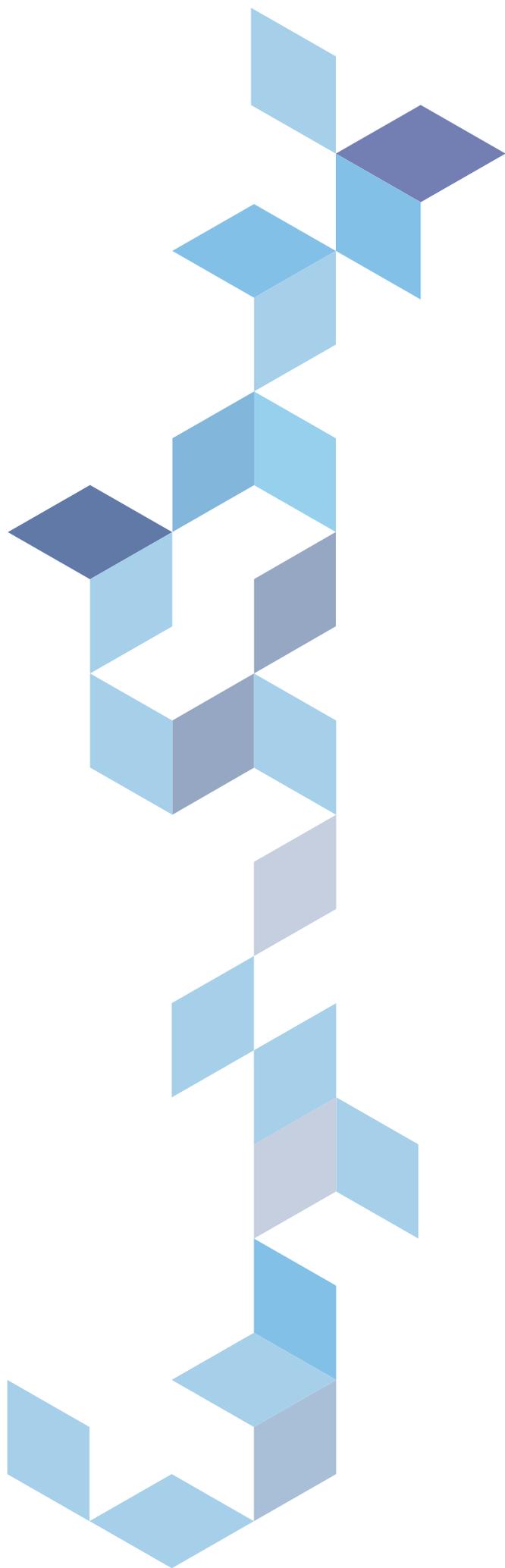


Farm hazards and solutions

Farm hazards and solutions

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Animal handling

As experienced farmers you would have a natural affinity with the animals you raise and understand their moods and behaviours. You would also understand the need to be alert at all times and keep your animals calm. Some good stock handlers have a natural ability, while for others the skills are generally gained by observation, on-the-job training and practice. Good stock handlers are calm, able to move stock with low-stress handling techniques and remain in control of the stock and themselves.

A lack of knowledge of animal behaviour could put a handler in a dangerous situation. Your workers need to be adequately trained and familiar with the temperament of your animals. Remember that new, young and inexperienced workers (and bystanders) are more likely to be injured, so ensure they are closely supervised and not put at risk of injury.

Safety solutions

Livestock handling facilities should be well designed and functional for both animal welfare and worker safety. Suggested simple solutions for safe animal handling include:

- planning ahead for any task
- separating people from animals as much as possible
- having water available in yards/shearing sheds to clean up during and after work
- having at least one person on the farm trained in administering first aid
- having a first aid kit close by
- talking about safety issues with family members, workers and other animal handlers.

Yards and loading areas

When designing and locating yards and loading areas, make sure that:

- crushes, cradles and sheds are suitable in size and strength for the animals being handled
- blind corners and sharp turns are avoided
- walkways and laneways are kept dry and non-slip
- gates, footholds and access ways are well positioned
- all equipment is maintained in good repair, gates are moving and hung, latches are working, hinges are greased
- equipment repairs are done well before any major husbandry practices are carried out
- there is good lighting
- mains power supplied to any outside area, including stock yards, is protected by either a fixed or portable residual current device (RCD).

Livestock handling

Check that livestock handlers:

- have a good working knowledge of animal behaviour and a positive attitude towards stock
- are competent in moving stock
- understand and use low-stress handling techniques
- remove distractions that affect the movement of stock from yards
- are aware of the animal's flight zone and point of balance
- understand the importance of handling small groups of livestock
- are competent in training stock for handling tasks
- maintain personal hygiene and are vaccinated against specific infectious diseases that can be spread by animal blood, saliva or urine (e.g. Leptospirosis, Q fever)
- wear protective clothing (e.g. long pants, boots)
- use appropriate animal-handling facilities and manual handling aids (e.g. cradles)
- have effective communication arrangements (mobile phone, UHF radio) in the event of an emergency.

Refer to Safe Work Australia's *Guide to managing risks in cattle handling* for more information.

safeworkaustralia.gov.au



Working with animals

Undesexed male animals can be aggressive. When putting rams, bulls or stallions in a paddock together, keep in mind that initial fighting can occur until a new social order is established.

Select livestock that demonstrate a preferred temperament (e.g. poll stock are usually quieter than horned stock).

Consider an animal's temperament before purchasing breeding or replacement stock.

Handling and weaning calves must be undertaken carefully. Some cows can be very protective towards their calf and react quickly if they think it is at risk.

When using gas knives for tailing lambs, ensure the gas cylinder is in test, has a safety fuse fitted and is secured and not able to overturn.

Dogs

When working with cattle in yards it is important that the dogs are kept well away. It's hard enough keeping your eyes peeled on the task at hand without a helpful dog entering the fray.

Horses

Many farms use horses for both recreational and work-related purposes. However, given their size, speed and unpredictability, in some circumstances horses can cause serious injury if they are not handled properly.

Workers who do not have sufficient knowledge, skills and experience with riding or handling horses are at greatest risk of injury. Inexperienced riders and handlers are particularly vulnerable, as they may not have developed their skills fully and lack the strength required to control a horse for riding or handling tasks.

Rider safety can be compromised through the use of damaged or incorrectly fitted riding equipment or tack.

Before assigning work to be undertaken on horseback, riders should be:

- assessed to determine if they are a beginner, a competent rider or somewhere in-between
- given a horse (selected by a qualified and experienced person) that matches their age, size, experience and riding ability.

Ensure bridles, bits, saddles and girths are kept in good repair and fit the horse comfortably. Saddles, stirrup leathers, stirrup irons, bridles and bits should be regularly checked, adjusted for fit and well maintained. Horse sweat can rot stitching and leather, so all tack should be kept clean and supple.

Wear riding boots, while sturdy closed boots or shoes should be worn by horse handlers and stable hands. Wear a correctly adjusted and fitted helmet and fitted, comfortable clothing and gloves.

Horses are easily frightened by vehicles and care should be taken when crossing or riding on a road. Fluorescent/reflective clothing is recommended when accessing roads and riding in poor light or low visibility conditions. Do not ride on roadways in the dark.

Other practices that need to be considered:

- Riders need to be careful when riding at pace close to cattle or other animals.
- Be aware of the surroundings and take care when riding under gate caps in stockyards or low branches.
- Take extra care when riding in slippery or boggy conditions.
- If a horse is likely to buck, it's best to saddle it and give it some exercise prior to mounting.
- If a horse bolts in an unconfined area, gradually circle the horse by applying pressure to one rein until the horse is under control.
- If a horse is behaving badly when ridden or handled on the ground (e.g. bucks, bolts, or rears), it is best to dismount (if riding) and have the horse assessed by a competent person to determine the cause and how to address the behaviour.
- Always remain alert and in a position of control while handling, riding or supervising a horse. Only adjust equipment from the ground.

