

# Guide to Your Hearing Health



## Hearing loss

is the third most common chronic physical condition in the U.S.<sup>1</sup>



## Don't suffer in silence

we've got solutions to help  
keep you connected!

# Are you having difficulty hearing?

If so, you are not alone.

An estimated **48 million** Americans experience some degree of hearing loss.<sup>2</sup>

Don't worry: **There are solutions** that can help you reconnect with friends and loved ones, and improve your quality of life!



**Recognizing the symptoms of hearing loss can be difficult.** It often develops so gradually that you become used to the changes in your hearing and adapt to them.

## Learn to recognize the signs:



Asking people to *repeat* themselves



Difficulty hearing over *background noise*

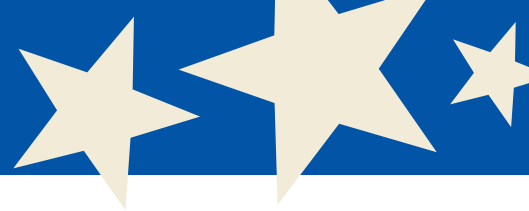


The feeling that people *mumble* when they speak



Turning up the volume when watching *TV*

# Who has hearing loss in America?



**1 in 3** people  
aged **65** and over<sup>3</sup>



**15%** of children  
between the ages of  
**6 and 19**<sup>5</sup>



**1 in 2** people  
aged **75** and over<sup>3</sup>



**8.5%**  
of adults aged  
**55 to 64**<sup>3</sup>



**2 to 3** out of every  
**1000** newborns<sup>4</sup>



About **2%** of adults  
aged **45 to 54**<sup>3</sup>



<sup>3</sup> National Institute on Deafness and Other Communication Disorders. (2022). Age-related hearing loss. <https://www.nidcd.nih.gov/health/age-related-hearing-loss>

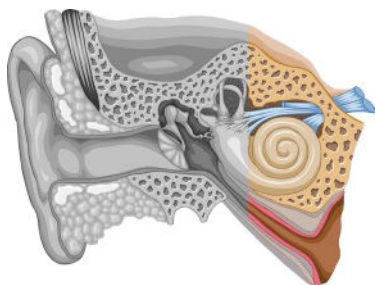
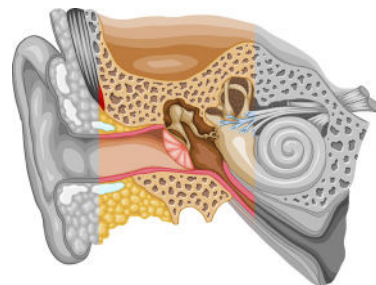
<sup>4</sup> National Institute on Deafness and Other Communication Disorders. (2021). Quick statistics about hearing. <https://www.nidcd.nih.gov/health/statistics/quick-statistics-hearing#1>

<sup>5</sup> CDC. (2021). Data and statistics about hearing loss in children. <https://www.cdc.gov/ncbddd/hearingloss/data.html>

# Types of Hearing Loss

There are **three main types** of hearing loss, categorized by which part of the auditory system has been damaged.

**Conductive** hearing loss involves damage to the outer ear (ear canal, eardrum) or middle ear (ossicles); this prevents sound waves from being carried from the eardrum to the inner ear. This type of hearing loss can often be corrected with medication or surgery.



**Sensorineural** hearing loss, often referred to as nerve loss, occurs when there is damage to the hair cells in the cochlea of the inner ear. This type of hearing loss is almost always permanent but can usually be treated with hearing aids. Nine out of 10 patients with a hearing issue experience sensorineural hearing loss.

**Mixed** hearing loss is a combination of both conductive and sensorineural hearing loss, and it occurs when there is damage to both

the outer/middle and the inner ear. Treatment may involve a combination of medications, surgery and hearing aids.

# What Causes Hearing Loss?

Hearing loss can be caused by a variety of factors. The most common are:



## Aging

Age-related hearing loss, known as presbycusis, affects an estimated one-third of adults over the age of 65.<sup>6</sup> The cumulative effects of noise exposure over a lifetime lead to a loss of hair cells in the inner ear, causing sensorineural hearing loss that interferes with high-pitched sounds in particular. Presbycusis is irreversible and ranges from mild to severe.



