# Noise at Work and Home Meeting Kit



# Noise at Work and Home Safety Talk

It's important to protect yourself against noise hazards. Medicine or surgery cannot reverse noise-induced hearing loss. A hearing aid can't completely restore hearing either. Once we diminish or lose our hearing we can never fully recover it.

#### NOISE FROM WORK

Damage to our hearing can happen over a short time or over a longer extended period of time depending on the source of the sound. Short loud bursts of noise such as explosions or gun shots can damage our ears in a short time of being exposed. Less hazardous noise such as woodworking equipment, heavy equipment, and machinery can lead to damage over an extended amount of time being exposed to the noise.

## **NOISE FROM HOME**

There are many people who are overexposed at home to noise. Hobbies may also be causing hearing loss. Activities such as listening to loud music, shooting guns, woodworking, using a lawn mower, riding a dirt bike, etc. will damage your hearing overtime.

#### OSHA/NIOSH RECOMMENDATIONS

OSHA and NIOSH recommend to stay under levels of 85 decibels over an 8-hour time weighted average (TWA).

# Average decibel ratings of some sounds:

- Normal conversation- 60 decibels.
- Heavy city traffic- 85 decibels
- Motorcycles- 95 decibels
- Circular saw- 100-105 decibels
- An MP3 player at maximum volume- 105 decibels
- Sirens- 120 decibels
- Firecrackers and firearms- 150 decibels

### **HEARING DAMAGE PREVENTION**

The best way to protect yourself is to **eliminate the exposure**. 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 of equipment 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, ear plugs 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.

Your distance from the source of the sound and the length of time you are exposed to the sound are also important factors in protecting your hearing. A good rule of thumb is to avoid sounds that are too loud, too close, or last too long.

#### **HEARING PROTECTIVE DEVICES**

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.

#### PROTECTION TIPS FOR WORKERS

When noise cannot be reduced to a safe level, your employer must provide hearing protection.

- Ear plugs. These work by sealing the ear canal from the source of noise.
- Ear plugs are easy to use, but must be inserted correctly to provide the best protection.
- Some are designed for one-time only use and others are designed for repeated use.
- Foam ear plugs are designed to be worn only once and thrown away after use.
- Many plastic ear plugs are designed to be re-used.
- Canal caps. These are a variation of ear plugs designed to fit over the top of the ear canal.
- Some people prefer canal caps because they aren't inserted into the ear canal and are more comfortable.
- Canal caps don't provide as much protection as ear plugs.
- Ear muffs. Ear muffs can last a long time if properly cared for and are generally easier to fit and wear.
- They work by sealing the entire ear with a cushioned cup.
- Ear muffs can also be worn over ear plugs to provide extra protection.

# FINAL WORD

Protect your hearing. Once it goes, it is gone. It is possible to regain some of your hearing back artificially through hearing aids, but it will never be the same as it was before it was damaged. Take hearing protection seriously.