Noise – Hear Today Gone Tomorrow Meeting Kit

What's At Stake

Hearing loss can happen so gradually that it can go unnoticed until it's too late. Then, even a hearing aid may not help. Most hearing loss is due to noise over a lifetime. While loss of hearing may result from a single exposure to a noise or explosion, such traumatic losses are rare. Most cases of hearing loss begin gradually in frequencies slightly above that of human speech and then subtly spread to lower and higher frequencies.

What's the Danger

UNDERSTAND HEARING DAMAGE

Hearing loss can occur when exposed to 85 decibels of noise averaged over 8 hours. Normal conversations typically occur at 60 decibels, well below the hearing loss threshold. Remember those headphones used as speakers? That music was probably playing at full volume, which can often register as 105 decibels. For every 3 decibel increase past 85 decibels, hearing loss can occur in half the amount of time. So it only takes 4 hours of exposure to 88 decibels for hearing loss to occur, and 2 hours of exposure to 91 decibels. Once noise levels exceed 100 decibels, a person can suffer hearing damage in as little as 15 minutes. The louder the noise, the faster hearing loss occurs.

HOW TO PROTECT YOURSELF

WHEN THE WORKPLACE IS TOO LOUD

The amount of noise and the duration of exposure determine the ability to damage hearing you tell if work is too loud and may be causing hearing damage? It's too loud if:

- You have to raise your voice to be heard.
- You can’t hear someone less than two feet away without shouting.
- Speech around you sounds muffled or dull after you leave a noisy area.
- You have ringing in your ears after exposure to noise.

WORKPLACE NOISE LEVELS

Where do the tools and environments where we work fit into this picture?

- Air compressors from 3 feet away register 92 decibels, which would take less than 2 hours to cause hearing loss
- Powered drills register 98 decibels, which would cause damage after 30 minutes
- Typical factories often register at 100 decibels – that’s 15 minutes of exposure
- Powered saws can reach 110 decibels from 3 feet away, which could cause permanent hearing loss in under 2 minutes

In short, if workers are exposed to these noise levels without protection, then hearing loss is very likely. The only way to know the exact noise levels that workers are exposed to is to conduct noise monitoring using specialized equipment, though this is only required when exposures are at or above 85 decibels. Some indications that noise levels may be this high are if employees complain about the loudness of the noise, if there are signs suggesting that employees are losing their hearing, or if the noise levels make normal conversation difficult.

BEST STEPS TO CONTROL NOISE IN THE WORKPLACE

First, learn how to recognize when an area is too loud.

- If you have to shout to have a conversation with a person three feet or one metre away from you, the area is likely too loud and hearing protection should be worn.
- You hear a ringing or humming in your ears after you leave work that could last a few minutes or several hours, depending on the noise level.

- You experience temporary hearing loss when you leave work. Sounds are muffled or you may not be able to hear at all for a period of time; or you have to turn up the radio on the way home, or TV once you get home, to understand what is being said or hear the music.

Second, always wear hearing protection every time you are in a high-noise area. Your employer should recommend and provide options for hearing protection, including different styles of earplugs, canal caps and ear muffs. It is your responsibility to wear and care for your PPE according to the training provided by your employer.

Third, recognize the signs of hearing loss and speak to your supervisor immediately if you experience any of them.

- Difficulty hearing higher-pitched voices or sounds.
- Difficulty hearing and understanding what people are saying in places with a lot of background noise, like restaurants or parties, for example.
- In normal conversation, you hear someone speaking but the words seem muffled or you want a repeat.
- You have to turn up the TV or radio to hear as clearly as you used to.
- Ringing, roaring, hissing or buzzing in the ear, as well as ear pain, itching or irritation.
- Vertigo, or feeling as though you are spinning, could be a sign of hearing damage.

BEST PRACTICES TO AVOID NOISE HAZARDS

- Reduce the noise reaching your ears. Nothing can totally block sound.
- Electronic hearing protection devices permit conversations and warnings to reach the ear, but prevent harmful sound-pressure levels. Other electronic hearing protectors pick up and amplify desirable sounds. Some earmuffs or earplugs combine with communication systems for use in noisy areas.
- Earmuffs – filled with liquid or foam – come in various styles for function and comfort. Earmuffs are fitted with a

headband made of metal or plastic. Some headbands can be folded or put around the front or back of the neck in various positions. Cooling pads are even available for earmuffs worn in hot work environments.

- Earplugs can be pre-molded to fit all wearers, or custom molded to fit exactly. They can be made expandable or non-expandable, and may be either reusable or disposable. Earplugs are available on cords you can wear around your neck so you can take earplugs out and put them in easily.
- Ensure your hearing protection is comfortable, fits properly and is compatible with other personal protective equipment (PPE) such as a hardhat.
- Check out specially-designed hearing protectors made to wear with other PPE. They attach to slots and brackets on hardhats or helmets for combined hearing, head and face protection.
- Cooperate with your workplace’s hearing protection program. Take the regular hearing tests and wear recommended personal protective equipment. Take good care of your PPE by cleaning it according to the manufacturer’s recommendations and replacing it as needed.

FINAL WORD

Hearing loss not only affects employment but life aways from employment. Specifically, hearing loss disrupts job performance, causes stress related problems, increases the heart rate including fatigue, irritability, and tension.