

Should I Use Hearing Protection?

By Your local audiologists at Advanced Hearing Care

Have you ever attended a concert or an event and left with muffled hearing? Maybe you've been exposed to the sound of a nearby gunshot and later noticed that you developed a ringing in your ears? What you may be experiencing is a temporary shift in hearing thresholds, meaning your hearing temporarily worsens. Repeated exposure to loud noise can lead to permanent damage, otherwise known as noise-induced hearing loss (NIHL). NIHL is one of the most prevalent types of hearing loss. Another common type of hearing loss is presbycusis, also known as age-related hearing loss. Tinnitus, which is often described as a "ringing" or "buzzing" sound in the ears, can be experienced by people who are exposed to loud noise and is often one of the first signs of permanent hearing damage.

Use of hearing protection or hearing protective devices (HPDs) was not common practice prior to the 1970s, and hearing protection was not required for people working in occupations with high levels of noise exposure. Factory workers, farmers, construction workers, and military veterans are just a few of the tradespersons who often found themselves having a difficult time hearing and understanding speech in their later years. It was not until the 1970s that laws and standards were established to protect and preserve the hearing of workers exposed to hazardous levels of noise.

The Occupational Safety and Health Administration (OSHA) sets safety standards for companies and employers to reduce workers' exposure to harmful conditions during the workday. When noise levels consistently reach an average of 85 decibels during an 8-hour day, OSHA requires employers to implement a hearing conservation program for their employees. Hearing conservation programs are set in place to educate employees about the importance of utilizing HPDs and to show them how to better protect themselves from permanent damage to their hearing. These programs typically require employees to undergo some sort of yearly audiometric testing to evaluate whether their hearing is being affected over time from their work.

Hearing protection is not only important in occupational settings but is also important in recreational settings as well. Hunting and rifle shooting are common activities throughout many regions of the United States. The sound of a single gunshot can exceed 140 decibels and could potentially cause significant damage to the hearing system. There are different types of hearing protection on the market that specifically cater to hunters and to indoor shooters. Some of these HPDs have unique technology that automatically protects the user from the harmful sound of a gunshot but still allows the user to hear speech and other environmental sounds.

Earbud and headphone use have dramatically increased since the 1990s,



which has led to an increase in hearing difficulties being reported by those of younger generations. Repeated harmful noise exposure early in life can be permanently damaging and can go unnoticed until much later in life. It is important for younger users to be educated on the possible consequences of long-term earbud use at high volumes. Doctors recommend that volume levels not exceed 60-80% of the maximum allowed volume from devices and that listening periods be limited to 60-90 minutes at a time.

If you have been exposed to loud noise in your past or are currently working in a noisy environment and feel that you have difficulties hearing or understanding speech, schedule an appointment with your local audiologist. Your audiologist will test your hearing, educate you on your results and present options to treat any hearing loss so that you can hear better. They will also provide hearing protection options if you will continue to be exposed to loud sounds. If you have previously been diagnosed with hearing loss, it is recommended that you have your hearing checked every 1-2 years to monitor for possible changes in your hearing. It is important to pursue hearing testing and treatment because having untreated hearing loss (like having hearing loss and not consistently using amplification such as hearing aids) has been found to be correlated with an increased risk of developing dementia (Yeo et al., 2023) as well as experiencing depression (Gopinath et al., 2009).

Gopinath, B., Wang, J. J., Schneider, J., Burlutsky, G., Snowdon, J., McMahon, C. M., Leeder, S. R., & Mitchell, P. (2009). Depressive symptoms in older adults with hearing impairments: The Blue Mountains Study. *Journal of the American Geriatrics Society*, 57(7), 1306-1308.

Yeo, B. S., Song, H. J., Toh, E. M., Ng, L. S., Ho, C. S., Ho, R., Merchant, R. A., Tan, B. K., & Loh, W. S. (2023). Association of hearing aids and cochlear implants with cognitive decline and dementia. *JAMA Neurology*, 80(2), 134-141.

COME VISIT US!

ALAMOGORDO
1401 10th St, Ste B
Alamogordo, NM 88310
575.437.HEAR (4327)

RUIDOSO
2825 Sudderth Dr, Ste H
Ruidoso, NM 88345
575.257.0454

SERVICES INCLUDE:

- Hearing Evaluations for all ages
- Tinnitus (ringing in the ear) evaluations
- Balance evaluation
- Custom made hearing protection
- Hearing aids of all manufacturers
- Hearing aid repair
- Cerumen (ear wax) removal



* We are in network with all insurances (including Tricare, Medicare and Medicaid)

* We are contracted with the Veterans Administration (no need to drive to El Paso or Albuquerque for your VA hearing aid needs)

Dr. Allison Money Penny, AUD CCC-A www.AHCNM.com • Allison@ahcnm.com