

Is Hearing Loss Affecting Your Life?

Hearing. For most of your life, it's as natural as breathing. You listen without thinking. You converse with ease. You wake from sleep to the subtlest of audio cues. Yet little by little, things have changed. You realize how often you have to ask people to repeat themselves. How exhausting it's become to attend a meeting. And how the TV is too loud for everyone but you. You still wake up and smell the coffee, but you haven't been hearing its gentle drip – or half of what the morning FM deejay has been saying. What's going on?

Importance of Hearing in Contemporary Life

What does it mean to have a hearing loss?

It could mean not hearing the doorbell ring or your spouse call you from another room. It could mean missing key information in a business meeting or avoiding seeing friends for fear of being “found out.”

Hearing loss can interfere with the quality of your life, restricting your ability to interact with others, causing misunderstandings and fatigue, heightening stress and filtering out the myriad of sound experiences that give pleasure and meaning to life. And not incidentally, hearing loss can be a safety issue. What happens when you don't hear the smoke detector?

Yet most people hesitate to act when it comes to treating a hearing loss. Part of the problem is that onset is gradual (and virtually invisible). In fact, it can take years for hearing loss to develop. Part of the problem is denial. Hearing loss may be a natural part of the aging process, but few of us want to admit to growing older.

But perhaps the biggest problem is how we view hearing loss, both as a culture and as individuals. Hearing loss has always carried something of a stigma in comparison to failing eyesight, for example—and as a society, we even tackle hair loss before hearing loss.

Fortunately, that's changing, fueled in part by your search for knowledge at sites like this one. So, congratulations on taking a step towards making hearing loss not just another topic in the healthcare forum.

Detecting Hearing Loss

Maybe you already know you or a family member is dealing with hearing loss. Then again, it may be happening so gradually you're not sure. Unlike many conditions, hearing loss is often hard to detect in its early stages.

The kind of signs to look for may differ based on your perspective—that is, whether you're checking for yourself or a loved one. Click the appropriate link at left to recognize the signs of hearing loss in someone else or to evaluate your own situation.

What Can I Do About Hearing Loss?

While hearing loss isn't reversible, most age or noise related loss can be managed and often compensated for. Sometimes that means medication or surgery. But just as eyeglasses are used to correct most vision problems, hearing instruments are used to treat most kinds of hearing loss.

Any treatment starts with a screening of your hearing by a doctor or hearing professional. Once you know the nature and extent of the hearing loss, you'll be able to make your own decisions about treatment.

Getting Your Hearing Tested

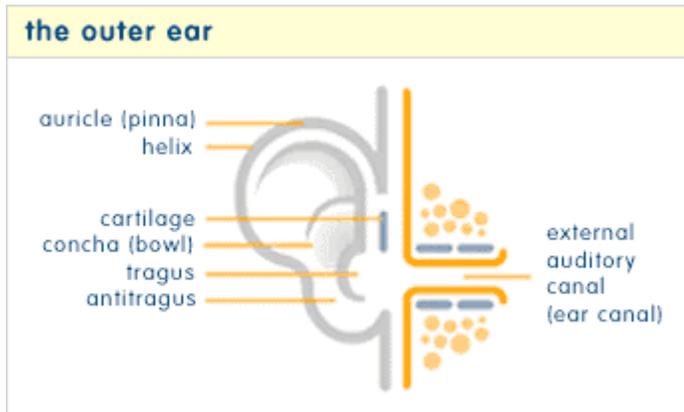
Unlike most medical tests, the tests that measure hearing ability are relatively quick and painless. Our Hearing Instrument Specialist will probably perform 3 or 4 simple exams, which will include the following:

- Video Otoscopic Exam – With a camera on the end of a lighted scope, we will visually exam the ears as well as the ear canals to determine the overall health of the ear. With a lighted scope, we will check for cerumen (ear wax) remove it if necessary.
- Audiogram – A sound check that produces a mapping or graphical representation of hearing ability;
- Speech Discrimination – We will test your ability to understand speech with amplification to determine what type of hearing instruments would be best for you and also, what we can expect with correction.