Sheep

- Build yards on sloping ground for better drainage, with a design that encourages sheep to move freely.
- Avoid slippery surfaces and trip hazards in drafting/drenching races and forcing yards.
- Keep dust levels to a minimum by using sprinklers to water the yard surface prior to work.
- Provide shelter over drenching and drafting races.
- Treat rams with caution as they can be aggressive.
- When working rams in a race, ensure you are protected from those behind you. A well-positioned drop gate is useful to reduce the hazard.

Mustering/droving

- Ensure operators are competent in the use of off-road bikes.
- Ensure the brakes and suspensions on motorcycles are regularly maintained.
- Wear a helmet and appropriate personal protective equipment (PPE) and clothing to protect arms, legs and feet when riding motorcycles.
- If using horses, ensure the riders are competent.

Lamb marking and mulesing

- Always use a lamb-marking cradle to restrain the stock.
- Work out a system along the cradles so that operators are not in danger of being cut, sprayed with chemicals or suffering needle stick injury.
- Sterilise all knives, shears, needles and ear pliers, and ensure operators observe good hygiene practices.

Jetting

- Always wear appropriate clothing, including sunglasses.
- Ensure the Safety Data Sheets (SDS) are readily available for the chemicals used.
- If headache or any other discomfort is suffered after handling chemicals, seek medical advice and have appropriate tests done. Avoid using these chemicals in future, if possible.
- Ensure correct mixing rates are used.
- Keep equipment well maintained and check regularly to avoid leakage of chemicals.
- Do the work in the shade to reduce the risk of heat stress.

Plunge dipping

- Ensure sheep aren't thirsty prior to plunge dipping to reduce the risk of them attempting to drink the dipping chemical.
- Follow the manufacturer's recommendations for mixing the dipping fluid.
- Ensure that sheep are thoroughly wet by the plunge.
- Allow adequate time for the sheep to drain before returning them to the paddock.

Rotary spray dipping

- Follow the manufacturer's recommendations for mixing the dipping fluid.
- Ensure that the spray dip is operated at the correct pressure and the spray nozzles are clean and not obstructed.

Mustering

- Allow plenty of time and do not rush the stock.
- Use low-stress handling techniques.
- Use well-trained dogs to muster the mob. Dogs that bite should be muzzled.



Handling

- Put a drafting gate at the end of the handling race to save lifting. It is advisable to have several positions for 'drop gates' in the race to hold sheep that are to be drafted off.
- Sheep should have a clear, unobstructed view of the direction they are heading.
- Use wide raceways so that livestock can see the rest of the mob.
- Use wide gates to maintain good sheep flow, whenever possible.
- Ideally, sheep should take the same route and direction through the yards for all handling operations. Train sheep to move through gates with regular handling.
- Take sheep behaviour into account when positioning handling facilities (e.g. generally sheep will move towards the receiving yards in anticipation of escape or release to their paddock).
- Sheep move willingly around curves and corners into narrow races. They also move better on flat ground, rather than up or downhill. If the land slopes, movement should be across the slope rather than up or down. They will move readily towards light and avoid dark areas, shadows and dead ends.
- Ensure that the operator is in a safe position in drafting races.
- When drafting sheep, be aware that they may jump as they near the operator – keep arms and hands clear of the sheep.
- Use ramps with side rails and walkways to load sheep, where possible.
- Consider low-stress handling methods.

Shearing and crutching

- Empty the sheep out into the yards prior to placing them in the shed for shearing or crutching. Ensure floors in catching pens are kept dry where possible to prevent them from becoming slippery.
- Repair any loose grating and remove any nails or wire from the catching pens and shearing board. Where possible, the grating should run at right angles to the catching pen door. This reduces the muscular load to the shearer and makes it easier to drag sheep to the shearing floor.

- Raised board sheds must have a top guard rail fitted to the outer edge of the board to prevent a fall to a lower level.
- No chemical treatments should be carried out inside the shed.
- Use trolleys or hooks to move bales when stacking or loading them. Get assistance if needed.
- Properly guard belt drives and grinders.
- Keep dogs clear of the shearing board.
- RCDs must be fitted where power is provided to shearing plant and wool presses.
- Motor-driven wool presses must have the exhaust vented to the outside of the shed.
- Where back harnesses are used, the harness must be securely attached to the overhead support by a chain and a D-shackle. Bale clips, nails or binder twine are not permitted.

Pigs

- Use raceways that encourage the pigs to move freely, with no changes to lighting conditions.
- Sterilise needles, teeth cutters and ear pliers, and ensure that operators observe strict hygiene practices.
- Wear appropriate protective clothing and maintain good personal hygiene.
- Consider the age, sex, breed, weight, temperament and training of the animal.
- Wear hearing protection when feeding pigs.
- Prevent boars coming into contact with each other at all times. Boars are more aggressive during the mating season and extremely dangerous when fighting.
- De-tusk boars if their tusks get too big.
- Use an appropriate drafting board to assist the movement of boars.
- Where pigs need restraining, use crushes.
- Maintain raceways in a non-slippery state.

Animals – infectious diseases

Occupational animal diseases and infections transmitted between vertebrate animals and humans pose a risk to rural workers due to their day-to-day interaction with animals.

Transmission of these diseases is usually through the bodily fluids (e.g. blood, saliva, urine) or faeces of infected animals, or through other animals on the farm (e.g. cats, dogs, rodents). Contaminated items such as hay, wool, animal hair, hides and carcasses can also be a source of infection.

You can get these diseases from healthy or ill animals – an infected animal may not appear sick.

Safety solutions

Depending on the infectious diseases, control measures which may be applicable and implemented according to the hierarchy of control include (may be one or more):

- vaccination of at-risk workers (pre and post-exposure)
- biosecurity (animal disease control)
- good personal hygiene (thorough hand washing after handling animals, machinery or equipment and before handling food)
- administrative controls (safe work procedures, training, instruction and supervision)
- personal protective equipment (PPE) such as overalls, gloves, masks, waterproof boots, goggles and aprons.

Ways to minimise the risk of these diseases include:

- cleaning and disinfecting work spaces, floors and equipment (e.g. using sodium hypochlorite)
- covering cuts and abrasions with water-resistant dressings
- vaccinating livestock and pets (e.g. brucellosis in cattle)
- deworming pets
- controlling rodents
- isolating and treating sick animals
- using machinery (preferably cabined) to clear manure and feed waste build-up in sheds, yards and lane areas where animals are regularly kept or moved
- keeping pigs and cattle separated
- having good drainage in animal holding pens and farm areas, and hygienic disposal of animal effluent
- limiting unnecessary physical contact with animals (e.g. use mechanised crushes, good yard design, no children or bystanders in yards)
- using mesh floors in pig pens, where possible
- minimising contact with animal carcasses, blood, tissues and body fluids
- separating or isolating workers from physical contact with animal body fluids
- ensuring that potentially infectious material (e.g. placenta, contaminated litter) is disposed of in a safe and hygienic way, such as incineration
- displaying information about workplace risks
- training workers in the prevention, symptoms and treatment for particular diseases (e.g. abattoir workers should be taught to recognise infected carcasses)
- avoiding consumption of unpasteurised milk.

Reporting notifiable diseases

Doctors and medical laboratories are legally obliged to notify SA Health about anyone who is either suspected of or confirmed as having a notifiable condition. This information is dealt with confidentially by SA Health's Communicable Disease Control Branch (CDCB).

