



Noise-Induced Hearing Loss

Safety Talk

Our hearing is precious to us. Once we diminish or lose our hearing, we can never fully recover it. Both on the job and at home there are many sources of noise which can damage our hearing. These sounds can damage sensitive structures in the inner ear and cause noise-induced hearing loss (NIHL). Approximately 26 million Americans have some type of noise-induced hearing loss. According to the CDC, over 22 million workers are exposed to hazardous noise levels at work each year.

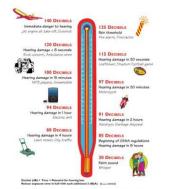
How the Ear is Damaged from Noise

Hearing depends on a series of events that change sound waves in the air into electrical signals. Our auditory nerve then carries these signals to the brain through a complex series of steps. To breakdown the process simply- the sound waves travel through the ear and eventually move hair cells up and down in the ear that cause

channels to open up. This allows chemicals to rush into a cell that creates an electrical

signal that translates the sound into something we can understand.





Most noise-induced hearing loss is caused by the damage and eventual death of these hair cells. Unlike bird and amphibian hair cells, human hair cells don't grow back. They are gone for good.

Signs and Symptoms of Noise Induced Hearing Loss (source www.ncid.com)

Most damage due to noise is gradual and over time. Because of this, many people ignore or do not realize that their hearing is being damaged. It becomes noticeable to an individual when it is harder to understand someone talking or needing to turn the TV volume up. Damage can also occur from a single loud impulse noise such as a gunshot or explosion. These types of noises can rupture the eardrum or damage the bones in the middle ear. This kind of NIHL can be immediate and permanent. Loud noise exposure can also cause tinnitus—a ringing, buzzing, or roaring in the ears or head. Tinnitus may subside over time, but can sometimes continue constantly or occasionally throughout a person's life. Hearing loss and tinnitus can occur in one or both ears. Sometimes temporary hearing loss can subside however the event that caused it can still cause long term damage to your hearing.

HAVING TROUBLE ACCESSING YOUR PAYSTUBS?

REACH OUT:
MICHELE LEWIS
757-222-5981
MLEWIS@AITMARINE.COM

Hearing Damage Prevention

- The best way to protect yourself is to eliminate the exposure to the noise. That can be achieved through removing yourself from the area the noise is in or eliminating the excessive noise altogether.
- Engineering controls are the second best choice in protection from noise. Sound barriers, enclosures, and noise dampening systems are examples of engineering controls that will bring down the level of noise in an area.
- Administrative controls such as training on using hearing protection, job rotation, breaks, and routine maintenance programs are some ways that protect workers from being exposed to hazardous noise.
- PPE is the last line of defense. It is important to know the levels of noise that remain after applying the other techniques mentioned above. For noises between 85 decibels and 100 decibels on an 8 hour TWA, <u>ear plugs</u> will be enough to protect you if worn correctly. Over 100 decibels then double hearing protection is needed, an example is earplugs and ear muffs.

HOW CAN YOU PREVENT NOISE-INDUCED HEARING LOSS (NIHL)? TURN IT DOWN PROTECT YOUR EARS WALK AWAY LIMIT EXCESSIVE SOUNDS

Summary

Once you damage your hearing, you cannot get it back. While hearing aids have advanced greatly, they still cannot replace your hearing to peak levels that it was at before the damage occurred. Understand the levels of noise you are exposed to and protect yourself from hearing loss.

Employee of the Month Maverick Stevens



Maverick recently joined AIT who is devoted, hardworking General Laborer. His versatility has contributed to an increase in overall production at NASSCO between the three Naval Vessels. His dedication has led to over 300 linear feet of surface preparation, rigging support of two Shipboard Fan Motors, fitting and fabrication of a vent plenum and drain piping. Maverick's continue motivation and development has molded him into a valuable asset to his peers and the company. On behalf of AIT, we would like to extend a big thank you for the job that you do!

HEADPHONES AND SPEAKERS ON THE WORKSITE ARE NOT ALLOWED!



Listening to music may produce a safety hazard by masking environmental sounds that need to be heard, especially on active work sites where attention to moving equipment, heavy machinery, vehicle traffic, and safety warning signals may be compromised. It is also a violation of AIT's Safety Violation Disciplinary Action Plan.