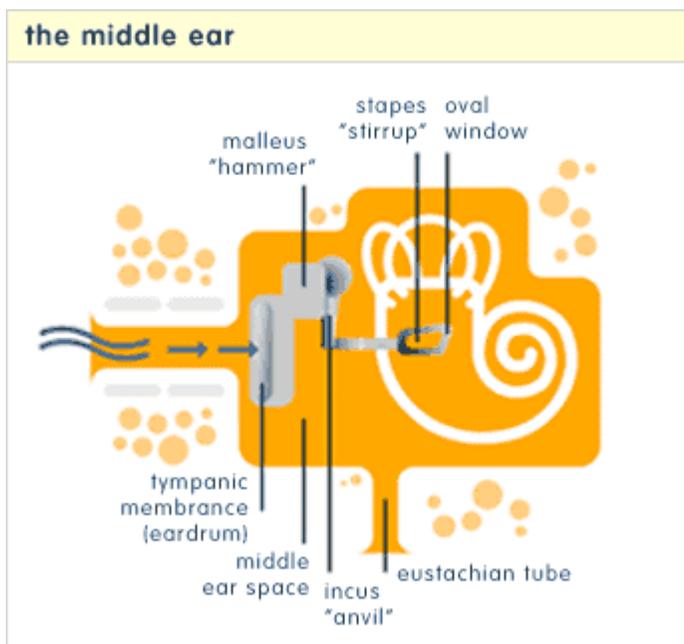
These tests are performed at the hearing professional's office and usually take less than an hour to complete. With the information from these tests, your hearing professional will be able to make an accurate assessment of your hearing capabilities and advise you of all your treatment options. In most cases, this means hearing instruments. If a medical problem is found, your hearing professional will refer you to a physician for next steps

How Hearing Works

We don't just hear with our ears – we hear with our brains. How does it work? Find out how simple vibration becomes a birdcall, a rock lyric or the blast of a jackhammer.



While the outer ear is a great place to display jewelry, it's specifically designed to transmit sound. Sound begins as motion. When objects vibrate, molecules of air are set in motion and transmitted as sound waves. The outer ear's bell-like contours guide and focus these sound waves into the ear canal, where they're aided and amplified by its spiraling shape. This natural phenomenon works so well we copy it to hear even better: a radio announcer cups his hand around his ear, simultaneously gathering sound in and blocking background noise out. Once inside the ear canal, sound waves travel on until they reach the eardrum, the dividing point between the outer and middle ear.



When sound waves hit the eardrum, they cause it to vibrate, sending the sound on to the delicate machinery of the middle ear. Here, the body's three tiniest

bones – commonly referred to as the hammer, anvil and stirrup – mechanically advance and organize the sound to further amplify it and facilitate its passage into the inner ear. The middle ear also contains the eustachian tube, which equalizes air pressure between the outer and inner ear.



The fluid-filled inner ear is where the action takes place. Here, microscopic hair cells reside within the spiral-shaped cochlea. These hair cells are stimulated by the sound wave moving through the fluid and convert that movement into nerve impulses that are sent to the brain.

From Sound Waves to Brain Waves

Our brain interprets the signals and tells us in turn that the doorbell rang, or that words are being spoken. Many things help determine just exactly what it is you hear, but it's the combination of frequencies that give different sounds their distinctive qualities. Source and direction of the sound and loudness are other clues the brain uses to decipher messages.

Hearing loss occurs when hair cells are damaged or die, a common occurrence as we age. And hair cells, like brain cells, do not regenerate. That's why most hearing loss is irreversible.

Who Treats Hearing Loss?

Your doctor may screen for hearing loss as part of a regular physical, but many do not. If you suspect a hearing loss, you can go to one of three types of professionals: a family physician or general practitioner, an Ear, Nose and Throat (ENT) specialist, or a hearing professional.