Doctors are encouraged to let you know that they will notify SA Health about your notifiable condition and that, as a result, CDCB may be in contact with you.

Infectious diseases

Infectious diseases include:

Australian Bat Lyssavirus (ABL)

- closely related to the rabies virus
- only vaccinated people trained in the care of bats should handle them.

Avian influenza (or Bird Flu)

- there are many types of influenza viruses that usually only infect birds, and very rarely an avian influenza virus can also infect people
- to date, there have been no reports of avian influenza in people in Australia, and the Australian Government has many measures in place to prevent its emergence here.

The Department of Agriculture and Water Resources provides specific information for the poultry industry.

agriculture.gov.au

Brucellosis

- a bacterial infection caused by a number of types of Brucella bacteria
- the bacteria can cause illness in cattle, pigs, goats, sheep, working dogs and domestic animals
- infection is spread by contact of breaks in the skin (open cuts or sores) with infected animal tissue or the ingestion of unpasteurised milk and dairy products from infected animals
- the bacteria can also be inhaled in dusty animal enclosures, abattoirs and laboratories
- vaccination for human protection is unavailable
- can be treated with specific antibiotics.

Hendra virus

- a sporadic disease of horses and humans that can cause very serious illness and death
- natural hosts are flying foxes which can pass on the virus to horses
- human infection results from close contact with infected horses and their blood, body fluids and tissues.

Hydatid disease

- caused by a small tapeworm parasite, Echinococcus granulosus
- humans become infected by eating parasite eggs, usually when there is hand-to-mouth transfer of eggs in dog faeces.

Influenza A viruses

- a cause of contagious respiratory infections in swine herds
- spread from infected to uninfected pigs primarily through contact with nasal discharges and aerosols from sneezing and coughing.

Leptospirosis (or Weils Disease)

- caused by bacteria and spread through contact with the urine of infected animals (wild and domestic) or water and soil contaminated with infected urine.
- can be treated with specific antibiotics
- vaccination for human protection is not available in Australia.

Orf

- caused by a parapox virus occurring primarily in sheep and goats
- can also infect humans through direct contact with infected animals or fomites (skin cells, hair, clothing) carrying the virus
- also known as contagious pustular dermatitis, infectious labial dermatitis, ecthyma contagiosum, thistle disease and scabby mouth.

Ovine Johnes disease

- an incurable wasting disease found in sheep
- when vaccinating sheep, follow the safety directions and use vaccinating guns with a safety tip on the needle
- any needle stick injury must be treated immediately by a medical practitioner
- is a notifiable disease and must be immediately reported if you suspect it is present in your sheep.

Psittacosis

- caused by the bacteria *Chlamydia psittaci*
- usually transmitted to humans from birds in the parrot family, but also found in other species including poultry, pigeons, canaries and sea birds.

Q fever

- spread from contact with animals, most commonly sheep, cattle, goats and some native wildlife
- infection usually occurs from inhaling aerosols and dust contaminated with animal urine, faeces, milk or birthing products
- infected animals generally show no signs of being sick
- some infected people have few symptoms, and others may develop a severe flu-like illness
- chronic infection can occur, which most commonly affects the heart (endocarditis)
- some people develop Q fever fatigue syndrome which can last for a long time
- infection in pregnant women can cause miscarriage and premature birth
- the bacteria that cause Q fever are very hardy and can survive in the environment for long periods of time
- can be treated with specific antibiotics
- vaccination for human protection is available
- at-risk workplaces (e.g. shearing) should implement a Q fever vaccination program to protect workers
- to find a vaccinator in your state, go to qfever.org.

Toxoplasmosis

- occurs worldwide
- human infection is common
- caused by a parasite, *Toxoplasmosis gondii*, which is usually found in cats, other mammals and birds.

Further information

For guidance on zoonoses, go to sahealth.sa.gov.au and/or health.gov.au

For instructions on reporting animal diseases go to the Primary Industries and Regions SA website. pir.sa.gov.au

Hazardous chemicals and dangerous substances

Most farmers handle, use and store hazardous chemicals for a range of activities. Hazardous chemicals are those that have been classified as such under the *Globally Harmonised System of Classification and Labelling of Chemicals* (GHS). Examples include fuels, liquid petroleum gas (LPG), pesticides, some herbicides, fertilisers, acids and industrial gases.

The GHS is a new internationally agreed system of chemical classification and hazard communication. It is published by the United Nations Organization and includes harmonised criteria for the classification of physical, health and environmental hazards.

This system has replaced the previous system used for classifying workplace chemicals and will standardise information on labels and Safety Data Sheets (SDS).

The effects of chronic exposure to chemicals, such as pesticides, are not always immediately obvious and sometimes do not appear for many years. Exposure through inhalation, direct skin contact or ingestion may cause skin irritation, cancers or respiratory sensitisation.

For more information on the GHS and to obtain a list of hazardous substances (maintained by Safe Work Australia) visit safeworkaustralia.gov.au.

Safety solutions

- For each chemical hazard identified, assess the likelihood and possible severity of an injury, harmful reaction or a hazardous incident occurring. This might include assessing procedures for decanting and using the chemicals, the effectiveness of protective equipment and how toxic the chemical is.
- Consider the best way to minimise or control these hazards, put control strategies in place and review the effectiveness of these strategies regularly.
- Ensure workers handling and using hazardous chemicals are trained to do so safely.
- Ensure workers have chemical accreditation if they are working unsupervised or are applying group 1 herbicides such as 2,4-D.

- Leave chemicals in their original containers which have the correct labelling of contents.
- Purchase chemicals in envirodrums with the micromatic coupling.
- Make sure personal protective equipment (PPE) is used, especially when mixing organophosphates that come in small drums.
- Use gloves when installing creosote posts and always wash your hands and clothes after handling creosote.

Safety Data Sheets

A hazardous chemical's label has advice on safe handling, storage and use, and information about the chemical's identity and toxicity.

For some agricultural and veterinary chemicals the label has been approved by the Australian Pesticides and Medicines Authority (APVMA) but may not include the GHS signal word or pictogram.

Chemical manufacturers are required to supply you with an SDS that details information on its health hazards, precautions for use, first aid, safe handling, storage and disposal. A register containing a list of all hazardous substances and your SDS must be maintained at your property and be accessible and understood by workers.

You can look up SDS (formerly called MSDS) online if you haven't got a legible copy from your supplier.

Keep a folder of all of your SDS handy near the chemical shed and chemical fill-up area.

You don't need SDS for household chemicals that you would buy at a hardware shop, such as standard size methylated spirits (unless you buy it in bulk).

Further information

Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace

Code of Practice: Labelling of Workplace Hazardous Chemicals

Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals

safework.sa.gov.au/cop

Licensing dangerous substances

Dangerous substances are regulated in South Australia, including the storage of LPG and Classes 3, 6 and 8 dangerous substances, above prescribed quantities. An applicant will be issued with a storage licence by SafeWork SA once it is satisfied that the mandatory requirements have been met.

The proper segregation of incompatible substances, as well as the legislated minimum separation distances of dangerous substances to protected workplaces (e.g. homes, schools, offices and other worksites), are key requirements to ensure safe storage. If you are unsure about the requirements for the storage of dangerous substances on your property, contact SafeWork SA for advice.

Explosives

Explosives are commonly used on farms for purposes such as rabbit warren destruction and tree stump removal. Explosives used may include ANFO, cartridged explosive, detonating cord, detonators and safety fuse.

Activities involving explosives, including purchase, transport, storage, mixing and use, require the relevant licences and permit issued by SafeWork SA. Find out more about licensing requirements on page 119.

