

### SUPERVISOR INSTRUCTIONS:

- Use toolbox trainings to encourage safety/environmental discussions during monthly meetings with employees.
- Campus Services' employees should maintain the employee sign-in sheet in their department's safety/environmental compliance binder as a record of training. All other groups should maintain a record of training in accordance with their Division's training procedures.

ccording to the National Institute for Occupational Safety and Health (NIOSH), 30 million workers are exposed to hazardous noise every day, ranging from sounds of a power lawnmower to shots fired from a shotgun. This noise can cause severe damage to the ear and produce permanent hearing loss. Noise-induced hearing loss is the number one diagnosed occupational disease.

People working in industrial settings are not the only ones that need to worry. As a matter of fact, you may be exposed to several noise sources daily that can affect your hearing if exposed long enough. One-third of hearing loss is due to loud noises, a loud workplace environment (machinery) or loud recreational equipment (iPods or MP3 players).



### What is Noise?

Noise is unwanted sound by the listener. Sound travels through the air in the form of waves and is measured in two ways – intensity and frequency. Intensity is the loudness of sound, and frequency is the pitch of sound (meaning how high or low a sound is). The decibel (dB) is the unit used to measure the intensity of a sound.



### **Decibel Rating of Some Common Noises**

## **OSHA Requirements for Hearing Protectors**

- Hearing protectors must be made available to all workers exposed to noise at or above 85 dBA.
- Hearing protectors must be worn by all workers exposed to noise levels at or above 90 dBA.

### Signs of Hearing Loss

- Words are difficult to understand when having a conversation.
- Children and women's voices are difficult to understand.
- The tendency to favor one ear over the other.
- A ringing sensation exists in one or both ears.
- Social occasions that once were enjoyable are now uncomfortable to attend.
- The need to have people repeat themselves constantly.
- Phone conversations are hard to understand.

## **Diagnosing Hearing Loss**

How can you tell if your ears have been affected by noise? The only way to know if your hearing has been affected is to have an audiometric test performed. An audiometric test measures a person's hearing over time and detects any changes that may have occurred. Results of audiometric tests are used to diagnose hearing loss or diseases of the ear. A hearing test will tell you if your ears have been affected by noise. Also, if you wear hearing protectors, the test results will tell you if the protectors are doing their job.

# **Hearing Loss Prevention**

# Noise induced hearing loss is 100% preventable, but once it strikes, the damage is irreversible and permanent. There are several ways to prevent damage to your ears in the workplace when you may be exposed to loud noises. A cheap and easy way is to wear earplugs or earmuffs while working in loud areas. These items decrease the levels of power a noise brings to the eardrum. Hearing protection should be worn on or off the job whenever and wherever the level of noise is greater than 85 decibels.

### **Questions for Discussion**

- 1. True or False. Noise induced hearing loss are temporary and reversible. **False:** Once hearing loss occurs, the damage is irreversible and permanent.
- 2. True or False. Decibel is a unit used to measure sound. **True:** Decibel is a unit used to measure sound
- 3. What will protect your hearing while working in loud areas?
  - A.) Ear plugs
  - B.) Ear Muffs
  - C.) Cotton balls or Headphones
  - D.) Both Ear Plugs and Ear muffs
  - **D** Wearing ear plugs and ear muffs are a cheap and easy way to protect your hearing.