Training Module: Protecting Against Noise

Objective: To know the effect of noise on hearing,and to practice proper protection against unsafe noise levels.

Trainer's Note: For this session, the trainer may want to demonstrate proper hearing protection by bringing earplugs and earmuffs to the session. Before the training, it may be helpful to purchase some of the types of earplugs shown below to give to each employee. This will allow the employees during the training to determine which they find most comfortable. Ask the employees to share some of the reasons they do not wear hearing protection. It will be important for the employees to understand that by protecting their hearing they have nothing to lose, but a lot to gain. Demonstrate to the audience that hearing protection does not make it more difficult to hear warning signals, machinery, or speech.

Background

The most common reason employees resist wearing ear protection is because they just don't think they need it. This is a frightening fact because hearing loss is gradual, and by the time it is realized, the ability to hear is not as good as before. It may be too late. Another reason individuals give for not wearing ear protection, is that they think the protection will be uncomfortable.

The following are several types of ear plugs which give good protection, are comfortable and easy to use:

Formable Plugs Plugs are spongy, soft compressed or shaped prior to insertion; expandable to provide a snug fit. These are disposable plugs and are not for reuse.

Premolded Plugs Plugs made of soft flexible material preformed to fit the ear. Must be fitted (sized) for each ear. These plugs are designed for reuse and must be washed after each use. They are good to use in cases when hearing protection is used on a regular basis.

Earmuffs Adjustable headband with soft cups and cushions that seal around the ear. Plugs may be worn under muffs for additional protection. Muffs may be more comfortable to wear over a longer period than plugs, but should not be worn with eyeglasses or any other obstruction that will reduce their effectiveness.

How noise can hurt you:

- Too much exposure to loud noise can result in stress, from constantly straining to listen and be heard.
- Noise can cause you to miss important safety instructions.
- Prolonged exposure to loud noise can result in permanent hearing loss.
- Even if you are exposed to loud noise for a short time, you may temporarily lose your hearing.

How to tell if noise is hurting you:

- You may have a problem if you hear ringing or other noises in your ears, have a hard time hearing people when they talk to you, or are unable to hear high pitched or soft sounds.
- If you experience any of these problems, tell your supervisor. You may need to have your hearing tested.

****Becoming accustomed to loud noise is a sign of gradual hearing loss****

Noise is defined as sounds people prefer not to hear. Noise is especially dangerous in the workplace because it interferes with communication and disrupts concentration. Sound is measured by decibels. Noise that is 85 decibels or greater can affect your hearing if you work around it more than eight hours a day.

For example:

Chicken Coop; Conversational Voices	60-70 Decibels
Tractor Idling; Conveyers	80 Decibels
Diesel Trucks; Power Lawn Mowers	95 Decibels
Power Tools	100 decibels

Protective covering or insertions in the ears reduces noise levels to the inner ear. It is important to use hearing protection when noise exposure cannot be controlled adequately by environmental changes, such as moving farther away from the noise. Hearing protection should be worn when noise levels exceed 85 decibels.

Good protection against noise depends on the seal between the surface of the skin and the surface of the hearing protector. Caution should be taken because protectors can become loose and create leaks. Having a leak does not protect the ears from harmful noise levels. Talking and even chewing can create a leak in the protection. Earplugs should be made of a soft material, such as neoprene. Earplugs should also be properly designed, well-fitted, and clean.

Not all materials can block the same amount of sound. The manufacturer indicates how much noise (in decibels) the hearing protection device blocks. This is called the noise reduction rating (NRR). For general use, look for a NRR of 25 or greater.

Review the Following Points

- Sound that exceeds 80 decibels can cause hearing loss.
- Good protection against noise depends on the seal between the surface of the skin and the surface of the ear protector.
- It is important that hearing protection is worn properly.
- If head noise or ringing noises occur in the ears at the end of the workday, the worker might be exposed to too much noise, and should take precautionary measures.

True or False Answer Key
1. F, 2. T, 3. T, 4. T, 5. T

THE OHIO STATE UNIVERSITY EXTENSION

Agricultural Tailgate Safety Training

Agricultural Safety Program

True or False **Name**_____

1. All hearing protection is the same, so there is no reason to worry about the NRR.	T	F
2. Protecting your hearing reduces noise level to the inner ear.	T	F
3. Hearing loss is gradual, and by the time it is realized the ability to hear has already diminished.	T	F
4. Most employees resist wearing ear plugs because they feel they are not needed.	T	F
5. Muffs and plugs can be worn together for additional protection.	T	F