SUPERVISOR INSTRUCTIONS:
- Use toolbox trainings to spark safety discussions during monthly meetings with employees
- Submit the employee sign-in sheet to your designated administrative assistant/training coordinator as a record of training

Noise and vibration are fluctuations in the pressure of the ear. The term noise describes unwanted sound. Every year, approximately 30 million people in the United States are exposed to hazardous noise in their workplace. Noise-related hearing loss has been listed as one of the most prevalent occupational health concerns for more than 25 years. Since 2004, the Bureau of Labor Statistics has reported that nearly 125,000 workers have suffered significant, permanent hearing loss. In 2009 alone, more than 21,000 cases of hearing loss were reported.

**Hearing loss can be permanent!**

Exposure to high noise levels can cause permanent hearing loss that neither surgery nor a hearing aid can correct. Even short term exposure to high noise levels can cause temporary changes in your hearing such as a stuffy feeling in your ears or ringing in your ears. These short term effects may eventually go away after leaving the noisy area, but repeated exposures can lead to permanent ringing of the ears (tinnitus) and/or hearing loss.

Loud noise can also create physical and mental stress, reduce productivity, interfere with communication and concentration, and contribute to workplace accidents and injuries by making it difficult to hear warning signals or instructions.

**Is your area too noisy?**

Noise is measured in units of sound pressure levels called decibels using an A-weighted scale (dBA). The A-weighted scale closely matches the perception of loudness by the human ear. OSHA set a limit on noise at 90 dBA over an 8-hour work day or a one-time peak limit of 140 dBA. Signs that noise may be a problem include:

- You hear ringing or humming in your ears when you leave work.
- You have to shout to be heard by a coworker an arm’s length away.
- You experience temporary hearing loss when you leave work.
Although OSHA sets a limit of 90 dBA over an 8-hour day, OSHA requires employers to implement a Hearing Conservation Program once the 8-hour noise level reaches 85 dBA. The program requires the following:

- Employees be notified of the high noise levels
- Annual audiometric testing must be provided
- Employers must provide hearing protection to the employee free of charge
- A monitoring program must be developed
- An annual training program must be developed

Noise controls are the first line of defense against excessive noise exposure. The reduction of even a few decibels can reduce the hazard to hearing, improve communication, and reduce noise-related annoyances. The following are simple ways to reduce noise:

- Choose low-noise tools and machinery.
- Maintain and lubricate machinery and equipment.
- Place a barrier between the noise source and employee, where possible.
- Enclose or isolate the noise source, where possible.
- Operate noisy machinery during shifts when fewer people will be exposed.
- Limit the amount of time a person spends at a noise source.
- Provide a quiet area where employees can get relief from noisy areas.
- Restrict worker presence to a suitable distance away from noisy equipment.
- Use proper hearing protection devices such as earmuffs and earplugs when engineering and administrative controls cannot reduce the noise.

Remember: the effects of hearing loss can be profound. Hearing loss can interfere with your ability to enjoy socializing with friends, playing with your children or grandchildren, or participating in other activities you enjoy, which can lead to psychological and social isolation. At Emory, anyone who works in a high noise area needs Noise training. For more information, contact Kelly Young at 404-727-3686 or kelly.young@emory.edu.

REMEMBER: HINDSIGHT EXPLAINS THE INJURY THAT FORESIGHT WOULD HAVE PREVENTED
1. **True or False:** As long as I can hear again a few hours after I’m exposed to a loud noise, my hearing will be fine.

   **Correct Answer:** False. *Repeated short term hearing loss can lead to permanent hearing loss.*

2. What are the signs that you are being exposed to too much noise in the workplace?
   a. You hear ringing or humming in your ears when you leave work.
   b. You have to shout to be heard by a coworker an arm’s length away.
   c. You experience temporary hearing loss when you leave work.
   d. Your ears begin to itch.

   **Correct Answer:** a., b., and c. *Itching ears is not a sign of high noise exposure.*

3. **True or False:** The following are ways to reduce noise exposure in your area: choose low-noise tools and machinery, place a barrier between the loud noise and the person, use proper hearing protection.

   **Correct Answer:** True