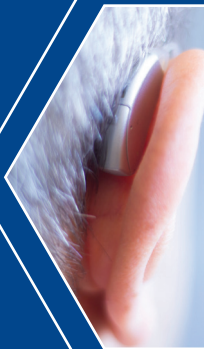


Guide to Adult Hearing Care

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AMERICAN
ACADEMY OF
AUDIOLOGY 

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Disclaimer: The information in this guide is not intended to replace the services of a qualified audiologist and should not be interpreted as an endorsement of any type or category of hearing device. Rather, this information is available to enhance a consumer's conversations with audiologists or other healthcare providers about hearing care and hearing devices.

Introduction

The ability to hear and communicate effectively impacts all aspects of your life including relationships, success in school and work, and overall quality of life. Hearing loss is the third-most common chronic health condition for adult Americans (National Center for Health Statistics, 2012¹). Hearing loss can occur at any age. Although hearing loss might occur suddenly, it most often develops over several years or decades. Some of the reasons for changes in hearing include aging, use of some types of medications, exposure to loud sounds, serious infections, accidents, and others.

Although most hearing loss in adults is permanent, some types of hearing loss are medically treatable or surgically correctable. The most common treatment for permanent hearing loss in adults is hearing aids; however, only a fourth of those who can benefit from a hearing aid use one. Most individuals wait about seven years to investigate treatment options after they begin to suspect having a hearing problem. Reasons for waiting include not thinking that the hearing loss is bad enough to need attention, not knowing what services are available, concern over cost, the social stigma of hearing loss, and a lack of self-awareness.

Types of Hearing Loss

You may suspect that you have a hearing loss, but to determine the best treatment the audiologist also needs to determine the type of hearing loss. It is not possible for you to determine the type or degree of hearing loss you have, even using online screening tools. Screening tools can alert you that your hearing might not be normal, but anyone concerned about hearing should consult an audiologist for an audiologic evaluation (hearing test). The audiologist can propose a hearing device for treatment, but the plan of care also may include other recommendations (e.g., auditory training, improving communication skills/communication strategies, and/or assistive and alerting devices).

The audiologist will classify hearing loss into one of three categories:

Sensorineural hearing loss is the most common form of hearing loss. It is sometimes referred to as “nerve deafness” but it usually does not involve the nerve. Instead, it involves the sensory cells in the inner ear and their connections to the hearing nerve. The sensory cells of the inner ear, called hair cells, convert incoming sound signals into electrical impulses that the hearing nerve conveys to the brain. When these cells are damaged or stop fully functioning, hearing loss results. It can become difficult to hear in noisy situations when the delicate connections to the nerve are affected, even when a hearing test appears normal. Sensorineural hearing loss most commonly affects a person’s ability to hear higher pitches, causing the listener to perceive that people are mumbling, or they will often state that they “can hear, but can’t understand.”

Sensorineural hearing loss often occurs slowly over time and generally affects both ears to the same degree. In rare instances it is possible to have a sudden hearing loss that affects only one ear. Sensorineural hearing loss is typically permanent and, in the majority of cases, can’t be corrected with medication or surgery. Fortunately, sensorineural hearing loss can be managed with hearing aids and implantable technologies, as well as other assistive accessories.

¹ National Center for Health Statistics. (2012) *Healthy People 2010 Final Review*. U.S. Department of Health and Human Service, Rockville, Maryland. Retrieved from: www.cdc.gov/nchs/data/hpdata2010/hp2010_final_review.pdf.

Conductive hearing loss is less common in adults and often can be treated with medications or through surgery. This type of loss is typically the result of sounds failing to travel effectively to the inner ear. Conductive problems can cause mild or moderate hearing losses but rarely result in total hearing loss. However, some forms of conductive hearing loss can be permanent, even with medical or surgical treatment. In these cases, hearing aids or other implantable technologies can be used to improve hearing. Causes of conductive hearing loss include cerumen (ear wax) impaction, middle ear fluid or infection, tumors/growths, and history of ear surgeries.

Mixed hearing loss is a combination of conductive and sensorineural hearing loss. These are generally more complex to treat and may require a combination of medical, surgical, and audiologic treatments.

Table 1 shows the three categories of hearing loss and their causes.