A GP or ENT can determine if there is a medical condition causing the hearing loss, or whether medical treatment, such as surgery, could be helpful. If not, your doctor will probably refer you to a hearing professional.

A hearing instrument specialist is trained in fitting and dispensing hearing instruments. Hearing instrument specialists are often state-licensed and board-certified to test for hearing loss and to fit consumers for hearing instruments.

Luckily, we offer hearing tests for FREE!

About Hearing Instruments - Expectations

“Hearing instruments changed my life.”

“Hearing instruments don’t work – period.”

No matter what you’ve heard about hearing instruments, none of it matters until your own ears are in question. Then, nothing is more interesting than learning all there is to know about these emotionally and electronically loaded little devices: the aesthetics, the size, the microchips, the bells, the whistles, the possibilities, the costs, the success stories.

Factors to Consider

What should you think about in buying hearing instruments? Following is a list of seven factors to consider. All other things aside, your hearing instrument must be a good match for your loss characteristics, fit comfortably and be adjustable, either manually, by you, or automatically. Read through these factors and make some notes as to your priorities so you can discuss them with your hearing professional.

Loss Characteristics

The nature and severity of your hearing loss will play a large role in determining which hearing instruments are ultimately recommended to you. Your hearing professional can help you understand your unique loss characteristics, and explain the models that would best suit your needs.

Lifestyle

Consider your life, work, free-time activities. What are the things you do that are most affected by hearing loss? What are the things, if any, that you're not able to do because of a hearing loss? Define your needs and set priorities. Your job may also be a factor. If you work outdoors in the elements or travel frequently, and are concerned about a hearing instrument's durability, you may want to consider a back-up instrument.

Technology

Sound quality is perhaps the most important consideration—it's why you're even considering purchasing hearing instruments, after all. Not every technological advance benefits every hearing loss, and it's safe to say that even basic hearing instruments can deliver appropriate sound quality. Consult your hearing professional—he or she will help you assess the level of sophistication you need based on a range of issues.

Handling

The smallest hearing instruments are the most discreet, but they are, well, small. If your eyesight or dexterity is less than what they used to be, size may indeed matter. Alternatively, some new instruments adjust automatically or via remote control. Your hearing professional will instruct you as to your best choices.

Appearance

Hearing instruments come in a variety of sizes, from tiny, completely-in-the-canal models to those that rest behind the ear. Many people are overly concerned about appearance, and it's wise to remember that others will be far less aware of your instrument than you. Most hearing instruments are quite discreet. Keep in mind that hairstyle can also play a role.

Physiology

Physical factors can also influence your selection of a hearing instrument. The shape and size of the outer ear and ear canal can make it difficult for some people to wear particular styles. For example, if your canal is extremely narrow, in-the-canal instruments may not work for you. Your hearing professional will help determine which hearing instrument options are appropriate for you.

One Ear or Two?

Two ears are better than one, since binaural, or two-ear hearing, is what helps us determine where sounds are coming from, and to distinguish between competing sounds more easily. If you have a hearing loss in only one ear, you may be fine with one hearing instrument. Age- and noise-related hearing loss tend to affect both ears, but your hearing profile for each ear is probably different. If there is a loss in both ears, then you will benefit more with a binaural approach. In addition, some of the benefits of digital technology require two hearing instruments.

Today, about two-thirds of new purchasers opt for dual hearing instruments, and as a group, they report a higher level of satisfaction than purchasers of a single instrument. We will be happy to discuss the pros and cons with you.

The Value Equation

Improving your hearing and adding to your quality of life is hard to put a price tag on.

While it might seem odd, it's not really what's inside the piece of plastic that you're paying for—it's how well the hearing instrument improves your quality of life. The real value is what it's worth to be able to fully engage in your relationships, work and the activities you enjoy.

