



Preventing noise induced hearing loss



Studies show that people who work or live on farms have higher rates of hearing loss than the rest of the population. Farmers are frequently exposed to loud noises from machinery and animals, which can lead to hearing loss over time.

KEY POINTS

- > Keep noise levels below 85dB(A) on average and 140dB at peak.
- > If possible replace machinery that creates noise above these levels.
- > If you can't replace the machinery reduce exposure to it.
- > Wear hearing protection if noise levels are still too high.

To assess the major risks and how to control them, view page 2.

This information sheet outlines the main hazards regarding noise on the farm and provides recommendations on how to eliminate, isolate and minimise them. WorkSafe NZ accepts these recommendations in this guide as current industry good practice. They will help you comply with the Health and Safety at Work Act 2015 (HSWA).

See the full guide at www.saferfarms.org.nz/guides

Accepted Good Practice: If workers have to work in noisy environments where the eight-hour average exposure is over 85dB, or the peak noise level goes to 140 dB or over, persons conducting a business or undertaking (PCBUs) need to put a noise management plan in place to keep the noise levels down.

Suitable ways to manage noise are (from best to worst):

- > Eliminate (get rid of) the noise source.
- > Substitute noisy machinery with quieter machinery ('buying quiet').
- > Engineer controls: treat the noise at the source or in its transmission path (using sound dampeners or silencers, noise barriers and isolation).
- > Introduce noise control measures (training and education, job rotation, job redesign or designing rosters to reduce the number of workers exposed to noise).
- > Provide hearing protectors (earmuffs, earplugs).

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Hearing protectors are the last control and are the last resort when higher level control measures in the above list can't reduce noise exposure levels below legal limits. However, they may also be used as a temporary control while you investigate engineering controls.

When noise levels exceed, or are likely to exceed the legal limits, designate the area as a hearing protector area. Every person in a designated hearing protector area must wear hearing protectors.

The Law: Section 36(3)(g) of HSWA requires worker health and work conditions to be monitored to prevent injury/illness. The overarching duty of Section 36(1) requires a person conducting a business or undertaking (PCBU) to ensure the health and safety of workers so far as is reasonably practicable.

WorkSafe expects duty holders to make sure workers aren't exposed to peak noise levels of 140 dB or over.

PCBUs must get someone to do a detailed noise assessment to find out if these noise risks are significant. The person doing the detailed assessment has to be a competent person as defined by 'AS/NZS 1269: Occupational Noise Management'.

PCBUs won't necessarily meet their legal responsibilities if they only provide hearing protection without taking reasonably practicable steps to reduce noise exposure to a level below the stated levels.

HEALTH AND SAFETY LEGAL REQUIREMENTS

The primary duties of a PCBU include:

- > providing and maintaining a safe work environment, safe plant and structures and safe systems of work
- > providing any information, training, instruction or supervision that is necessary to protect everyone from the health and safety risks at work.

Workers must:

- > take reasonable care for their own health and safety and that their actions or inactions do not harm the health and safety of others
- > co-operate with any reasonable health and safety policy or procedure of the PCBU notified to them and comply with any reasonable instruction given by the PBCU (eg using personal protective equipment).

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TABLE OF RISKS	
Risk	Good Practice
NOISE CREATED BY FARMING MACHINERY	<ul style="list-style-type: none"> > Regularly maintain farm machinery. > When replacing machinery, 'buy quiet'.
TRACTORS	<ul style="list-style-type: none"> > Make sure the tractor cab is sound-proof. If it is not, or there is no cab, wear hearing protection. > Add other noise reducing materials to your tractor like soft foam, porous materials, fibreglass or rockwool. > Consider installing Isolation materials that stop vibrations passing from one point to another. Examples are rubber mounts, fibreglass, air cushions. > Using a radio in machinery with cabins increases the noise in the cabin by 1-3dB <ul style="list-style-type: none"> - Make sure the radio is not turned up too loud.
NOISE IN THE FARM DAIRY	<ul style="list-style-type: none"> > Design the milking shed, plant and equipment to reduce noise levels. > Use sound absorption panelling. > Enclose noisy plant and equipment. > Put the vacuum pump in a separate insulated enclosure. > Keep noisy equipment away from the working area or away from metal, especially corrugated iron and walls. > Turn exhausts away from working areas or dampen them. > Have a regular maintenance routine in line with the operating manual's recommendations. > Provide and use hearing protection when other solutions don't reduce noise exposure. > Put up signs to show where hearing protection is needed.
SHED AND PROCESS MACHINERY	<ul style="list-style-type: none"> > Try to reduce the noise at source. If you can't do this, use these controls: <ul style="list-style-type: none"> - Use acoustic enclosures and sound-insulating panels to stop the noise travelling. - Fit controls in separate rooms or away from the noise. - Fit silencers on exhausts. - Remove the need for operators to be present with the equipment running. - Maintain machinery properly. Worn parts and loose panels increase noise.
SHOOTING	<ul style="list-style-type: none"> > Shooters and people nearby must wear suitable hearing protectors.
OTOTOXIC DRUGS AND SOLVENTS	<ul style="list-style-type: none"> > Follow doctors' recommendations about noise exposure for anyone taking ototoxic drugs. Eliminate or reduce potential exposure to solvents, pesticides and asphyxiants.

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