Table 1. Types of Hearing Loss

	Sensorineural Hearing Loss	Conductive Hearing Loss	Mixed Hearing Loss
Description	Hearing loss that typically impacts overall volume and the ability to understand speech clearly	Hearing loss that typically decreases volume of sound (like wearing an earplug)	May involve a combination of decreased volume and clarity
Who Is Affected	All ages	All ages	All ages
Location in the ear	Inner ear and/or hearing nerve	Outer ear and/or middle ear	Combination of outer and/or middle ear and inner ear to hearing nerve
Cause	Aging, exposure to loud sounds, infections, medications, genetics, and others	Growths or tumors, ear infections, eardrum perforations, malformations of ear structures, earwax	Combination
Treatment	Management with hearing devices and auditory training	Possible medical or surgical intervention; may be followed by management with hearing devices	Possible medical or surgical intervention; might be followed by management with hearing devices

Signs of Hearing Loss: Myths and Facts

Myth: Hearing loss is a normal part of aging.

Fact: In reality, there is no “normal” age-related hearing loss. Some individuals delay management of hearing loss because they view hearing loss as “minor” or that it is “normal for their age.” The sooner a hearing evaluation is conducted, the easier the treatment and the better the results.

Myth: Hearing loss is always sudden, so I will know when it is happening.

Fact: Adult onset hearing loss can occur so gradually that it might be difficult to identify at first. In quiet situations, there might be no difficulty at all in communicating or understanding others. Many individuals with hearing loss do not realize that their hearing can be better than it is.

Common symptoms indicating need for audiologic evaluation include the following:

- Perceiving that people mumble
- Frequently asking people to repeat what they have said
- Difficulty following conversations in restaurants or other noisy places
- Turning up the volume on the television or radio to levels that are bothersome to others
- Trouble understanding at the movies or theater, houses of worship, or other public gatherings
- Difficulty understanding people when their faces cannot be seen
- Difficulty understanding conversations in a group
- Impatience, irritation, or frustration during conversations
- Straining to hear conversations
- Hearing ringing, buzzing, beeping, or other noises in your ear(s) or head

Myth: Hearing loss is just an inconvenience you can learn to tolerate.

Fact: Even mild hearing loss can have a negative impact on quality of life. Long-term outcomes improve when hearing aids are obtained early, which reinforces the importance of seeking advice when hearing difficulties or problems are first noticed. Leaving hearing loss untreated can decrease the ability to benefit from hearing aids over the long term.

Myth: Mild hearing loss will always stay mild.

Fact: Many individuals with an even mild hearing loss go on to develop significant hearing impairment within five years of the start of the loss. Furthermore, hearing loss can create consequences in other areas of functioning.

Myth: As long as you try something for your hearing loss, you have done enough. Maybe nothing will work.

Fact: Untreated hearing loss causes problems, but there is evidence that *undertreated* hearing loss can result in similar problems. Simply using any hearing device is not enough to get benefits or to reduce other problems from occurring. The device must be appropriately programmed to provide adequate amplification. Using a device that is inappropriate or not appropriately programmed is as bad as not seeking any treatment at all. Having a bad experience with hearing aids might prevent you from using hearing aids in the future, so seeking good care early is essential.

Myth: All hearing loss is the same so any hearing device will work.

Fact: It is important to accurately identify the type and degree of hearing loss to correctly select and program a device and to verify that the selected device is providing the amplification it needs to provide. (See “Types of Hearing Loss,” page 2.) The audiologist will determine the type and degree of hearing loss, as well as which devices would be appropriate to consider, as part of the hearing needs assessment and device fitting.

Myth: A hearing device is all that is needed to solve my hearing problems.

Fact: Hearing aids are just one aspect of managing hearing loss. Hearing aids are complex medical devices, so working with an expert who appropriately can select and program the device is key. Other assistive accessory devices also can be helpful in certain situations. Audiologists frequently

will recommend aural rehabilitation or auditory training to maximize benefit from the device. Learning good communication strategies also can enhance communication experiences.

Seeking Care: Who Are Audiologists?

Let's say that you suspect you or a loved one has a hearing loss. Perhaps your primary care provider has recommended that you get your hearing checked. Maybe you even had a hearing screening at a health fair and were referred for more testing. What do you do next? Who do you see? The answer is to go to an audiologist.

