

# Hillcrest HealthCare News<sup>®</sup>

A newsletter for our patients, their families and friends

Spring 2012

## Understanding Speech in Noise

A number of studies have found that adults over the age of 50 have greater difficulty understanding speech in a noisy setting than do younger listeners, even if they have normal hearing. Adults over 50 years of age also have greater difficulty when someone talks fast or with an accent.

Research suggests that these difficulties are due to a reduced ability to use the time cues that are present in speech. Speech sounds—such as the (sh) in *wish* and the (p) in *put*—have different durations, and duration is one of the cues we use to distinguish speech sounds.

These cues may not be important in easy listening situations, such as in quiet, but they *are* important when someone talks rapidly or there is background noise.

Older listeners may be able to improve their ability to use time cues through practice. On the other hand, these findings suggest that even with the appropriate use of hearing aids, some hearing difficulties will remain because of a reduced ability to use time cues.

## We Couldn't Make This Up...

Here are things we DON'T recommend. These are true stories.

- Do NOT dry your hearing aids by putting them in the oven at 350 degrees for 30 minutes. They will be dry—and melted.
- Do NOT put your hearing aids in the washing machine—although some have survived the experience.
- DO NOT be careless where you put your hearing aids when sitting outside. A bird could pick one up and fly away with it.
- Do NOT wrap your hearing aids in tissue paper and then accidentally flush them down the toilet. *Yes, this has happened.*
- Do NOT eat your hearing aids. A man put one of his hearing aids down next to a candy dish and wasn't watching when he picked up what he thought was a little snack. He said it didn't taste very good.
- Do NOT feed your hearing aids to your dog. Dogs are attracted to the smell of the acrylic in hearing aids and are happy to chew on them, which makes for an expensive doggie treat.



Dogs are cute—but keep your hearing aids away from them!

## Why Was I The Last To Know?

Hearing loss is one of the most common undetected and untreated health problems in this country. According to the National Health Interview Survey, 15% of adults 45-64 years of age and 27% of adults 65-74 years old have significant hearing loss. Hearing loss can also occur in children, of course, and middle ear infection accompanied by conductive hearing loss is one of the most common problems seen by pediatricians.

But hearing loss too often goes unnoticed and the person with the hearing problem is usually the last one to realize it. As a result, many people put off getting help—and suffer unnecessarily with untreated hearing loss—for several years.

### Hearing loss characteristics

In most cases, hearing loss in adults “sneaks up” on the individual. That’s because hearing loss is usually:

**Gradual.** A loss of hearing can develop so slowly that the person is not aware of any change from year to year. A loss of one decibel of hearing each year is not noticeable, but 10 or 20 years of gradual loss can result in a significant—and unnoticed—hearing problem.

**Partial.** It’s not unusual to have a hearing loss for sounds in the speech clarity range, but still have normal hearing for noise and for the loudness of speech. That’s why someone with unidentified hearing loss

may say, “Speech is loud enough, it’s just not clear enough.”

### Painless

Although tinnitus (a ringing or buzzing sound in the ear) may accompany hearing loss, usually there is no feeling or sensation that alerts you to a change in hearing.

**Invisible.** The person with a hearing loss doesn’t look different and you can’t detect hearing loss by looking in someone’s ears. Only an audiologic evaluation can determine if there is a hearing loss.

Because of these characteristics, it’s easy for the person with early onset hearing loss to believe there is no problem. *If you know someone who may have an undetected hearing loss, please ask him or her to read this article.*

The first step is not to get hearing aids, but simply to have a professional hearing evaluation. And we’ve never heard anyone complain if the results indicate normal hearing!



Hearing loss often goes undetected, especially by the person with the loss of hearing.

## Hearing With Both Ears

The term *binaural hearing* refers to hearing with both ears. We hear from our left and right ears independently, but we also use our brain to blend together what we hear in each of our ears separately.

You might think that hearing with both the right ear and left ear is *twice* as good as hearing from either ear alone. It could be argued that it’s *three* times as good. That’s because when both ears—and both sides of the brain—are actively involved in hearing, there is a great deal of blending and comparing (*binaural interaction*) what goes on between the two sides. We have *right ear* hearing, *left ear* hearing, and *combined* hearing.

This right/left interaction occurs at several levels of the brain. The interaction is especially helpful for hearing in difficult places, which may explain why hearing in only one ear is adequate for quiet settings, but not for hearing in noisy settings.

Hearing with both ears also reduces the fatigue and stress that occurs from straining

to hear with only one ear. Balanced, two-ear hearing is also necessary to *localize* where a sound is coming from.

Someone with hearing loss in both ears who uses only one hearing aid may have *monaural* hearing, while the person who uses two hearing aids has recovered the ability to hear *binaurally*.

*“We use our brains to blend together what we hear in each ear separately.”*

## Did You Know?

Most people *are* able to hear better with their glasses on. That’s because almost everyone gets help from lipreading, even if they don’t realize it.

Hearing aids are one of the few health care products whose cost has increased *less* than inflation over the past 25 years.

Someone who smokes is 1.7 times more likely to have a hearing loss.

## When Should I Get New Hearing Aids?

Although hearing aids are more reliable than ever, almost everything we own eventually needs replacing, and hearing aids are no exception.

It's amazing that hearing aids don't need repair or replacement more often. The miniature electronic components are exposed to heat, perspiration, ear wax, humidity, rain, hair spray and daily handling. This regular wear and tear causes parts to wear out or malfunction. This can happen so slowly that you may not notice the loss of power or increased distortion.

The life of a hearing aid is usually said to be about five years. If you're wondering whether it's time to replace your hearing aids, consider the age of your present aids, the important improvements in technology of the past few years, whether your hearing has changed and whether you have a back-up set of hearing aids.

Call us if you would like to review the condition of your present hearing aids. And remember, a cleaning and re-programming of your current aids will often provide significant improvement without the need for new ones.

Sincerely,

The Audiologists, Dispensers and Staff of Hillcrest Hearing Aids & Balance Center

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## Which Are The Best Hearing Aids For Me?

Many factors should be considered when determining which hearing aids are best for you. Hearing loss is as individual as fingerprints, so there is no one instrument that is the "right one" for everyone.

### Clinical considerations

*Degree of hearing loss.* Someone with a mild loss has more options than someone with a more severe loss.

*Type of hearing loss.* Someone with a conductive loss usually needs more amplification than someone with a sensorineural loss.

*Previous history of hearing aid use.* Are you used to canal aids? Do you prefer the feel or look of open ear fittings?

*Type of listening situations.* Are you often in group settings? Do you attend lectures or meetings? Or are you usually in one-to-one settings?

### Physical conditions

*Shape and size of the ear canals.* Will canal aids fit? Will behind-the-ear aids interfere with eyeglasses?

*Manual dexterity and eyesight.* Some styles require more dexterity to handle and maintain.

### Technology

Today's hearing aids are advanced digital instruments with capabilities such as speech processing, noise management and automatic directionality. Hearing aids can have several programs for different situations, or telecoils for telephone use or when in a room with a loop system. How much and what kind of technology do you need? What are your listening needs? *More* is not necessarily *better*.

### Individual preferences

*Preferred size of instrument.* Is smaller better? Or will it be easier to handle a larger hearing instrument?

*Visibility of instruments (appearance).* How important is cosmetics?

*Cost.* There is a wide range in cost based on the style and amount of technology in your hearing aids. This decision may be easier if cost is not an issue, but that's rarely the case.

We'll discuss these factors with you and recommend what we believe will best meet your needs. Whatever you choose, professional fitting of your hearing aids and close, personalized follow-up care afterward are the keys to hearing as well as possible.