Ammonium Nitrate (AN) is the precursor chemical used for the manufacture of ANFO and is proclaimed under legislation as a 'security sensitive substance'. Activities involving AN (e.g. its purchase, sale, storage, transport, use and disposal) are licensed under a separate regulatory scheme. Fertilisers containing greater than 45% AN are also defined as security sensitive substances and the relevant licences/permits are required.

Asbestos

Materials that contain asbestos can be found in buildings, workplaces and dwellings built before 1990. Asbestos can also be found in products such as cement wall cladding, tiles, lino or older roof cladding.

An asbestos register and management plan is required for all workplace buildings unless they were constructed after 31 December 2003 and no asbestos has been identified, and where asbestos is not likely to be present. The asbestos register must be maintained and kept up-to-date.

You must take reasonable steps to label and record asbestos in your register. Inform everyone on the premises where asbestos is present about the consequences of exposure to asbestos and other appropriate control measures.

An employer, a self-employed person or a person who manages or controls a workplace must not perform asbestos removal work when more than 10 square metres of non-friable asbestos (or any friable asbestos) needs to be removed. You must engage a licensed asbestos removalist to undertake these tasks.

For further information, visit asbestos.sa.gov.au.

Health monitoring

If you work with hazardous chemicals, it's wise to keep track of changes in your health. Regular health monitoring may include:

- consultation – questions regarding your previous work and medical history or lifestyle (e.g. dietary, smoking and drinking habits), and discussing how this may affect your health
- physical examinations
- skin checks or a spirometry (lung function) test
- clinical tests – urine or blood samples
- x-rays.

PCBUs have a specific duty to provide health monitoring for workers who use hazardous chemicals and asbestos, with additional monitoring for any workers exposed to lead.

Health monitoring must be carried out by registered medical practitioners with experience in health monitoring who are adequately trained in the appropriate medical examinations and tests for the chemical in question, in order to supervise and/or carry out the monitoring.

The Royal Australasian College of Physicians maintains a list of medical practitioners who provide occupational health monitoring for workers who may have been exposed to hazardous chemicals at their workplace. The SafeWork SA website provides a link to this list and other useful information on health monitoring.

safework.sa.gov.au

Safe Work Australia's *Health Monitoring for Exposure to Hazardous Chemicals* guides for both workers and PCBUs provide further information.

safeworkaustralia.gov.au

Chemical contractors

If you spray chemicals on another person's land in a contractor capacity, you must:

- be qualified in *Control Weeds and Control Plant Pests, Diseases and Disorders* (these two courses are available online)
- apply for the appropriate licences with SA Health
- ensure each person spraying herbicides has a licence as a pest management technician
- ensure each business name providing contract chemical spraying is a licenced pest controller.
sahealth.sa.gov.au

Tips from an SA farmer

There are smartphone apps available for chemical SDS registers. Some will maintain the most up to date SDS in your register and give you advice on what substances should not be stored together.

For more remote chemical fill up points, save your main SDS sheets to Dropbox on your smartphone (if you have one). Favourite those documents so they can be seen off line when no mobile signal is available.

ChemCert accreditation – can be done online with several accredited training organisations.

Keep your spray records either in a notebook or use a smartphone app such as *production wise* which has an offline option for when your mobile signal is poor or unavailable.

Confined spaces

There are not too many people who would enjoy working in a closed, stuffy place, fitted out with masks, goggles and covered head-to-toe with protective clothing. But when it has to be done, safety is paramount.

Working in a confined space is a high-risk work environment and must only be done by trained persons.

Confined spaces are enclosed or partially enclosed structures that pose serious and immediate danger because they are primarily not designed to be areas where people work. They often have poor ventilation, which allows hazardous atmospheres to quickly develop, especially if the space is small. The hazards are not always obvious and may change from one day to the next.

Storage tanks, silos, field bins, wet and dry wells, manure and silage pits are some examples of confined spaces in which farm workers might be expected to work. They must have the appropriate signage and have restricted access.

Working in confined spaces can result in:

- loss of consciousness, impairment, injury or death due to the immediate effects of airborne contaminants
- fire or explosion from the ignition of flammable contaminants that come into contact with an ignition source (e.g. flame, hot surface, spark)
- asphyxiation from oxygen deficiency or immersion in a free-flowing material (e.g. grain, sand, fertiliser, water or other liquids)
- infectious diseases, dermatitis or lung conditions such as hypersensitivity pneumonitis can result from contact with micro-organisms (e.g. viruses, bacteria or fungi) – sewers, grain silos and manure pits are examples of confined spaces where biological hazards may be present
- difficulty in rescuing and treating an injured or unconscious person.

Safety solutions

Before you begin any work that might involve entry by yourself or a worker into a confined space think about:

- carrying out the work from outside the space
- getting professionals to do the work instead
- reviewing any safety information (e.g. technical standards or other information) and, if relevant, finding out about previous uses for the space
- placing signs that show you must have a signed entry permit to enter.

A confined space risk assessment must be done. A confined space entry permit may be used as a record of the risk assessment. Read more about confined space entry permits on page 119.

You must also follow certain other procedures, which include:

- ensuring the area is well ventilated before you go in
- providing personal protective equipment (PPE), as well as rescue, first aid and fire suppression equipment
- ensuring workers are trained in safe working in confined spaces, emergency rescue and the use of safety harnesses and safety or rescue lines where there is a risk of falling
- placing a competent standby person outside the confined space for support and in case of an emergency.

Use alternative power sources (e.g. electric appliances). Exhaust fumes from diesel or petrol-powered appliances (e.g. when using pumps to clean out water tanks) can result in a potentially lethal build-up of carbon monoxide. These fumes are heavier than air, can gradually seep into a confined space and fill up to a dangerous level, leading to loss of consciousness.

Further information

Code of Practice: Confined Spaces
safework.sa.gov.au/cop

For more information about grain storage facility safety and the safe fumigation of silos, see pages 92-93.

A sample Confined Space Entry Permit can be found on page 141.

Hazardous manual tasks

ReturnToWorkSA statistics (2012-16) reveal the most common cause of lost time injuries in agriculture result from muscular stress while manual handling, accounting for 103 claims over this period. Given the high risk of this hazard on-farm, you should give high priority to controlling the risks from hazardous manual tasks on your property.

Manual handling injuries result from activities that involve lifting, lowering, pushing, pulling, bending, twisting and restraining which might also include:

- repetitive or sustained force
- high or sudden force
- repetitive movement
- sustained or awkward posture
- exposure to vibration.

Most injuries are cumulative – it is the gradual wear and tear from manual handling that takes its toll on the body. We can prevent injury from performing manual tasks by firstly being aware of the risk and then making small changes to our day-to-day work.

To identify hazardous manual tasks on your property:

- consult with your workers as they can provide valuable information about discomfort and muscular aches or pain that can signal potential hazards
- review incidents of workplace injuries, including work injury insurance claims
- observe manual tasks first hand.

Once you have made any changes to remove or minimise the hazards, trial the change with your workers and seek feedback. To get the best response from workers, it's also important to communicate the reasons for the change.

Safety solutions

- Design your work area with the task in mind.
- Look to reduce repetitive tasks as much as possible, and share tasks across workers.
- Look to reduce duration and frequency of tasks by ensuring adequate rest breaks and task rotation.
- To correct posture and movement, lower the storage height of objects and use mechanical aids to help with tasks (e.g. cradles, loaders, trolleys forklifts).
- Use simple handling equipment when lifting heavy items off the back of utes (e.g. back saver, utility crane, hydraulic tailgate loader).
- When you are on a tractor or other large machinery, use mirrors and swivel seats to eliminate the need to twist and turn.
- Consider the ergonomic design and layout of the work area (e.g. a stockyard), seek feedback from workers where improvements could be made, and redesign where appropriate.
- Look to change your manual handling systems to reduce risk.
- Improve training and instruction on correctly performing tasks.
- Encourage workers to reduce the size and weight of loads being handled.
- Consider if other environmental conditions (e.g. heat, cold, rain, mud) may be impacting on ability to perform manual tasks.

