

The Invisible Disability—Hearing Loss

When a person thinks of a disability, visions of limited mobility in some form or another are typically the first things that come to mind: a missing limb, a white cane with a red tip, a wheelchair, or other visual indicators tell us something is not “normal”. Once the disability is acknowledged we will give the person with such impairment more latitude. Hearing loss is an equally life-changing disability, but often goes unnoticed and unforgiven.

Hearing loss is not an easily “seen” disability, though there is a large portion of the population that suffers from it. Hearing loss affects over 1.4 million school age children (Kochkin report, 2001) and over 18 million people 18-65 years of age. Therefore, it is not only the elderly that suffer from hearing loss, but people of all ages and walks of life.

When a person finds out they have hearing loss, it may be a shock or simply the confirmation of suspicions. Regardless, each individual goes through a process of grieving over the loss of a sense. A well known psychiatrist, Elisabeth Kubler-Ross, described the five stages of grieving. While her effort focused primarily on working through the loss of a loved one, the steps she described are equally relevant to any life-altering experience such as hearing loss.

The five stages are as follows:



With hearing loss, denial is very easy. Most individuals lose their hearing gradually and can function well in quiet places and one-on-one conversations. Therefore, hearing loss may go unnoticed for many years before being identified by an audiologist.

Once hearing loss is identified or the suspicion of hearing loss is confirmed, a person may feel angry or resentful. These feelings may be directed inward or outward towards friends, loved ones, or even the audiologist. Some may feel frustration that their body is betraying them. Others may even resent those who are not experiencing any hearing loss.

Bargaining begins when a person starts to qualify their hearing loss as, “I don’t have enough of a problem to do anything about it. People need to just speak clearer.” This stage is essentially a postponement of accepting the hearing loss and moving forward with managing it.

The fourth stage, depression, typically finds people with hearing loss withdrawing from their regular activities. A side effect of hearing loss can be feeling disconnected with the world. Communication becomes increasingly more difficult and we are not taught proper compensation skills for this situation. When the person with hearing loss becomes tired of trying to communicate and failing, he or she may withdraw from activities they previously enjoyed.

Finally, acceptance is reached when the individual recognizes that the hearing loss is not going to just fix itself. Coming to terms with the disability and making the best of what is left is evidenced by asking, “What can I do about my hearing loss? Is there a listening device that will help me communicate better?”

When an individual with hearing loss reaches this final stage they are ready to start considering what hearing devices can do for them. It is important that each person moves through these stages at their own pace. Additionally, this is not a one time process. An individual may go through these stages, to varying degrees, multiple times throughout life.

Encouragement, support and education are the best things to offer when dealing with hearing loss. A consultation regarding hearing instruments is a good way to find out about technology, pricing, styles, and expectations of hearing devices. This is also a good opportunity to ask questions about your hearing loss and get tips on how to deal with the changes hearing loss brings. The audiology staff at *Physicians Hearing Services* encourages you to come in and discuss your hearing healthcare and management. We are here to help you through this process.

www.asha.org/public/hearing/disorders/children.htm

www.hearingcenteronline.com/newsletter/may00f.shtml

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Sudden Hearing Loss

Hearing loss in most adults is a gradual process over time. However, some 5 to 20 per 100,000¹ people experience a sudden loss of hearing. The sudden sensory hearing loss (SSHL) may happen all at once or over a few days. It may manifest as selective low or high frequency hearing loss or distortion in speech discrimination and typically happens in only one ear. A sense of fullness and/or tinnitus (a ringing or buzzing sound) in the affected ear may also accompany the hearing loss.

Medical assistance from an Ear, Nose, and Throat physician (Otolaryngologist), is recommended for those with signs of SSHL as symptoms may be misinterpreted as a middle ear infection². This can delay more appropriate treatment. There is a chance of spontaneous recovery, however, the hearing loss can become permanent and early medical intervention (within 24 to 48 hours) is advisable.

Research into the causes of this type of hearing loss have developed four main theories:

- Viral infection of the inner ear
- Interruption of blood flow to the inner ear
- Microruptures of the tissues in the inner ear
- Auto-immune disorder of the inner ear

It is most likely that there is not a single origin for SSHL and typically the cause is unknown, also referred to as idiopathic SSHL (ISSHL). The research has shown there does not seem to be a relation to gender. In the majority of reported cases a single ear is affected. There is no evidence that one ear is affected more often than the other. Only 1 to 2% of all reported case studies reported both ears affected at the same time¹.

Anyone may be affected by sudden hearing loss. The reported occurrence in children and elderly individuals is less than those between 40-54 years old. The age group most reported to experience ISSHL is in the 6th decade of life.

There are a variety of treatments, depending on the diagnostic findings of the treating physician, but there is no specific protocol that has been agreed upon.

Therefore, it is important to discuss treatment options with your physician to make sure you understand the implications and potential side-effects of treatment. The incidence of spontaneous recovery ranges from 47 to 63% depending on the criteria used in the studies¹.

Once the hearing loss has stabilized, management of the hearing loss may begin. Hearing instruments are often used as a primary tool in management. Hearing instruments may be less effective with cases of ISSHL, as the quality of sound transmitted through the hearing nerve is often degraded and distorted. A hearing instrument can only

manage the sound coming into the system to reduce the effects of background noise on the biological system.

