## Ringing in the Ears





Do you suffer from ringing in the ears? You're not alone! The National Institute on Deafness and Other Communication Disorders (NIDCD) estimates that over 20 million Americans experience chronic ringing in the ears, known as tinnitus (pronounced "TIN-a-tus" or "Tin-EYE-tus"). The condition can be mild, intermittent, or so severe as to interfere with sleep, concentration, and enjoyment of daily life.

A recent analysis of data collected as part of the National Health Interview Survey indicated that noise-exposed workers in the United States are 3 times more likely to report suffering from tinnitus than their non-noise-exposed counterparts. According to the U.S. Department of Veteran Affairs, tinnitus and hearing loss are the top two service-connected disabilities for U.S. service members. Veterans of Iraq and Afghanistan have been exposed to a number of hazards known to cause hearing loss and tinnitus, including loud noise, blasts/explosions, and ototoxic chemicals. Service members who have suffered a traumatic brain injury are 3 times more likely to experience tinnitus than other veterans. Those exposed to solvents, a class of ototoxic chemicals, are twice as likely to report ringing in the ears.

Tinnitus is an annoying and sometimes debilitating condition, commonly defined as the perception of noise in one or both ears when no sound is actually present. Usually described as high-pitched, it might also be perceived as roaring, clicking, hissing or buzzing. Tinnitus can be a sign that something is wrong with the outer, middle or inner ear, the auditory nerve, or parts of the brain that process sound. Noise exposure, acoustic trauma, exposure to chemicals, and ear diseases/infections are common causes of tinnitus. Complicating its diagnosis and treatment, tinnitus has many other causes as well, including disorders of the heart/circulatory system, stress, hormone changes, and as a side effect of medications, smoking, or too much salt or caffeine. Sometimes the cause of tinnitus is unknown.

So what can a person experiencing tinnitus do about this annoying and on occasion even incapacitating condition? The first step in managing tinnitus is to get an evaluation. See your primary care doctor to determine if a medical condition or medication may be causing or aggravating the ringing. If needed, you will be referred for a complete audiological and otological examination to establish if there is an underlying ear or hearing problem. Although there often is no cure for long-term tinnitus, there are treatments and therapies that can help people cope with the annoyance and frustration of this condition. And because noise is a leading cause, remember that you can reduce the likelihood of developing or worsening tinnitus by limiting time spent around loud noise and wearing well-fitted and effective hearing protectors when needed.

## For more information/resources:

- National Institute on Deafness and Other Communication Disorders Tinnitus Topic Page
- American Tinnitus Association (ATA)
- ATA "Managing your tinnitus"
- Department of Defense Hearing Center of Excellence Tinnitus Topic Page
- Griest, et al. (2018). Risk factors associated with tinnitus and hearing loss in current and recently separated service members across military branches. Annual conference of the National Hearing Conservation Association. Orlando, February 2018.

NIOSH Press Release (2016). Putting an Ear to the Ground: NIOSH Study looks at Prevalence of Hearing Difficulty and Tinnitus among Workers