

SAFETY MEETING TOPIC: Noise-Induced Hearing Loss

Occupational noise-induced hearing loss, as opposed to occupational acoustic trauma, is hearing loss that develops slowly over a long period of time (several years) as the result of exposure to continuous or intermittent loud noise. Occupational acoustic trauma is a sudden change in hearing as a result of a single exposure to a sudden burst of sound, such as an explosive blast. The diagnosis of noise-induced hearing loss is made clinically by a medical professional and should include a study of the noise exposure history.

Characteristics

The principal characteristics of occupational noise-induced hearing loss are as follows:

- The rate of hearing loss due to chronic noise exposure is greatest during the first 10-15 years of exposure, and decreases as the hearing threshold increases. This is in contrast to age-related loss, which accelerates over time.
- Most scientific evidence indicates that previously noise-exposed ears are not more sensitive to future noise exposure and that hearing loss due to noise does not progress (in excess of what would be expected from the addition of age-related threshold shifts) once the exposure to noise is discontinued.

Ensuring a Good Fit:

Disposable Ear Plug Fitting Instructions

- Before fitting any ear plugs, make sure your hands are clean.
- Hold the earplug between your thumb and forefinger. Roll and compress the entire earplug to a small, crease-free cylinder. While still rolling, use your other hand to reach over your head and pull up and back on your outer ear. This straightens the ear canal, making way for a snug fit.
- Insert the earplug and hold for 20 to 30 seconds. This allows the earplug to expand and fill your ear canal.
- Test the fit. In a noisy environment, and with earplugs inserted, cut both hands over your ears and release. You should **not** notice a significant difference in the noise level. If the noise seems to lessen when your hands are cupped over your ears, your earplugs are probably not fitted properly. Remove and refit following instructions.
- Always remove earplugs slowly, twisting them to break the seal. If you remove them too quickly, you could damage your eardrum.
- Foam earplugs are disposable and not intended for re-use.

Ear Muff Fitting Instructions

- Earmuffs offer excellent protection if the cups are fitted and adjusted properly. Your ears should be completely enclosed by the ear cups.
- Adjust the cups up or down to fit the headband securely at the crown of our head. The best performance is obtained when the cushions form a tight seal against your head.
- Test the fit. In a noisy environment, place the palms of you hands on both cups and push the cushions towards your head and release. You should not notice a significant difference in the noise level. If the noise seems to lessen when you press the cups, you earmuff is probably not fitted properly.
- Regularly check cushions for wear and clean the often with a damp cloth. Check them for wear. If the cushions become hard, damaged or deteriorate, they should be replaced promptly.

Signature of Employees in Attendance: Date: _____

Provided by: Hellman & Associates, Inc., www.ehscompliance.com, 303-384-9828

The information provided is intended for instructional use only and may not reflect the complete compliance requirements as outlined by OSHA or other regulatory agencies.