## Noise exposure

Noise-induced hearing loss (NIHL) is the result of damage to the hair cells of the inner ear following exposure to sounds that exceed a safe listening threshold (85 decibels). It may occur suddenly, when exposed to a particularly loud noise such as a gunshot or explosion or gradually over an extended period of time. NIHL can be prevented through the use of hearing protection.

## There are many additional causes of hearing loss. These include:

- Excess buildup of **earwax**
- Ear infections caused by **inflammation or infection** in the outer or middle ear
- Abnormal bone growth in the middle ear known as **otosclerosis**
- There are more than **200 ototoxic medications**, which can cause temporary or permanent loss
- An inner ear disorder known as **Ménière's disease**
- A benign tumor known as an **acoustic neuroma**
- **Trauma to the head or ears** caused by an accident or injury



# Risks of Untreated Hearing Loss

## Increased risk

**Untreated hearing loss contributes to a number of social, psychological, mental and physical health complications.**

**Patients have an increased risk of:**

Reduced mental alertness and memory decline occur when the brain devotes energy toward processing sounds, which can lead to dementia. Difficulty hearing spoken conversation is associated with an up to 91% increased risk of dementia.<sup>7</sup>

<sup>7</sup> University of Oxford. (2021). Difficulty hearing speech could be a risk factor for dementia. <https://www.ox.ac.uk/news/2021-07-21-difficulty-hearing-speech-could-be-risk-factor-dementia>



## Depression

Patients with hearing loss experience increased social withdrawal and isolation, factors that may cause depression. As many as one in five elderly hearing loss patients experience clinically relevant depression symptoms.<sup>8</sup>

<sup>8</sup> Cosh, Se. et al. (2019). Depression in elderly patients with hearing loss. *Clinical Interventions in Aging*. <https://www.dovepress.com/depression-in-elderly-patients-with-hearing-loss-current-perspectives-peer-reviewed-fulltext-article-CIA>



## Falls

Falls are a serious concern for the elderly, and a leading cause of injury and death in people over the age of 65. Individuals with hearing loss are nearly 2.5 times more likely to experience a fall.<sup>9</sup>

<sup>9</sup> Jian, N. et al. (2016). Hearing loss and falls: a systemic review and meta-analysis. *Laryngoscope*. <https://pubmed.ncbi.nlm.nih.gov/27010669/>



# A Strong Correlation

has been found between certain health conditions and hearing loss. Hearing loss is often associated with the following:

**Diabetes.** Patients with diabetes are twice as likely to suffer from hearing loss, and those with prediabetes have a 30% higher risk.<sup>10</sup> Researchers theorize high glucose levels associated with diabetes can damage the blood vessels in the inner ear.

10 CDC. (2021). Diabetes and Hearing Loss. <https://www.cdc.gov/diabetes/managing/diabetes-hearing-loss.html>

**Hypertension.** The negative effects of high blood pressure aren't limited to the cardiovascular system; there is a significant association between hypertension and hearing loss.<sup>11</sup>

11 Agarwal, S., Mishra, A., Jagade, M., Kasbekar, V. & Nagle, S. K. (2013). Effects of Hypertension on Hearing. *Indian J Otolaryngol Head Neck Surg.* 65(Suppl 3): 614–618. from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3889339/>

**Obesity.** Individuals with a BMI of 30 or more are 66% more likely to have hearing loss compared to those with a BMI under 25.<sup>12</sup>

12 Hear-It News. (2019). Being obese increases the risk of hearing loss. <https://www.hear-it.org/being-obese-increases-risk-hearing-loss>

**Cardiovascular disease.** Poor cardiovascular health damages blood vessels and leads to a reduction in blood flow to the inner ear, increasing the risk of hearing loss. Adults who report experiencing moderate/a lot of trouble hearing are five times more likely to experience heart disease.<sup>13</sup>

13 Glassman, J. et al. (2021). Health status of adults with hearing loss in the United States. *Audiol Res.* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8006152/#:~:text=>