Further information

Code of Practice: Hazardous Manual Tasks
safework.sa.gov.au/cop

Firearms

Farmers who can demonstrate a genuine need and capability can apply for a Firearms Licence. This may be used for putting down animals, controlling predatory or feral animals, butchering large animals or incidents while transporting animals.

The South Australia Police Firearms Branch issues licences for firearms and ammunition, approves and registers firearms, and issues permits for prohibited weapons. Any farmer with a Firearms Licence must:

- be aged 18 years or over
- do an approved firearms safety training course
- pass a police background check
- be subject to extensive conditions for use, including safe storage of guns.

police.sa.gov.au

Safety solutions

Complacency around firearms is not an option. The safety of vulnerable people, such as children and anyone under high levels of stress, is paramount.

For a firearm safe farm:

- encourage respect for guns at all times
- ensure that firearms are not left in unlocked vehicles
- keep gun cabinets away from other tools such as angle grinders
- keep the gun cabinet key and storage cabinet in different places
- remove firearms from the property if they are no longer required
- treat every firearm as if it's loaded – point it away from yourself or others, use the safety catch and check that no-one else is around where you are firing
- tell someone when and where you are going to use your firearm
- install extra security when you leave guns off-site to prevent unauthorised access
- use ear muffs or ear plugs – the noise from firing guns can permanently damage hearing over time (health screening will detect hearing loss).



Tyres

Because of the diverse range of farm machinery on rural properties, farmers need to maintain a large number of tyres.

A high number of injuries or fatalities result from the locking ring not being properly seated on the rim while inflating tyres on split rim wheels. If the locking ring separates from the wheel assembly during inflation, the impact of the energy that is released has the potential to cause severe body and facial injuries or even death to anyone in close proximity.

Only workers who are trained and competent should carry out tyre assembly or fitting. Detailed methods and instructions for safe tyre assembly/fitting are available from tyre and wheel manufacturers. Appropriate supervision should be provided for trainees or workers undertaking new tasks.

Tip from an SA farmer

There are a number of restraint systems commercially available, which are inexpensive, portable and adaptable to a range of smaller tyre sizes.

Safety solutions

- A suitable restraining device should be used to control the risks associated with inflating tyres on split rim assemblies. This could be:
 - a steel safety cage, where the assembled wheel is placed inside the cage and then inflated (normally a workshop-based item)
 - a harness or collapsible steel bar assembly in the shape of a 'star' commonly used as a portable restraining device when repairs are performed in a location remote from the workshop.
- Use a lubricant such as soapy water on the bead when fitting a tyre to the rim.
- When assembling tyres and wheels make sure that flanges, rings and grooves are clean, undamaged and undistorted.

When inflating a tyre the utmost caution needs to be taken, and you should:

- never stand in front of or over the split rim or tyre
- never attempt to seat locking rings of a split rim while the tyre is partially or fully inflated
- never use damaged, worn or corroded rims/wheels
- avoid hammering or levering components of an inflated or partially inflated assembly
- avoid inflating a truck or tractor tyre beyond the recommended maximum inflation pressure (which is stamped on the side wall of the tyre)
- avoid inflating truck tyres without a purpose-built restraining device such as a safety cage
- never remove the nuts which hold the wheel rim together while the tyre is inflated (on some types of split rim)
- never leave unattended an air line which is attached to a valve.

Ladders

Falls from ladders can have devastating consequences, even from relatively low heights.

The type of work that can be safely performed on a ladder is limited. There are many different types of ladders, so give consideration to which is the most suitable for the job.

Other methods of access such as scaffolding or an elevating work platform should be considered for difficult tasks or work at height.

Safety solutions

If you must use a ladder, before you start work:

- conduct a hazard identification and risk assessment
- install a barricade or warning signs if there is a potential hazard for people near the work area
- ensure that the ladder has an angle or pitch of about 1:4 (one out and four up)
- ensure that the ladder extends at least one metre above the landing
- ensure that the ladder is installed on a stable surface
- secure the top and bottom of the ladder so it cannot shift position
- ensure that a non-conductive, insulated ladder is used for electrical work or near electrical hazards
- ensure that the ladder will not be used in a manner that endangers any person
- check older steel-tubing ladders for task suitability
- ensure compliance with the manufacturer's load rating (at least 120 kg) for the ladder.

Working on a ladder

- Only one person should be on a ladder at any given time.
- When ascending or descending a ladder, maintain three points of contact (two feet and one hand, or two hands and one foot, must be in contact with the ladder at all times).
- Always climb and descend facing the ladder.
- Don't carry anything when climbing or descending.
- Keep your body centred between the sides of the ladder. Don't lean sideways or over-reach.
- Don't stand above the tread or rung on the ladder indicated as the maximum safe working height.
- Only conduct light work from a ladder.
- If the ladder is placed near a doorway, the door should be locked open or closed. Alternatively, a person may be placed on guard at the foot of the ladder. Warning signs may also be used.



Step or trestle ladders

Step or trestle ladders should only be used in the fully open position. A rigid metal spreader or locking device must be used and the load must be carried by the front stiles.

Inspections and maintenance

Ladders should be checked frequently and periodically serviced by a competent person (someone who is qualified either through experience and/or training).

Think about the type of environment in which the ladder may have been used (e.g. aluminium ladders can easily become damaged if exposed to acids).

Bow ladders

The fruit growing industry use bow ladders so that workers can reach and pick fruit from tree canopies. The correct positioning and use of bow ladders can minimise or avoid falls that result in injuries.

To position and use bow ladders safely:

- carry the ladder using two hands, one on a lower rung with the other on a higher rung, holding the ladder close to the side of your body
- inspect the area of the tree where the ladder is to be placed to ensure there are no broken tree limbs which may cause the ladder to fall
- position the ladder at a ratio of 1 in 4 (an angle of approximately 15-20 degrees) from the tree canopy, with the inside curve of the ladder facing the tree
- ensure the spikes of the ladder are firmly in the ground
- test the ladder to ensure its stability
- only stand on the lower rungs and not on or above the red rung (generally, the third rung from the top)
- move the ladder to access fruit around the tree so that you do not have to over-reach
- maintain three points of contact while on the ladder.

Above-ground fuel storage

The most significant safety issue with above-ground fuel tanks is the risk of falling. Falls from a height can have devastating consequences. Those most at risk are fuel delivery drivers and farm workers engaged in filling and checking fuel levels in tanks. In some instances the risk is also present during fuel dispensing.

Safety solutions

The most effective solution is to reduce the need to work at height during the filling, checking and dispensing of fuel by conducting these tasks from ground level. This can be achieved by:

- relocating or installing the fuel tank at ground level and dispensing the fuel with the aid of a pump
- installing an external sight gauge to avoid the need to climb a ladder to check fuel levels
- fitting a bottom load facility and sight gauge, which can generally be purchased through a farm fuel supplier or rural agent and fitted following simple instructions.

Other issues related to above-ground fuel tanks include inadequate footings for the structure (e.g. wooden blocks or old plough discs are used), tank stand legs rusting and bent, broken and damaged structural members. Ensure proper construction practices are used and regular maintenance is carried out. Replace any tanks that are past their use-by date.

