

# Preventing Hearing Loss while Working in Agriculture

By Randall Bagley, Rhonda Miller Ph.D., and Katie Hewitt

Extension  
UtahStateUniversity



A common and harmful effect of working in agriculture is the potential loss of hearing. More than 50 million Americans have some degree of hearing loss, making it the third most common chronic physical condition in the U.S. This prevalence increases with age, affecting approximately 1 in 3 adults aged 65–74 and more than half of those over 75.<sup>1</sup> In Utah 35% of agricultural producers are over 65 years old<sup>2</sup>. Those who have hearing loss already should consider paying extra attention to their hearing in order to preserve the abilities they still have.

Tractors, combines, skid steers, augers, grain dryers, etc., can be very loud and can cause hearing loss over time if hearing is not protected. Noise levels are measured in decibels, and safe levels are usually 70 decibels or less. Agricultural machinery can often be much higher, and it is not uncommon for machinery to be over 110 decibels.<sup>2</sup> This chart shows how loud equipment and animals can be:

**Tractors and Combines:** 85 to 95 decibels

**Chainsaws and Skid Steers:** 100 to 110 decibels

**Grain Dryers and Augers:** 105 to 110 decibels

**Livestock Squeals and Grinders:** Up to 110 decibels

Repeated, long-term exposure to such sounds can cause hearing loss which is permanent. Using preventative measures can lessen hearing loss and the need to use hearing aids which are costly and sometimes annoying to use. The best treatment is to limit your exposure to loud noises and to protect your hearing by using noise limiting devices such as ear plugs, earmuffs or headphones.

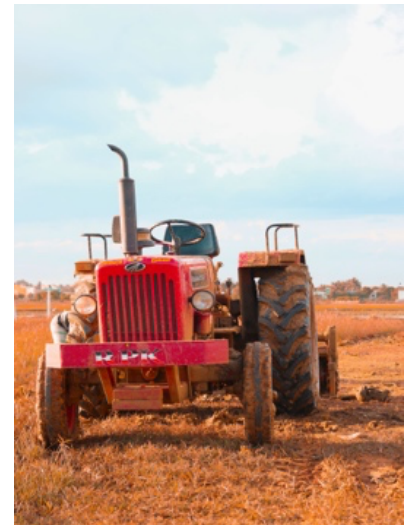


Photo courtesy of Pexels, Gothwan AGI

## Protective Hearing Equipment

**Earplugs (Disposable or Reusable):** Are usually the most effective and generally block 26 to 33 decibels. They require proper insertion to be effective, making them ideal for tasks where earmuffs might get in the way or for extended, all-day wear.<sup>3</sup>

**Earmuffs:** Block 20 to 30 decibels and are easy to take on and off when frequently moving in and out of noisy areas.<sup>4</sup>

**Double Protection:** Wearing both earplugs and earmuffs simultaneously adds an extra 3 to 5 decibels of protection, recommended when operating extremely loud machinery like grinders and grain augers.<sup>3</sup>

**Electronic hearing protection:** Features built-in microphones and digital circuitry that instantly compress loud, damaging noises (like gunshots or heavy machinery) to safe levels. Simultaneously, they amplify low-level ambient sounds, allowing you to easily maintain conversations and hear environmental cues without ever removing the device.<sup>3</sup>

### Tips to Reduce Noise on Farm

- Replace defective equipment, especially mufflers.
- Do not modify exhaust systems in ways that make them louder.
- Keep your machinery well maintained and lubricated properly.
- Enclose noisy machines with acoustic barriers. Inside of a tractor cab is much quieter than a tractor without a cab.<sup>3</sup>



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### Make Sure Employees Care for Their Hearing

- Train employees about hearing protection.
- Offer hearing tests to employees.
- Provide hearing protection.
- Require employees to use hearing protection in certain situations.<sup>3</sup>



Courtesy of TomasAdomatis, Freerange

Use common sense. If it seems loud, it is loud and you should find ways to prevent or lower the loudness of the machinery and to always protect your ears from the sound. Take breaks after extended periods of working with loud equipment and keep your equipment in good operating condition. Remember that hearing loss is usually irreversible.

### References

1. Hearing Loss Association of America <https://www.hearingloss.org/understanding-hearing-loss/hearing-loss-101/hearing-loss-by-the-numbers/>
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3. AgriSafe <https://www.agrisafe.org/healthcare/hearing-loss-prevention/>
4. Farm Bureau Financial Services <https://www.fbfs.com/learning-center/how-to-protect-your-farm-workers-hearing>