Hearing loss common in farming, can be prevented

Effects are cumulative, say K-State safety experts

By Maddy Rohr, K-state Research and Extension news service

MANHATTAN, Kan. — Natural hearing loss comes with age, but exposure to a loud environment -- common in agriculture -- can cause noise-induced hearing loss, said a pair of Kansas State University safety experts.

Loud machinery, equipment and even animals can play a role in hearing loss related to farming and ranching, said Brad Dirks, associate director of the K-State physician assistance program.

“Exposure hearing loss can be from a one-time experience like a loud concert or using a circular saw without protection,” Dirks said. “Cumulative (hearing loss) can happen over time, like working 40-50 years around machinery that push you above the decibel cutoff of 80-85.”

For reference, Dirks said people talk at about 60-70 decibels, a movie theater ranges from 75-105 decibels and a motorcycle produces 80-110 decibels.

“How close you are to the noise and how long you're exposed is very important,” Dirks said.

Tractors with a cab are more muffled compared to those without, and machinery in open spaces will dissipate noise compared to those in enclosed areas. Tractors normally produce 110-120 decibels.

Animals can also cause exposure hearing loss. Their effect is often overlooked when compared to machinery.

“Pigs squealing can be around 100 decibels, and so prolonged exposure to something like pigs … in a closed environment can be a problem,” said Tawnie Larson, project coordinator with the Carl and Melinda Helwig Department of Biological and Agricultural Engineering.

She also mentioned the noise from working cattle and calves that are calling back and forth with mothers as being a cause of hearing loss.

Dirks recommends using foam plugs in ears or ear muffs as a preventative measure.

“If you really want to protect your ears, do both; use the foam earplugs and then put the headphones or the earmuffs over and it becomes much more protective in those environments,” he said.
Ear plugs are convenient to keep in pockets and many headphones can be carried around the neck until needed.

“Producers, parents or managers need to think about providing everyone that's working with them and working on the farm or ranch to have something that can protect their ears,” Larson said.

Youth and babies are also at risk of induced hearing loss, and should be provided with appropriate protection at an early age.

“It's a cumulative thing, so the younger you start with that noise exposure, the more years you have to be exposed to high noise levels,” Dirks added.

Hearing safety is important because it is permanent, and not something that can be fixed.

“And you can get hearing assistive devices, hearing aids that will amplify (sound), but that vocal range and the high range of those sound waves is gone -- and once it's gone, it's gone. You can't bring them back,” Dirks said.

Dirks added that hearing loss can also come from an obstruction in the canal, such as wax or build up. Those can be solved by a doctor.

“(Hearing loss) is preventable,” Larson said. “You can turn it down, walk away, or you can wear hearing protection. (Protection) is pretty easy to find at any hardware store.”

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