Audiologists are highly trained, usually doctoral level, health care professionals who evaluate, diagnose, treat, and manage hearing loss. An audiologist will perform an evaluation to assess your hearing. The audiologic evaluation is centered on identifying the current hearing concerns and developing plans that will improve the patient's quality of life. The evaluation will allow for a thorough understanding of the capabilities and limitations of an individual to communicate in a variety of different listening situations. The audiologist will also assess features and functions that will be most effective in a hearing device, if needed for treatment. The information obtained in the evaluation will enable the audiologist to formulate a treatment plan to discuss with you.

Others might be involved in addressing your hearing loss. It is important to understand the different types of providers and the role they play in your journey of hearing health care. Table 2 on the following page describes these different providers.

Table 2. Providers of Hearing Care

	Description	Credentials typically seen:	Purpose	Other
Audiologists	<p>Doctoral-level health-care professionals.* Extensive education and training focused on the auditory system, underlying causes of and appropriate management of hearing loss.</p> <p>*Some audiologists earned master's degrees before education transitioned to AuD as entry-level degree.</p>	AuD, PhD, MA, MS, FAAA, CCC-A, CISC, PASC	Evaluate, diagnose, treat, and manage hearing loss, tinnitus, and balance disorders in newborns, children, and adults; specialize in the prevention, identification, evaluation, consultation, habilitation or rehabilitation, and research of hearing loss.	
Otolaryngologists, or Ear, Nose, and Throat (ENT) providers	<p>Doctoral-level health-care professionals. Training focuses on medical aspects of hearing loss.</p>	MD, DO	Physicians (MD) who specialize in disorders of the ear, nose, and throat. Otolaryngologists further subspecialize to focus on disorders of the ear. If your audiologist suspects there is an underlying medical issue causing your hearing loss, or if that hearing loss might be medically or surgically treatable, they will suggest you have an evaluation with one of these specialists.	In December 2016, the U.S. Food and Drug Administration announced they no longer are enforcing the requirement for adults to have a medical exam before a hearing aid fitting. Some state laws still include this requirement for now.
Hearing Aid Dealers	<p>Educational preparation varies. Training focuses on selling hearing aids.</p>	HIS, BC-HIS	Select and fit hearing aids. They also measure hearing levels for the purpose of selecting, adapting and selling a hearing aid. They cannot conduct diagnostic hearing evaluations	The credentials for becoming a hearing aid dispenser vary by state, but typically involve working as an apprentice to an already certified dispenser for some period of time and passing a test about hearing aids.

Types of Hearing Devices

There are many different types of hearing devices, and no one device is appropriate for everyone or every kind of hearing loss. When considering a hearing aid or other types of hearing device, a consumer should work with an audiologist and other providers, as needed, to identify primary concerns and long-term needs. Other factors include selecting a device that fits one's lifestyle, is easy to use, and fits within a budget. Selecting a hearing aid is not the same as purchasing an electronic device, so the guidance of a qualified hearing professional is needed to specifically address an individual's needs.

The following are descriptions of devices that can be used to enhance or improve hearing. Not all these devices are designed to be used to treat hearing loss. Hearing aids and other devices can be purchased at a variety of locations, including audiologist offices, some physician offices, on-line,

retail outlets, and hearing aid dealer offices. When considering a hearing device, be sure to consider the provider, services offered, technology available, available insurance coverage, and the cost. It is important to realize that the hearing device itself is only one aspect of good hearing care — the provider, the programming of the device, and other services, such as auditory training and communication strategies, are just as important, if not more so. The American Academy of Audiology does not recommend purchasing or using a hearing device without the recommendation of an audiologist.

Hearing Aid

- Any “wearable instrument or device designed for, offered for the purpose of, or represented as aiding persons with or compensating for, impaired hearing” (FDA, 21 CFR 801.420).
- Regulated by the U.S. Food and Drug Administration (FDA).
- Recommended for individuals with mild to profound hearing loss and customized to meet the specific hearing and listening needs of the individual with hearing loss.
- Has multiple programs (acts like different hearing aids depending on the listening situation), can be adjusted over time as hearing changes, and can communicate with external devices such as televisions and smartphones.
- Some hearing aid brands can be programmed only by providers within specific networks (e.g., Beltone, Miracle Ear, Costco). Other devices are able to be programmed by any provider who is contracted with the manufacturer.

Wireless Connectivity/Accessories

- Devices that allow the listener to directly stream information from a phone or other personal listening device (e.g., tablet, computer, e-reader) as well as remote or lapel microphones that help the listener to hear over long distances (e.g., in classrooms, conference rooms, and lecture halls).
- Other accessories allow hearing aids to be connected directly to televisions, music systems, and smartphones.

