs, it is time to seek help.

### **What can be done?**

Medications, hearing aids, and surgeries are among the remedies available. A good place to start is with a hearing evaluation. Sophisticated equipment is used to measure the sensitivity of hearing at different pitches, and the perception or understanding of speech.

The evaluation will explain the type and degree of hearing loss, and will point to the need for correctable medical and surgical procedures where a referral to a medical doctor may be needed. In a significant number of cases, specialized amplification can be used for a specific type of hearing loss.

Amplification comes in many forms, and cost is an important factor. The most popular type of amplification is the hearing aid. Hearing aids can be worn behind the ear or in the ear. One or two hearing aids may be prescribed depending on the nature of the loss. Adjusting properly to the hearing aid may take from a couple of weeks to several months.

It may be bothersome to hear things more loudly than haven't been heard well for a long time.

Training may be needed to “tune out” background noise and focus on what should be heard. Simply making sounds louder only addresses part of the problem in sensorineural loss. A hearing aid can help you hear better, but it is no substitute for “a new ear”. Despite technological advances, hearing when background noise is loud may still be difficult.

When cost and use might discourage the purchase of a hearing aid, other alternatives are available. For example, amplification systems the size of a small transistor radio sell for about a third of the cost of one hearing aid.

These systems usually are worn only when amplification is needed, as when family members want to visit. Usually, such quality systems are not available in retail electronic outlet stores. However, your audiologist can guide your purchase or help supply a system for you.

### **HINTS FOR CAREGIVERS**

1. Get the person's attention before you begin speaking.
2. Position yourself 3-6 feet from the hearing impaired person. Encourage the person to wear eyeglasses if they are needed.
3. Be sure there is enough light in the room, and face the light when you are speaking to a hearing impaired person. “Reading” your lips, seeing your facial expressions and gestures helps understanding.
4. Speak at your normal rate.
5. Don't exaggerate your speech. This distorts normal lip and tongue movement, and makes it more difficult for the hearing impaired person to interpret.
6. If the person doesn't understand what you are saying, rephrase your remarks instead of repeating them. Speak louder than normal but don't shout, as this can actually decrease

understanding by an impaired hearing individual.

7. Reduce background and competing noise whenever possible. Understanding can be better in small groups of people, in quiet restraints, and when the TV is off.
8. Wax buildup is a frequent complaint among older people. If someone has this tendency, a physician should remove the wax regularly. Follow professional advice when using some over the counter medications.

### **Troubleshoot your hearing aid**

Three of the most common problems are things you can find, and often take care of on your own:

1. Make sure the battery is functioning. Use a battery tester that the audiologist can supply.
2. See that wax is not plugging the opening in the ear mold, or the plastic tubing. There is a cleaning kit you can use for this purpose.
3. If the hearing aid whistles too much, check to see if there is a break in the plastic tubing, or if the ear mold is too loose or if the volume is turned too high.