If a fixed ladder is used to access an above-ground tank, reduce the risks by ensuring the ladder:

- meets the requirements of Australian Standard *AS1657: Fixed platforms, walkways, stairways – Design, construction and installation*
- has level and stable ground at the base
- is of sufficient height to allow workers to access the top of the tank
- has a platform and adequate handrails/handholds provided at the top
- is in sound condition, with no rust pitting to the rungs, stiles, welds, fastening brackets and bolts
- is secured to the tank or supporting structure and does not move during access.



Fragile roofing

Working on fragile roofing materials presents a serious work hazard. They can fracture without warning and so quickly that you or a worker could easily fall through the roof, suffering serious or even fatal injuries.

Fragile roofing materials can include corroded corrugated steel cladding, structurally unsound roof members, plastic sheeting, wired glass and corrugated asbestos-cement roof sheeting.

Before working on any roof area or using the roof as a means of access (e.g. for repairs, maintenance, demolition or inspection), it is essential to identify all potential hazards. You should:

- inspect the perimeter walls for warning notices/signs
- visually inspect the roof to determine the presence, structural condition and extent of fragile materials, including the cladding and supports
- review any asbestos register (where applicable)
- check the existence and condition of safety mesh – if you are not sure if it is fitted, consider the roof as unmeshed and dangerous
- determine accessible access and egress points
- consider distribution of the load on the roof
- think about any other factors that may affect health and safety.

Safety solutions

A plan to safely carry out the work should then be developed, where you:

- provide a safe way of getting onto and down from roofs
- use readily available and appropriate access equipment (e.g. crawl boards, roof ladders, walkways, planks)
- wear suitable footwear that controls the risk of slipping and other site hazards
- wear a safety harness and fall arrest equipment (e.g. static lines, running lines, inertia reels) if the need has been identified (Note: fall arrest equipment needs to be installed by a licensed scaffolder or rigger)

Fragile skylights within buildings or structures must be:

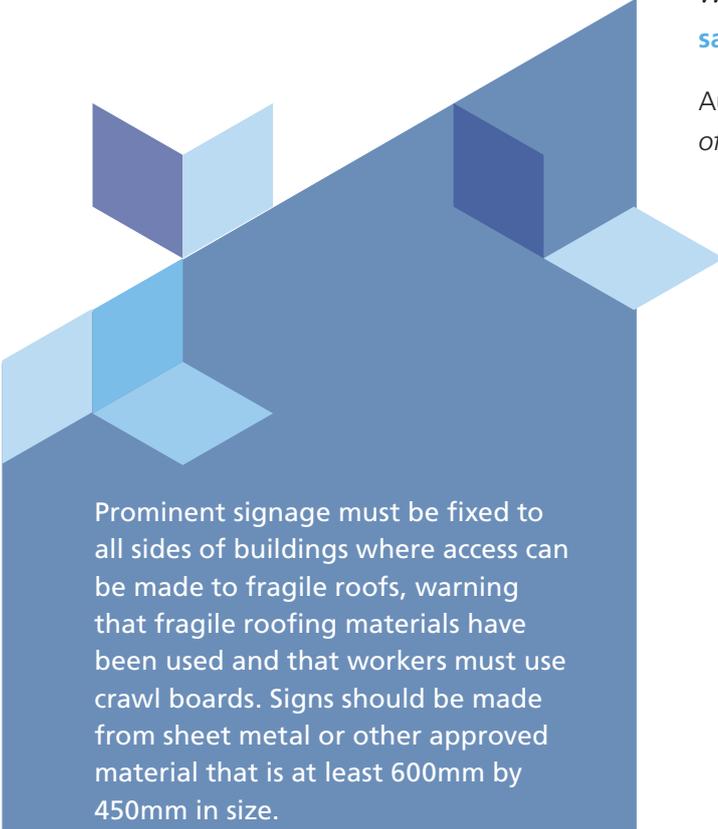
- secured by fixing safety wire mesh either above or below the plastic or polycarbonate sheet, or by installing a guard rail to prevent people standing on the skylight
- regularly maintained.

Further information

Code of Practice – Managing the Risk of Falls at Workplaces

safework.sa.gov.au/cop

Australian Standard AS1562.3: Design and installation of sheet roof and wall cladding – Plastic



Prominent signage must be fixed to all sides of buildings where access can be made to fragile roofs, warning that fragile roofing materials have been used and that workers must use crawl boards. Signs should be made from sheet metal or other approved material that is at least 600mm by 450mm in size.

Heat stress

Everyone knows what it's like to feel hot and uncomfortable while you work. Heat stress is more than just 'feeling off' while you are working outdoors. It can cause serious health issues, and in the case of heat stroke, can be fatal.

When the body cannot sufficiently cool itself, you absorb more heat from your environment than you can get rid of through perspiration or other cooling mechanisms.

Having in place a 'Working in the heat' policy is important so that workers clearly understand what is required of them when working in very hot or humid conditions. This policy is best discussed at induction or refreshed before the hot season sets in.

Symptoms of heat illness include headache, nausea, dizziness, weakness, irritability, thirst, cramps and heavy sweating. People lose concentration and their judgement is impaired. They may seem clumsy, collapse and convulse. Skin can become cold and clammy, despite the heat.

Don't ignore the signs, or if you notice them in your workers you need to seek immediate medical attention.

Note that young workers are more at risk – possibly due to doing physically strenuous tasks that they are not accustomed to in hot conditions or lack of experience.

Safety solutions

To minimise the risk of heat illness:

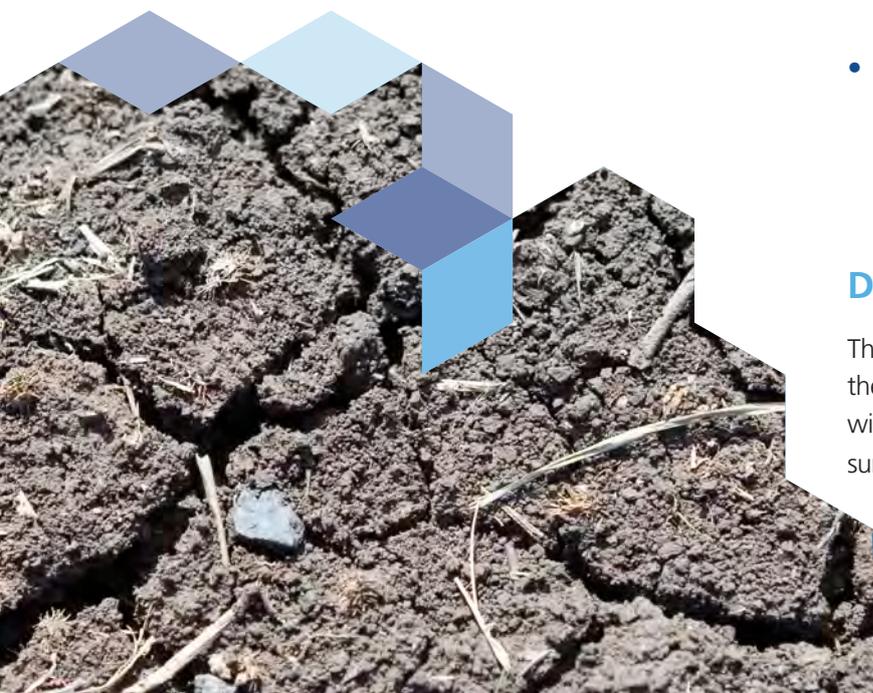
- arrange for more workers to do the job, if possible
- work at a different location
- provide extra rest breaks in a cool area
- reduce time spent doing hot tasks (e.g. by job rotation)
- reschedule work so that heavy work and hot tasks are performed during the cooler part of the day
- use mechanical aids to reduce physical exertion
- wear light clothing that still provides adequate protection.