Hearing Implants

- Includes bone-anchored implants, middle-ear implants, cochlear implants, and auditory brainstem implants.
- Considered when traditional hearing aids can't provide enough benefit or improvement of speech understanding, or when there is a total loss of hearing.
- Examples of hearing losses that may benefit from implants include single-sided deafness (or hearing loss in only one ear), hearing losses caused by tumors, or sensorineural hearing loss that has progressed to a point where the listener is missing a majority of conversational speech, even when wearing hearing aids.
- Eligibility for an implant is determined by an audiologist or a physician who specializes in this technology.
- Used for children and adults, but the majority of candidates are adults who developed hearing loss later in life.

Personal Sound Amplification Products (PSAPs)

- Wearable electronic devices that are designed to *enhance* listening in certain environments (not full-time use) for people with normal hearing. They do not treat hearing loss.
- Unregulated by the U.S. Food and Drug Administration (FDA).
- Suggested examples of situations for PSAP use include hunting (listening for prey), bird watching, listening to lectures with a distant speaker, and listening to soft sounds that would be difficult for normal hearing individuals to hear (e.g., distant conversations). (FDA Draft Guidance, 2013²).
- Sold “over the counter” (OTC), but are not considered to be “OTC hearing aids” as they are not intended to treat hearing loss.

Hearables

- A hearable is a wireless in-ear computerized device that uses wireless technology to supplement and enhance your listening experience. Many hearables will also feature additional features such as biometric tracking. PSAPs and even hearing aids are technically hearables.
- Unregulated by the U.S. Food and Drug Administration (FDA) with the exception of hearing aids.
- May be sold “over the counter” (OTC) and are generally not for the treatment of hearing loss. Rather, hearables generally are more focused on supplementary functions, such as translation, biometric tracking, or other enhancement of the listening experience.

OTC hearing aids do not exist currently, but recent laws passed by Congress describe OTC hearing aids as devices that use the same fundamental technology as a traditional hearing aid but would be available without prescription from a licensed provider. OTC hearing aids will be regulated by the FDA when they hit the market, which is estimated to be after 2020, and will have limited use. The American Academy of Audiology recommends these devices only for individuals with mild hearing loss.

Financial Considerations Related to Hearing Health Care and Devices

It can be confusing to compare costs when it is not clear if the price includes only the device or also the related services of the audiologist. Also, it can be difficult to know what will be covered by insurance. The following offers some guidance for understanding the costs for evaluation, treatment, and management of hearing loss.

Bundled Fees

- When services are included with the device, this is called a “bundled” price.
- The bundled price generally includes most or all of the following: hearing aid evaluation, hearing device, earmold or dome, hearing aid dispensing/fitting fee, tests to verify

² U.S. Department of Health & Human Services, FDA. (2013). *Regulatory requirements for hearing aid devices and personal sound amplification products*. Rockville, Maryland. Retrieved from: www.fda.gov/MedicalDevices/ucm373461.htm

programming of device, batteries, accessories, manufacturer warranty, loss and damage coverage, and return visits to office for a specified period of time.

Unbundled Fees

- In an unbundled structure, each device and service are quoted and billed separately.
- This structure allows for greater transparency and separation of device and services.
- The American Academy of Audiology encourages its members to distinctly describe device and professional fees to support patients' greater understanding of costs associated with their care.

Hearing Evaluation

- Most commercial and federal insurance programs allow direct access to an audiologist for a hearing evaluation (no physician referral required).
- Medicare requires a physician referral and will only reimburse providers for a hearing evaluation to evaluate a change in hearing or the cause of the change, or to evaluate the effect of a treatment.
- Medicare does not reimburse providers for visits related specifically to fitting hearing aids.

Hearing Aids

- Medicare does not cover hearing aids or hearing aid services.
- Some commercial insurers offer hearing aid benefits, although some require that the devices be dispensed by a specific provider. Some also might cover only a certain level of technology or brand. The individual might have the option to pay out of pocket for additional features that insurance does not cover.
- Insurance typically does not cover the cost of batteries or out of warranty repairs but might cover the cost of a hearing aid evaluation.

Hearing Implants

- Hearing implants usually are considered to be durable medical equipment (not hearing aids) and frequently are covered by most insurance programs including Medicare and Medicaid, when certain criteria are met.

