PLEA
Hearing Conservation
Study Aid
How We Hear Sounds

- Tiny hairlike cells in cochlea respond to vibrations and are most sensitive to **LOUD** noise.
• The longer you are exposed to a damaging level (greater than 85 dBA), the greater will be the eventual hearing loss.
• Hearing protection is recommended at noise levels above 85dBA.
Health effects

- Acoustic trauma- a temporary or permanent hearing loss due to a sudden, intense noise.

- Temporary threshold shift- is a temporary loss in hearing sensitivity. Sensitivity will return to the pre-exposed level.

- Permanent threshold shift is a permanent loss in hearing sensitivity due to the destruction of sensory cells in the inner ear.

- Tinnitus describes the condition of "ringing in the ears"
Hearing Conservation Program

Key elements of an effective hearing conservation program include:

1. Noise Monitoring – Identification of ‘high noise’ areas.
2. Hearing Tests – Audiograms (to determine how well you hear)
4. Training and Communication
Rule of Thumb

When you feel the need to shout in order to be heard 3 feet away, the noise levels are probably 85 dB or more and hearing protectors are recommended.
Hearing Protection

- Personal Protective Equipment (hearing protective devices-HPD)
Key Employee Responsibilities

- Understand the need for hearing protection devices (HPDs).
- Wear HPDs as directed and seek replacements.
- Communicate problems to supervisors.
- Inspect and clean their personal hearing protectors.
Hearing Protection Devices (HPD)

Here are the two basic types of hearing protection devices you may use:

• **Earplugs**: Most earplugs are made of soft fiber or foam that conforms to fit the ear canal. They come as pre-molded or can be custom-molded to fit your ears.

• **Earmuffs**: Earmuffs are ear cushions and cups. In order to get a good seal, your entire ear must fit within the cups. Push aside or remove anything that may keep you from getting a good seal: hair, beard, hair clips, and earrings, for example. Glasses or goggles may affect the seal as well.
Remember……

• Hearing loss due to excessive noise is permanent and *cannot be cured*!

• You have the responsibility to protect it!!