

Frequently Asked Questions

Q: What is the **best** hearing protection to use?

A: The short answer is: **the one that fits you and you are willing to wear.** You may find that you like different types of devices for different activities. It is important to test out several types for comfort and ease of use. Then, make sure they are available at the time you need them when working in noisy areas.

Q: I know I already have hearing loss. I don't have to be concerned about protecting my hearing now, do I?

A: Yes, you do. While you might not be able to hear *all* sounds well, you are probably able to hear some sounds: we want to protect what hearing ability you do have.

Q: I have hearing aids. Do I need to wear hearing protection?

A: If sound is loud (>85 dB), we recommend that someone who wears hearing aids NOT use them without additional hearing protection. Typically, this means putting muffs over your hearing aid. If you have digital hearing aids that cut off sound at certain level, your audiologist / hearing aid specialist can let you know how to set these up. Discuss a plan with your audiologist/hearing specialist.



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**HEARING LOSS
PREVENTION:
TIPS FOR
FARMERS**

US Farmers experience hearing loss at high rates. Much of this is noise-induced, wherein exposures to loud noises over time result in permanent, irreversible damage to the ear.

With a little bit of information, motivation, and follow through, farmers can take simple steps to prevent future hearing loss.

How Is Sound Level Measured?

Sound is reported in units of *decibel*, abbreviated as **dB**. Sometimes, you might see this expressed as dBA, which means that the measurement was taken with a filter (A-weighted) that presents the sound level in a way that represents how our ears “hear” sound across a wide range of frequencies.

Scientific studies use sound level meters or dosimeters to measure noise. However, the common smartphone can be used with a sound level or noise meter app to get an idea about the sound level in real time. Some apps are shown below, and there are many available to download onto a smartphone.

Example Smartphone Apps:



NIOSH Sound Level Meter

SPL Pro

Decibel X Pro

How Loud Is Too Loud?

Sound levels above 85 dB are known to cause both temporary and permanent hearing loss.

85 dB

How do you know if it is too loud (>85 dB)?

High Tech:

Use smartphone app

Low Tech:

If you have to “raise your voice” to be heard, it is probably louder than 85 dB

Typical Sound Levels on the Farm

The following guide illustrates the loudness (dB) of typical farm sounds. The “max safe time” listed is the maximum amount in a day that it is “safe” to work at that sound level without the use of hearing protection. Once exposures reach any of these times, exposures for the rest of the day need to be <85dB.

Noise Source	Sound Level, dB	Max Safe Time*
ATV, push mower	90	2.5 hr
Enclosed cab tractor or combine, grain auger	92	95 min
Air compressor	95	47 min
Pigs squealing, table saw, irrigation pump	100	15 min
Tractor, grain dryer, combine (no cab)	105	4 min
Chainsaw	115	<1 min

*Without hearing protection in use.

How Can I Protect My Hearing?

Whenever you are working in areas where sound levels are expected to be 85 dB or louder, **wear hearing protection.**

There are many types available. Here are some pros and cons about each type. Look for ones where the manufacturer provides you with a *noise reduction rating* (NRR) number – this means the device was designed to reduce your exposure. Depending on the type of protection used and fit of the device, a higher NRR gives you more protection.

Muffs

These fit over your head and surround your outer ears.



Pro: Reusable, easy to wear, some have Bluetooth capabilities, easily adjusts to fit

Con: Glasses may interfere, may be uncomfortable in the heat

Reusable Plugs

These are inserted into your ear and usually have a rigid center.



Pro: Reusable, low price, easy and safe to insert, even with dirty hands

Con: Lower protection, easy to lose, may need to obtain a specific size to provide real protection

Formable Plugs

These must be rolled between fingers before putting into ear canal.



Pro: Low price, good protection if fit and inserted properly

Con: Easy to lose, take more time to insert properly, need clean hands to insert, not generally reusable