You could also:

- make sure that your new workers acclimatise
- use the 'buddy system' to recognise signs of heat illness in each other (including weakness, unsteady pace, irritability, disorientation, and changes of skin colour)
- provide outdoor workers with protection against ultraviolet exposure (e.g. wide brim hat, loose fitting/long-sleeved/collared/preferably cotton shirt, long pants, sunglasses, sunscreen). There are different types of shade materials, so look for a rating of UPF 15 or more to ensure at least 93% of solar UVR is blocked.
- provide cool drinking water near the work site – to stay hydrated you should drink a cup of water (about 200 ml) every 15 to 20 minutes during hot weather
- provide first aid facilities and access to medical help
- provide workers with information, instruction and training on how to recognise heat-related illness and appropriate first aid treatment
- establish a system for all workers to receive a daily text message reminder of the UV Alert – download the Sunsmart app for your smartphone from cancersa.org.au.

Did you know?

The Australian Taxation Office has recognised the importance of sun protection for outdoor workers, with tax deductions available for sunscreen, hats and sunglasses. Visit ato.gov.au for further information.



Water safety

It seems ironic that, when we live and work in the driest state in the driest inhabited continent on earth, water can be one of the major hazards on a farm.

Rural water safety is everyone's responsibility. Whether your farm has a dam, your home property has a swimming pool or your land has a creek running through it, there are many things you can do to promote safe behaviours around water and protect your workers and loved ones.

Most people learn to swim from an early age, but you should never assume that everyone can swim. Be particularly vigilant when young children and farm visitors are near open water or liquid-filled containers.

Remember that toddlers can drown in as little as 5cm of water ... a water trough or a rain-filled post hole is all it takes for a potential tragedy to occur. In fact drowning in dams, tanks and creeks is one of the major causes of child deaths on farms, with inadequate supervision considered a factor in more than 70% of these deaths.

Also at heightened risk are seasonal and labour hire workers who may not be water smart. Proper induction and supervision are essential.

Safety solutions

Take a close look at lakes, ponds, rivers, creeks, dams, irrigation channels, wells, open tanks, troughs, drums, sheep dips and seepage pits on your property and assess them for potential hazards.

While you cannot fence off a dam or trough that animals need to drink from, there are many other potential safety solutions.

- Closely supervise children when they are around water that cannot be adequately fenced.
- Fence off swimming pools.
- Have children learn to swim as soon as possible.
- Create a securely fenced, child-safe play area for young children outdoors, so they cannot wander off into the farm environment without adult supervision, and ensure it is free of any water or water-collecting areas.
- Securely cover wells, tanks, plunge and spray dip sumps.
- Fill in unused ditches, dips and post holes.
- Adequately guard all ladders to tank stands so that they cannot be climbed.
- Lock away all portable ladders when not in use.
- Learn CPR so you are prepared for an emergency. As your property is likely to be quite isolated or a long way from a town, it is also likely that ambulance or emergency services will take longer to provide assistance.

Further information

To know more about how you can prevent your child from drowning, go to [keepwatch.org.au](https://www.keepwatch.org.au).



Noise

Hearing is a precious sense that, once damaged or lost, will never be regained. Noise-induced hearing loss can happen quickly or over time.

Noise that is capable of damaging hearing also causes other health effects such as stress, hypersensitivity to noise, elevated blood pressure and increased heart rate. It can also interfere with communication at work, which could lead to incidents.

Hearing loss

How it works is that very loud sounds can cause the hair cells of the inner ear to collapse and flatten temporarily, resulting in deafness. This may be temporary or permanent, depending on the noise level and length of exposure. Temporary hearing loss may also be accompanied by a ringing sensation called tinnitus.

If high noise exposure is repeated over many years, the hair cells in the inner ear may also become permanently damaged, resulting in permanent hearing loss.

Immediate, permanent hearing loss can also occur if someone is exposed to very intense or explosive sounds (e.g. a gunshot or explosion). This type of damage is known as acoustic trauma. In some cases a very intense sound can actually perforate the eardrum.

The harmful effects of noise may be cumulative and not necessarily confined to the workplace. For instance, the use of personal stereo units and frequenting nightclubs may result in young people having some early damage to their hearing before they even join the workforce.

Predicting hearing damage is not an exact science as people respond differently to noise. The amount of damage caused by noise depends on an individual's exposure and predisposition.

dB(A)	Farming machinery or operation	Maximum noise exposure time
80	Tractor idling	No limit
85	Working in a tractor with an enclosed cab	8 hours
90	Shearing shed	2 hrs 30 min
90	Chainsaw idling	2 hrs 30 min
95	Angle grinder	48 min
95	Grain auger	48 min
95	Header	48 min
100	Tractor operating under load without a cab	15 min
100	Orchard sprayer	15 min
105	Pig shed at feeding time	4 min
120	Chainsaw cutting	8 seconds
140	Aircraft at 15 m	No safe limit
140 dB(C)	Shotguns/rifles and other firearms far exceed the 140 dB limit	No safe limit: instantaneous damage

Chart taken from WorkSafe Tasmania

This table shows likely upper levels of noise from different farming machinery and the respective allowable exposure times without hearing protection. Noise is excessive where it exceeds the exposure standard of 85 dB(A), averaged over an eight-hour period, or where a peak noise level of 140 dB(C) occurs.



Safety solutions

The easiest way to protect your hearing while carrying out work on noisy equipment around the farm is to **always** wear protective ear muffs or earplugs. When selecting ear protection ensure it:

- is effective and gives adequate protection for the ears against the hazard
- is of an appropriate standard
- is readily available for use
- matches the wearer, the task and the working environment, so that it does not get in the way of the job being done or cause any discomfort
- is compatible with any other personal protective equipment (PPE) being worn (e.g. some ear muffs may interfere with the fit of a safety helmet)
- is checked before use and cleaned, maintained and stored in accordance with the manufacturer's instructions.

Provide workers with relevant information, instruction and training in the safe and correct use of PPE for ear protection. However, if workers are frequently required to wear PPE to reduce the risk of hearing loss from a noise exposure that exceeds the exposure standard, then an audiometric test must be done, and the testing records kept.

Audiometric testing and assessment should be carried out by a competent person in accordance with the Australian Standard *AS/NZS1296.4: Occupational noise management – auditory assessment*.

Further information

Code of Practice: Managing Noise and Preventing Hearing Loss at Work

safework.sa.gov.au/cop

Dusts and fumes

It is important to be aware that the atmosphere you work in may be hazardous, and this is often difficult to detect as substances may be odourless or colourless.

With the use of monitoring equipment, an atmosphere is considered hazardous if there is:

- an unsafe oxygen level (common to grain silos and effluent pits)
- a concentration of oxygen resulting in increased risk of fire
- a concentration of flammable gas, vapour, mist or fumes exceeding five per cent or the lower explosive limit
- combustible dust present (e.g. wood dust, bio-solids, sugar, starch, flour, feed or grain) in a quantity and form that would result in a hazardous area.

Dust explosion risks

Dust explosions usually occur when combustible dusts or fibres from paper, grain, organic compounds and metals accumulate, are disturbed and released into the air, and come into contact with an ignition source.

Safety solutions

Once you have located where the generation of dust and fumes could occur, it is important that you provide appropriate personal protective equipment (PPE) and make sure workers wear it.

A good ventilation and dust collection system is equally important, and should be regularly inspected and maintained.

Where the presence of dust and fumes is not obvious, you must ensure air quality is monitored in conjunction with health monitoring of all workers.

