



Farm Safety Association
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Tailgate-Hearing

Protect your hearing

Instructor: *The following script can be used to deliver a 15-minute training session to employees. You may wish to have some acoustical ear muffs and ear plugs on hand to demonstrate personal protective devices.*

The text emphasizes important points related to hearing loss prevention. It is suggested that you try to stay strictly on topic. Obviously, you will need to be prepared to answer questions.

POINTS TO EMPHASIZE:

- **Farmers tend to have greater hearing loss than people in other occupations.**
- **Use some form of hearing protection when working in a noisy environment.**
- **Develop an understanding of noise levels that could damage hearing.**

Be aware of the hazard

Farmers typically have greater hearing loss than people in other occupations. This is likely due to frequent and continuous exposure to loud noise produced by farm equipment, a barn full of squealing pigs, etc.

How is your hearing? Is it good as it was a year ago? A decline in the ability to hear is less obvious than losses of other senses. It occurs slowly, usually over a number of years. You may not even realize that your hearing is gradually decreasing, because there is no pain. Often, people who have experienced considerable hearing loss will tend to speak loudly.

Sound and noise

Sound is measured in logarithmic units of sound pressure, called decibels. Values range from zero to 140. The bottom end of the scale represents the acute threshold of human hearing. The noise level inside an acoustically insulated tractor cab is usually about 85 decibels. A shot gun blast produces 140 decibels of sound pressure energy.

Noise is defined as unwanted sound. Loud noises increase heart rate and energy use. This can contribute to fatigue, discomfort, and mental ease.

However, the primary effect of noise is loss of hearing. Abusing the ears with loud noises shifts the hearing threshold upward, so that a person can only hear louder sounds.

You might have experience this after working in a noisy environment for several hours. When you stop, your ears may ring, and your hearing doesn't seem normal. Hearing will usually return to normal overnight. However,

repeated exposure to excessively loud noises will eventually result in permanent hearing loss.

When noise exposure goes down, people often:

- Show fewer signs of stress.
- Have more energy.
- Experience less hearing loss.

How much is too much?

Health and safety experts suggest that 90 decibels is the maximum noise level that a person should be exposed to over the course of an 8-hour day. An uncabbed tractor, power mower, or snowmobile produces approximately 100 decibels, and safe exposure time is only two hours. Feeding time noise levels in livestock barns may be even higher.

Preserve this vital sense

Once damage to hearing has occurred, it is impossible to repair. Everyone should take steps to protect their hearing in the farm workplace.

If you are aware of the sources of noise, you can make better decisions about protecting your hearing. Some examples have already been cited. Charts are available that list sound levels produced by different types of equipment and in various working environments. More precise readings require use of a decibel meter.

When it comes to protecting your hearing, it is best to error on the side of caution. Following are the most basic precautions that all of us should take to prevent hearing loss in the workplace.

1. Limit the length of noise exposure time.
2. Stay as far away from noise sources as possible. Doubling the distance from the source reduces the sound pressure to one-fourth its level.
3. Use ear protection for *all* noisy jobs.

- rubber or plastic **ear plugs** fit into the ear canal and are effective noise suppressers. A snug fit is important.
- **acoustical ear muffs** provide the most effective protection against noise. They don't contribute to infection and discomfort as do ear plugs, which fit tightly and carry dirt to the ear canal. Ear muffs block more noise than plugs because they also cover the sound conducting bones around the ears.

Check your hearing

Your hearing ability can be checked by audiometric testing. Various organizations often set up testing booths at farm trade shows. Hospitals and audiologists will also conduct hearing tests.

It is a good idea to have your hearing assessed. The procedure will let you know whether or not you have already experienced significant hearing loss.

As pointed out earlier, noise-induced hearing loss can't be reversed. However, by recognizing the hazard and taking protective measures, you can guard against further loss of this precious sense.

Are there any questions?

Finally, let's take a moment to review some of the "Do's" and "Don'ts" related to hearing protection.

DO:

Wear hearing protection for all noisy jobs.

Get a proper fit!

Stay as far away from the source of noise as possible.

Have your hearing tested to establish a "base" line.

DON'T:

Refuse to wear ear protection because you find it uncomfortable.

Ignore any indications that your hearing has deteriorated.

Remain in a noisy environment for an extended period.

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