You may also want to think about what you value most in terms of a hearing instrument's features and benefits. How important is vanity? How important is the latest technology? The equation of price will depend somewhat on your priorities—and it's different for everyone.

Hearing instruments generally run from several hundred to a few thousand dollars, and pricing varies between hearing professionals. Typically, costs reflect the amount of research and development that has gone into the product as well as quality of the components, with the smallest, most technologically advanced instruments at the higher end of the pricing spectrum. However, you can also get hearing instruments that provide a good benefit in a modest price range.

At our offices, pricing includes all of our services as your hearing profession, such as the testing, making of the earmold impression, fitting of the instrument and follow-up care and service, as well as batteries, small repairs and professional cleanings. In addition, most hearing instruments come with a warranty and return guarantee.

Developing Realistic Expectations

Some people put on a hearing instrument and hear better right away. For most, there is more of an adjustment period. The single most important factor in the process is the attitude and commitment of the wearer—and the development of realistic expectations.

Just as if you had a knee replacement or other medical procedure, you can expect to go through a period of rehabilitation, followed by adjustment to your new circumstances. You can also expect that this will take some time. You'll need both a willingness to go through that process, as well as the patience to re-learn a new way of hearing.

Part of that re-learning is recognizing that hearing instruments won't replicate the way you used to hear, nor will they restore or prevent further loss. Most people gain significant improvement in their sense of hearing with hearing instruments, though it is a gradual process that can and will take some time.

Why is Digital Technology Better?

Digital technology's superiority over traditional analog hearing instruments isn't just what it can do with sounds, but how much better it does it.

By converting the incoming signals into computerized 'bits,' they can be processed, or manipulated extremely fast and efficiently in many complex ways using mathematical formulas known as algorithms. This gives digital signal processors (DSP) tremendous speed and agility to recognize sound's key ingredients.

Like a graphic equalizer in high-end audio systems, algorithms can continually divide sounds into frequency channels. These help preserve and emphasize the higher frequencies containing vital consonant sounds in speech – the “c” and “t” sounds in “cat” – over the distracting rumble of low frequency noise.

Algorithms also manage noise by its duration. While speech sounds' intensity can change radically in a millisecond, noise is more acoustically stable over a comparatively longer time. Using time, DSP precisely reduces the levels of continuous sounds like traffic noise and household appliances. And it instantaneously readjusts when changes occur, restoring amplification when shorter duration sounds are detected.

That same sensitivity is also useful in quiet surroundings. Utilizing an audio technique called expansion, the digital algorithm senses the consistency of softer environmental sounds from ventilation systems and appliances.

It automatically reduces amplification in the appropriate frequency range, immediately restoring proper levels when the sound pattern changes.

Digital algorithms can also minimize and eliminate the onset of feedback, a common nemesis to hearing instrument use. Within its elaborate frequency channel network, the algorithm detects the elements of feedback before they become audible. It then reduces levels in just those discreet channels, with no noticeable effect on perceived volume levels.

The precision and flexibility of digital technology also gives your hearing professional the ability to more accurately tailor your amplification for the best possible match to your listening and lifestyle needs. This process may include subsequent visits to ensure that you are receiving maximum benefit from your instruments.

In order to determine if the many advantages of digital hearing technology might benefit you, complete testing and evaluation are necessary.

What to Expect from your Hearing Instrument

Some people put on hearing instruments and hear better right away. For most, there is more of an adjustment period. The single most important factor in the process is the attitude and commitment of the wearer—and the development of realistic expectations.

There are two things to know right from the start. One, hearing aids don't sound the same as having your old hearing. And two, adjusting to wearing them takes time. Just like getting comfortable with a pair of bifocals, you may experience some difficulty at first, but it will likely pass in time.

It's important to know what to expect and to learn how to get the most from your hearing instruments in different situations. You'll need both willingness and patience to re-learn a new way of hearing. It helps to start slowly as well as to be consistent in using your new hearing aids.