**Sleep apnea.** Sleep apnea increases the risk of heart disease, stroke and diabetes, and it leads to higher rates of hearing loss. Those who suffer from sleep apnea are 31% more likely to develop high frequency hearing loss and 90% more likely to develop low frequency hearing loss.<sup>14</sup>

14 Hear-It News. (2015, March 23). Sleep apnea and hearing loss. <https://www.hear-it.org/sleep-apnea-can-cause-hearing-loss>



# Improved Quality of Life

**The evidence is overwhelming:** Untreated hearing loss is associated with a variety of health complications, either directly or indirectly. On the other hand, treating your hearing loss can greatly improve your quality of life. It is the third most common physical condition in the U.S.<sup>15</sup> and 48 million Americans.<sup>16</sup>



**ONLY 20% of physicians routinely screen for hearing loss.**<sup>17</sup>

The problem? Hearing loss is an invisible condition. Many of its symptoms are attributed to confusion or personality changes. The solution? Be proactive! You already have your vision tested annually and schedule regular dental checkups. Make hearing screenings a part of your routine health care, too.

**About 80% of individuals with hearing loss can benefit from treatment with hearing aids.**<sup>18</sup>

Research shows a strong correlation between hearing aid use and quality of life. Patients who treat their loss with amplification devices report significant improvements in a number of key areas, including:<sup>19</sup>

45%

**Relationships  
at home**

37%

**Feelings  
about self**

53%

**Overall  
quality of life**

42%

**Self-  
confidence**

42%

**Sense of  
safety**

44%

**Sense of  
independence**

<sup>15</sup> CDC. (2018). Public Health and Scientific Information. [https://www.cdc.gov/nceh/hearing\\_loss/public\\_health\\_scientific\\_info.html](https://www.cdc.gov/nceh/hearing_loss/public_health_scientific_info.html)  
<sup>16</sup> Hearing Loss Association of America. (2018). Hearing Loss Facts and Statistics. [https://www.hearingloss.org/wp-content/uploads/HLAA\\_HearingLoss\\_Facts\\_Statistics.pdf?pdf=FactStats](https://www.hearingloss.org/wp-content/uploads/HLAA_HearingLoss_Facts_Statistics.pdf?pdf=FactStats)

<sup>17</sup> Bettger, J.P. (2020). Comparative implementation-effectiveness of three strategies to perform hearing screening among older adults in primary care clinics: study design and protocol. *BMC Geriatr.* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7216720/#:~:text=>

<sup>18</sup> Hearing Health Foundation. (n.d.). Hearing Loss & Tinnitus Statistics. <https://hearinghealthfoundation.org/hearing-loss-tinnitus-statistics/#:~:text=>

<sup>19</sup> Picu, E. (2020). MarkeTrak 10 (MT10) Survey Results Demonstrate High Satisfaction with and Benefits from Hearing Aids. *Semin Hear.* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7010487/>







## **PRIVATE** Lifestyle

Minimal Background Noise

- Quiet Conversation
- Doorbell
- Phone Ringing
- Alarms  
(Clock, Security, Timers, etc.)



## **QUIET** Lifestyle

Occasional Background Noise

- Home Telephone
- Driving
- Religious Services
- Adult Conversations
- Small Family Gatherings
- Quiet Restaurants



## **ACTIVE** Lifestyle

Moderate Background Noise

- Cellphones
- Shopping
- Movie Theaters
- Health Clubs
- Small Group Meetings
- Conversations with Children
- Television
- Open/Reverberant Home
- iPod®/Personal Music Players



## **DYNAMIC** Lifestyle

Frequent Background Noise

- Outdoor Activities
- Entertainment Venues  
(Casinos, Exhibit Halls, etc.)
- Busy Restaurants
- Frequent Social Gatherings
- Smartphones
- Conference Calls
- Multimedia Connectivity  
(Computer, Phone, etc.)
- Travel & Airports
- Concerts & Arts
- Group Presentations

# Everybody's hearing loss is unique

We encourage you to call your hearing health specialist to schedule a one-on-one consultation and determine the treatment plan that is best for your individual needs.



**To learn more and schedule a consultation at one of our convenient office locations, please contact us:**

**(864) 582-2900**

**[www.spartanburgent.com](http://www.spartanburgent.com)**

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