

## NOISE – HEAR TODAY GONE TOMORROW

Most workers take good hearing for granted. Hearing loss can happen so gradually that it can go unnoticed until it's too late. Then, even a hearing aid may not help. Some assume hearing loss is the unavoidable result of getting older, yet 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. Hearing loss can disrupt job performance, cause stress-related problems, increased heart rate, fatigue, irritability, tension and lead to unnecessary accidents or injuries on the job.

The workplace can be very noisy. Both the amount of noise and the duration of exposure determine the ability to damage hearing. Workers may be exposed to noise from many sources: equipment, vehicles, or tools, to name a few. Any of these things can damage hearing when exposure accumulates over extended periods of time. How can you tell if work is too loud and may be causing hearing damage?

### It's too loud if:

- You must 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.

### What can employers do to prevent their workers from developing hearing problems?

Good planning can prevent problems caused by excessive noise exposure. Noise reduced at its source should be the first consideration. Employers should invest in noise-controlled equipment. When purchasing, employers can ask vendors if there is a "quiet" model or a noise-reducing option, such as enclosed or acoustically lined vehicular cabs and equipment. Work schedules can be adjusted so that exposure to high noise levels does not occur for the entire workday. Equally important is the use of personal protection devices, such as ear plugs and earmuffs. Employers should provide training on the protection devices available and the effects of noise on hearing if workers do not use the protection. Training

should include the fit, use, and care of any hearing protection device.

Employers can't always prevent noise, but they can lessen the chance of workers experiencing hearing loss enforcing the use of proper hearing protection.

### HEARING PROTECTION DEVICES

Hearing protection devices (HPD) such as earmuffs and earplugs can be an effective measure to protect hearing in noisy work environments. However, hearing protection devices are only effective if they are properly sized and carefully fitted into or over the ear.

Common types of hearing protection devices:

- **Formable earplugs** made of expandable foam. One size fits most people.
- **Pre-molded earplugs** made from flexible plastics.
- **Semi-aural devices, or canal caps**, consisting of flexible tips on a lightweight headband.
- **Earmuffs** having rigid cups with soft plastic cushions that seal around the ears.

The formable foam earplug must be narrowed and compressed by rolling before it is inserted into the ear canal. Once inserted, the earplug expands to fill the ear canal and to reduce noise further into the ear. If it is inserted incorrectly, the foam earplug will provide much less protection against noise.

Employees may express concern about the potential for HPDs, particularly earplugs, to cause ear infections. Hands should be clean before rolling foam earplugs.

If feasible, disposable earplugs should be discarded after each use.

If reused, earplugs should be washed with warm water and soap and allowed to dry thoroughly before reuse.

Earmuffs are less likely than earplugs to contribute to ear infections. However, earmuff cushions should be periodically wiped or washed clean. Employers' and employees' working together to select HPDs increases the likelihood that HPDs are worn when needed to protect against hearing loss.