

FARM NOISE & HEARING LOSS

Noise injury affects the hearing of up to two-thirds of the farming community. Noise injury occurs when thousands of tiny hair cells in the inner ear (cochlear), are damaged through excessive noise. These hair cells are needed to receive sound vibrations before transmitting them to the brain. Once destroyed, these hair cells are not replaced. The process of hearing loss through noise injury is painless, progressive and permanent - but it is also preventable.

SIGNS OF NOISE INJURY AND HEARING LOSS



Do you experience difficulty hearing:

- On the telephone
- Watching TV
- In meetings or during conversation at work
- When there is background noise

Do you have:

- Tinnitus (noises in the ears or head)?
- Family or friends suggest you have a hearing loss?

HEARING SCREENING AND SERVICES

Have you had a hearing screening test? If not, contact your Community Health Centre or the Yellow Pages* for hearing services in your area. Australian Hearing offers a free telephone hearing screening service through: Telscreen 1800 826 500 (Freecall). The National Relay Service www.relayservice.com.au provides telephone access services for the hearing impaired.

FARM NOISE EXPOSURE

The degree of noise injury will depend on the length of time exposed to noise - as well as how 'loud' the noise is, as measured in decibels (dB). For each 3 dB increase, the noise intensity is doubled. Intense noise, (eg. discharging firearm), can cause instant damage, but long periods exposed to tractors and other noise can also cause damage.



Are you (or were you) exposed to the following noise sources:

- Tractor (no cabin)
- Workshops tools
- Firearms
- Heavy machinery
- Chainsaw
- Tractor with cabin, (if it is getting older & noisier)
- Other recreational or occupational noise

**For each activity, do you ALWAYS wear hearing protection?
(ear muffs or ear plugs)**

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FARM NOISE LEVELS, EXPOSURE AND HEARING PROTECTION

Machinery or activity	Average noise levels in dB(A) at operators' ear	Typical time period before hearing damage (No hearing protection)	Min. protection level Ear muffs or ear plugs Class / (SLC80 rating)*
Firearms	140+ (C)	No Safe Exposure	Class 5 (26dB+)
Pig handling - suckers	109	1 - 2 mins	Class 5 (26dB+)
Chainsaws	106	3 mins	Class 5 (26dB+)
Irrigation pumps	(diesel) 100	15 mins	Class 4 (22-25dB)
Circular saws	99	18 mins	Class 3 (18-21dB)
Angle grinders	98	20 mins	Class 3 (18-21dB)
Augers	93	1 hr	Class 2 (14-17dB)
Tractors without cabins	92	1.5 hrs	Class 2 (14-17dB)
Ride-on lawn mowers	92	1.5 hrs	Class 2 (14-17dB)
Shearing	86	7 hrs	Class 1 (10-13dB)

OTHER CONSIDERATIONS

Use of radios in cabined machinery can increase noise in the cabin by up to 5dB. Whilst usually not a problem, this can be significant in older machinery, where the additional use of a radio can expose operators to average noise levels over 85dB(A). Risk of hearing damage can also be increased when working long days during peak seasons (14 hrs+).

Ear muffs or ear plugs are both suitable forms of hearing protection. However, they need to fit, be clean and seal well; Australian Standards Approved (AS) and compatible with other PPE (eg. hats, faceshields). It is also essential that they provide enough protection for the job.*

NOISE MANAGEMENT

Reduce farm noise and exposure where possible, FIRST, before using hearing protection.

Have you done any of the following to manage farm noise?

- Used a quieter alternative where possible (eg. cabined tractor vs. tractor with no cabin; or plastic vs metal chutes)
- Put up noise barriers or insulated walls to isolate workers from noise**
- Placed and maintained mufflers on motorised equipment
- Rearranged workshop layout to dissipate noise
- Regularly maintained equipment - engines, seals, brackets
- Limit time exposed to noise in any one day - rotate tasks
- Provided hearing protection & information on noise to workers, including safety signs for noisy areas



For farm safety checklists and other information on farm safety risks and controls, go to aghealth.sydney.edu.au or contact:

AgHealth Australia
PO Box 256 Moree NSW 2400
Ph. (02) 66882 1486 Email: aghealth@health.usyd.edu.au

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