7 - Hearing Protection: Safety Training

EH&S – ▮▮▮

Goals: This safety session should teach you to:
    A. Understand the hazards of high noise levels.
    B. Know how to select, use, and maintain hearing protectors.

OSHA Regulations: <u>29 CFR 1910.95</u>

1. High Noise Levels Can Damage Hearing and Cause Safety Problems
    A. Loud noise, especially if it's shrill, can cause:
        1. Temporary or permanent hearing loss
        2. Tinnitus, a constant or periodic ringing or roaring in the ears
        3. Inability to hear signals and safety warnings (interferes with communication)
        4. Stress, poor concentration, headaches, etc. from straining to hear.

2. OSHA Requires Employers to Protect Employees from High Noise Levels
    A. Employers must measure workplace noise levels. If 8-hour time-weighted average exposures are 85 decibels (dB) or more, a Hearing Conservation Plan is needed.
        1. A dishwasher is 65 dB; power sander, 85; jackhammer 110; jet engine, 140.
    B. Employers with Hearing Conservation Plans must:
        1. Monitor noise levels and report results to employees
        2. Test employee hearing to set a baseline and identify any losses over time
        3. Try engineering out workplace noise
        4. Provide employees still exposed to high noise levels with hearing protection devices and training on how to select, use, and care for them.

3. Cooperate With Efforts to Reduce Workplace Noise Exposure
    A. These efforts include:
    B. Placing noise machinery or operations in separate areas
    C. Lubricating and maintaining equipment to eliminate rattles and squeaks
    D. Replacing worn or loose machine parts
    E. Mounting machines on rubber to reduce vibration
    F. Choosing quieter machines when replacements are needed
    G. Installing sound barriers around noisy equipment
    H. Using sound-absorbing pads, ceiling materials, etc
    I. Administrative controls, such as reducing the time an individual is exposed to high noise levels.

4. Hearing Protection Devices Cover or Go Into the Ears to Block Noise
   A. Never use cotton, stereo headsets, or other makeshift hearing protectors. They don't protect your ears from noise. Use one of the following:
       1. <u>Earplugs</u> are inserted in the ear canal to seal noise out. (Note: Frequently, plugs are inserted ineffectively or incorrectly.) They may be premolded or custom-molded reusables, or one-use or one-week-use disposables.
       2. <u>Earmuffs</u> are the best protectors. They have a headband with cushioned plastic cups that cover each ear. They may feel bulky or uncomfortable in hot weather. In tight quarters, they can be an added problem.
       3. <u>Canal caps</u> cover and seal the ear canal entrance with soft flexible pads on a lightweight headband. Though comfortable, they provide the least protection.
       4. <u>Earmuffs plus earplugs</u> may be needed in some high-noise areas.

5. Inspect and Care for Hearing Protection Devices
   A. Inspect hearing protectors before each use. Report and don't use:
       1. Earmuffs or canal cups that are loose, cracked, or don't seal well
       2. Earplugs that are cracked, misshapen, or hard and inflexible
   B. Wash hands thoroughly before inserting or putting on hearing protectors
   C. Clean hearing protection devices regularly, following manufacturers' instructions.
       1. Warm, soapy water is often recommended.
       2. Don't use alcohol, acetone, or other chemicals.
   D. Store hearing protection devices where they'll stay clean and dry.
       1. Don't squish. Doing so will affect fit.

6. Be Aware of and report Hearing Problems
   A. Noise or ringing in the ears
   B. Trouble hearing voices or high or soft sounds
   C. Needing TV or radio volume so high that others complain

7. Wear Hearing Protection for Off-the-Job Noise Exposure
   A. Power tools, chain saws, lawn mowers, garden tractors
   B. Hunting, shooting
   C. Motorcycles, snowmobiles, rock concerts, car and motorcycle races.

<u>Summation: Always Use Hearing Protection in High-Noise Situations</u>

Though they may seem uncomfortable at first, hearing protection devices can help you protect one of your most important senses.