Despite the challenge of sudden sensorineural hearing loss, hearing instruments should not be ruled out until they have been attempted. Stimulation of the hearing system may promote further recovery and potential reduction in tinnitus. *Physicians Hearing Services* encourages you to look into the various amplification options for ISSHL and single-sided deafness.

¹<http://emedicine.medscape.com/article/856313-followup>

²<http://otosurgery.org/suddendeafness.htm>



Technology coming together: Tinnitus management and Hearing Devices



Tinnitus management has incorporated many things from pillow with speakers, to ear level sound generators, to fancy MP3 players with high quality speakers. The concept behind using these devices is to provide an external sound source to draw attention away from the tinnitus providing

additional sound enrichment to the brain so that neural networks can be retrained to filter tinnitus out. Other devices are used to mask, or cover up, the tinnitus with a similar sound. No matter how or what kind of sound is

used, these devices are referred to as sound generators.

Traditionally, hearing instruments manipulate sound, but they do not generate or create sound. That is until now. Through the wonders of technology, there are now hearing devices available with sound generators. Audiologists now have the ability to appropriately fit a hearing device that includes a sound generator to assist with relaxation and tinnitus relief. Ask your audiologist for more information on these ground breaking devices.

Physician Hearing Services recommends that you consider a complete tinnitus management program to obtain optimal results for the relief of tinnitus.

What Can I do to Protect My Hearing?

We are often asked what causes a sensorineural hearing loss and if there is anything one can do to prevent it. Most sensorineural hearing losses are probably genetic and show up in mid or late life, often gradually progressing. While we cannot do anything about our “inheritance”, we can control some factors that put us at greater risk of hearing loss. The two main things to be aware of are medication effects and noise exposure.

Possible medication side effects can be found in the package insert information. Your doctor or pharmacist can also advise you regarding potential vestibular (affecting balance) and auditory (affecting hearing) side effects. When starting new medications, any change in hearing, sensation of muffling or plugging, tinnitus (ringing in the ears) or imbalance/dizziness should be reported to your doctor. It may be possible to reduce a dose, change the medication or provide supplements to help protect hearing. Some medications may affect hearing temporarily. A few can cause permanent hearing loss. Promptly addressing problems gives your ears the best chance of recovery.

The other controllable factor impacting hearing is noise exposure. While you might think of obvious events such as being near an exploding firecracker or around gunfire, there are many other sources of noise that can potentially harm hearing over time. For example, do you mow a lawn, ride a

motorcycle, use power tools, or listen to loud music at concerts, in nightclubs or with headphones? Are you exposed to loud noise at work? Very loud sound can damage hearing with only one exposure, however, even less loud sounds can damage hearing with longer or repeated exposures.



Any sound that causes you to raise your voice to be heard is potentially harmful. You can protect your hearing by using hearing protection in noisy situations. It is important to protect hearing even when a hearing loss is present to prevent further damage to the ear.

There are special earplug devices for specific types of noise such as the impact sounds of gunfire. Musicians may notice hollow sound quality with regular earplugs that may be undesirable. Custom musicians' earplugs minimize sound distortion while providing a flat attenuation (decrease) across frequencies, thus reducing input to safe listening levels.

In the event that hearing loss occurs there are many hearing instrument options to optimize your hearing ability. These include both ear level instruments and other assistive devices (i.e. those used specifically for either telephone or television use). Your audiologist can advise you on the best options for your hearing protection needs.

Fun Facts!

Here are some interesting hearing instrument facts:

- Significant advances in hearing instrument technology happen every 3 to 5 years.
- Audiologists and Ear, Nose, & Throat physicians recommend updating your audiological evaluation at least every 2 years.
- Your hearing devices should be cleaned and checked every 6 to 8 months.
- Earmolds should be replaced every 12 to 18 months to maintain sound quality and physical fit.
- Earmold tubing should be replaced every 3 to 6 months to maintain sound quality.
- On average it is recommended to replace your hearing device(s) every 5 to 7 years to ensure optimal access to sound and clarity.
- Wax guards (for custom and some behind-the-ear products) should be changed every 2 weeks to 1 month.

Specials!

Battery Special through May 28, 2010

*With purchase of four (4) packages of
batteries,*

Receive a fifth package FREE.

Must redeem with original coupon.

One per person.

Expires 5/28/2010



Go GREEN!

**Rayovac Mercury-Free Batteries
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Appointments
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Coming This *April*—FREE SPRING CLEANING EVENT!



Are your hearing instruments out of warranty? Have your instruments been checked and cleaned in the last 6 months or later?

This event is for you!

- ◆ **Free** cleaning of hearing instruments that are **out of warranty**
A \$35 value. This includes:

- AuraCare (dehumidifying) service
- Vacuuming the microphone and speaker ports
- Electroacoustic Analysis of devices to verify they are working to specifications
- Tubing replacement (applies to BTE devices)
- Cleaning battery contacts
- Ultrasonic cleaning of earmolds (applies to BTE devices)
- Wax guard change

With this service we can let you know whether your instrument(s) are working the way they should be, or if off-site repairs are necessary*.

*If the instrument(s) need off-site repairs charges will apply.

This event takes place on
April 21, April 23 and April 27
Call now for your appointment
time ~ 432-5973

No "make-ups" will be allowed.



In warranty? No need to rush. You may come in at anytime for your service.