Considerations for Using Hearing Aids

Once you have decided to start using hearing devices, you can become excited to have your hearing "back to normal." But it's important to realize that no hearing device can completely restore hearing in the way you remember it. Also, because you might have stopped hearing sounds gradually over time, it can be surprising to hear all that you will with hearing aids. Unlike wearing glasses, where blurry letters and images suddenly become clear, using hearing aids is a process and can take time to adjust. Hearing aids make the sounds you are missing louder, which often helps make sounds clearer. Noisy rooms, distance, group conversations, and other challenging situations might still be tricky. In these instances, wireless accessories used with your hearing device, strategies to improve communication, and controlling your environment can help. The use of the right hearing devices along with other strategies for improving hearing might help improve quality of life and decrease listening effort and fatigue.

You have many options for purchasing hearing aids, but it's important to realize that hearing aids are complex, medical devices that require expertise to program correctly. It's also important to understand that not using hearing devices, or using incorrect hearing devices, can create more problems.

When meeting with your audiologist to discuss hearing devices, some good questions to ask include:

- What do the stated charges include?
- Who can program the device if I need or want to change providers?
- What is the warranty and what does it include?
- What is the expected life of the device?
- Am I a candidate for an implantable hearing device?
- What are the realistic expectations I should have when using this device?
- Are there any wireless accessories that would enhance the benefit I receive from this hearing device?
- How long do I get to try the hearing aids and still return them for a refund? Are any fees nonrefundable?
- What follow-up care should I expect?
- What is the expected battery life and cost?
- Do I need to see a physician before getting hearing aids or other devices?
- Are you qualified to evaluate my candidacy for devices other than hearing aids?

It is also a good idea to bring a friend or family member to your appointment with you. They will be able to learn about how you communicate best and will serve as a second set of ears to hear all the information your audiologist has to share.

Over-the-Counter (OTC) Hearing Aids

OTC hearing aid solutions are under development to create a class of hearing aids that can be purchased without a prescription by a licensed health-care provider. The American Academy of Audiology believes that these devices are likely to be most appropriate for individuals with no more than mild hearing loss and recommends to consider purchasing an OTC device only with the recommendation of an audiologist. It is important to understand that true OTC hearing aids are not available, so consumers should be wary of considering any device being marketed as such.

There may be risks associated with using OTC hearing aids: (1) Failing to identify an underlying medical condition to the hearing loss; (2) providing less amplification than is necessary and suffering consequences of undertreated hearing loss; or (3) providing more amplification than is necessary and potentially causing greater degrees of hearing loss. For these reasons, the American Academy of Audiology recommends that consumers with certain signs and symptoms do not select a direct-to-consumer device (see sidebar).

With any self-selected device, there is a risk that the technology will not give you the volume or sound quality you want or need. Therefore, the American Academy of Audiology recommends anyone concerned about their hearing to see an audiologist for a hearing test and to discuss of appropriate hearing devices before any device is used.

Tips for Successful Management of Adult Hearing Loss

- Have a comprehensive audiologic evaluation (hearing test) with an audiologist as soon as you or a family member has concerns regarding hearing.
- Talk with your audiologist about any underlying reasons for the hearing loss.
- Follow through on any appointments that are recommended to determine the cause of the hearing loss or other possible treatment options.

- Don't use a hearing device without the recommendation of an audiologist.
- Invest in a hearing device that meets your unique needs and requirements and if recommended by an audiologist.
- Don't wait to have your hearing tested or to start using an appropriate hearing device is hearing loss is identified.
- Hearing aids are medical devices that require specialized knowledge to ensure they are programmed and used appropriately. Don't select a hearing device on your own as it might not optimally improve your hearing and could even do further harm.
- Ensure that the provider with whom you are working has the training, expertise, and experience to discuss appropriate options, including, but not limited to, hearing aids.
- Realize that no hearing device completely restores normal hearing; however, the appropriate device can significantly improve quality of life and your ability to interact with friends, family, and colleagues.
- Stop wearing a device if it feels or sounds painful. Contact your audiologist!
- Recognize that technology might not be the only treatment needed to help your hearing loss. Sometimes, the brain needs exercises (called "aural rehabilitation") as a supplement to hearing devices to help the brain adjust to the sound. Hearing loss is complex and simply using a device is often not enough to adequately manage the challenges it creates.