Potential hazards in agriculture

Work process	Hazards
Grain silos and auger loaders	Combustible particles in the form of husks and fine dusts, dust explosions
Chaff and hay processing and storage	Combustible particles and dusts, spontaneous combustion of haystacks
Milling grains, sugars, cellulose, fibres – cotton, linen, polyesters, possible peroxide powders	Flammable and combustible materials, dusts and fibres, possible static build-up, oxidising agents
Processing oil and oil seeds – cottonseed, linseed, other vegetable oils, canola, olives	Combustible oils with possible combustible wastes
Viticulture and alcoholic spirit manufacture	Flammable and combustible materials, vats or tanks containing flammable vapours
Drying and processing grains and vegetables (e.g. tobacco drying, vegetable preparation)	Cellulose fibres, dusts and other combustible material, rotting vegetable matter produces methane gas
Flammable or combustible pesticides	Some contain flammable or combustible carrier liquids
Liquid and gaseous ammonia for nitrogen fixing in soils	Flammable gas, toxic gas, corrosive

Quick safety scans

Use these quick safety scans to look at key work health and safety issues on your property. Those items where you tick 'Sometimes' or 'Never' will need action to fix or do better. Use the safety solutions suggested earlier in the guide to help you improve.

Animal handling	Always	Sometimes	Never
Dairy and yards are designed to reduce injury from kicking and crushing by cattle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Separate veterinary facilities are provided, including crushes, pregnancy testing and AI facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Barriers are in place to prevent dairy cattle getting into the pit or falling off the rotary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surfaces are maintained to prevent cattle and workers slipping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are instructed and trained in working around and handling livestock (including bulls if used).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working alone with cattle is kept to a minimum.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gates are inspected and maintained to ensure they swing easily on hinges to minimise strain on workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency escapes are sufficiently available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety/warning signs are in place, where required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dogs are kept well away from the yards and dogs that are well-trained are used when mustering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Before horseback work, riders are assessed to determine their experience level and matched to a suitable horse.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plenty of time is allowed and the stock are not rushed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate protective equipment and clothing is worn to suit the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The manufacturer's recommendations are followed when mixing dipping fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wide raceways and gates are used, and the same route and direction through the yard is used to maintain good flow of animals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ramps with side rails and walkways are used to load animals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Catching pens are kept dry and free of hazards such as loose grating and nails.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strict hygiene practices are observed and all needles, shears, knives, pliers and cutters are sterilised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Animals infectious diseases	Always	Sometimes	Never
Workers are trained in the prevention, symptoms and treatment for particular diseases.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At-risk workers are vaccinated (pre and post exposure).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good personal hygiene is practiced (thorough hand washing after handling animals, machinery or equipment and before handling food).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unnecessary physical contact with animals is minimised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact with animal carcasses, blood, tissues and bodily fluids is minimised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Livestock and pets are vaccinated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sick animals are isolated and treated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potentially infectious material (e.g. placenta, contaminated litter) is disposed of in a safe and hygienic way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE is provided and worn, as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work spaces, floors and equipment are cleaned and disinfected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cuts and abrasions are covered with water-resistant dressings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pigs and cattle are kept separated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mesh floors are used in pig pens, where possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Animal holding pens and farm areas have good drainage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You are aware of the legal obligation for doctors and medical laboratories to notify SA Health about anyone who is suspected of/confirmed as having a notifiable condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cattle are vaccinated against leptospirosis.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are tested for Q fever.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Licensing and storage of dangerous substances (e.g. LPG, fertilisers) meets state regulations and you have informed SafeWork SA (if needed).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All asbestos containing materials are handled safely and appropriately, as per Codes of Practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Confined spaces	Always	Sometimes	Never
You get a professional to do the work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confined space risks are identified, eliminated or minimised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confined space entry permits are completed by a competent person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained for and supervised when undertaking work in confined spaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE appropriate for tasks is available, used and maintained (e.g. safety harnesses, rescue, first aid and fire suppression).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You make constant communication checks with persons working in confined spaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A competent stand-by person is placed outside the confined space for support and in case of an emergency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hazardous manual tasks	Always	Sometimes	Never
Risks that can cause injury (e.g. handling heavy items, repetitive tasks in awkward postures) are identified, assessed and controls implemented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in correct manual handling techniques and solving manual handling problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical aids are available and used to lift or move heavy or awkward items.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You have considered the ergonomic design and layout of the work area (e.g. a stockyard, shed or workshop) and redesigned it where appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The size of the load is reduced, where practicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental conditions do not impact on the ability to perform manual tasks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Firearms	Always	Sometimes	Never
Your firearm licence is up-to-date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Firearms and ammunition are stored in a safe, secure place and out of reach of children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gun cabinets are placed away from tools such as angle grinders.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The cabinet key and storage cabinet are in different places.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Firearms are removed from the property if they are no longer required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ear muffs or ear plugs are used when firing guns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You use the safety catch and check that no-one else is around where you are firing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You tell someone when and where you are going to use your firearm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tyres	Always	Sometimes	Never
Tyres are secured when being inflated on split rim assemblies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tyres are inflated to the recommended maximum inflation pressure (which is stamped on the side wall of the tyre).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers stand clear of the split rim or tyre during inflation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A lubricant such as soapy water is used on the bead when fitting the tyre to the rim.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No work is done while the tyre is partially or fully inflated, such as attempting to seat locking rings of a split rim, hammering or levering components, removing the nuts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rims/wheels are in good condition and not damaged, worn or corroded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The air line is attended at all times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When assembling tyres and wheels flanges, rings and grooves are clean, undamaged and undistorted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ladders	Always	Sometimes	Never
Ladders used are stable and in good condition, with non-slip rubber feet fitted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-conductive, insulated ladders are used for electrical work or near electrical hazards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manufacturer's load rating is complied with (at least 120kg).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Only one person is on a ladder at any given time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Three points of contact are maintained when ascending or descending.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nothing is carried when climbing or descending ladders.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Barricades or warning signs are installed if there is a potential hazard to people near the work area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doors are locked closed or open when ladders are used near doorways.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Step/trestle ladders are only used in the fully open position with a rigid metal spreader or locking device.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work platforms or scaffolding are used for access to work at height.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Above ground fuel storage	Always	Sometimes	Never
Tanks are relocated or installed at ground level and fuel dispensed with the aid of a pump.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External sight gauges are installed to avoid the need to climb a ladder to check fuel levels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A bottom load facility and sight gauge has been installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Above-ground tanks have adequate structural footings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fixed ladders used to access above-ground tanks meet the requirements of Australian Standard AS1657.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ladders are of sufficient height to allow access the top of the tank.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ladders have a platform and adequate handrails/handholds provided at the top.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ladders are secured to the tank or supporting structure and do not move during access.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All potential hazards have been identified before working on any roof area or using the roof as a means of access (e.g. for repair, maintenance, demolition or inspection).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prominent warning notices/signs are fixed to all sides of buildings where access can be made to fragile roofs, warning that fragile roofing materials have been used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate access equipment (e.g. crawl boards, roof ladders, walkways, planks) is readily available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fragile skylights are secured by safety wire mesh fixed either above or below the plastic or polycarbonate sheet, or by installing a guard rail to prevent people standing on them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Heat stress	Always	Sometimes	Never
You have developed a working in the heat policy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You re-schedule work and use job rotation to minimise risks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You have developed a system for everyone to recognise signs of heat illness and what action to take.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor workers are provided with protection against UV exposure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cool drinking water is provided near the work site at all times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Water safety	Always	Sometimes	Never
Children are supervised when they are around water that cannot be adequately fenced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Swimming pools are fenced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Children can swim/are taught to swim at an early age.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wells, tanks, plunge and spray dip sumps are securely covered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unused ditches, dips and post holes are filled in.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ladders to tank stands are adequately guarded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portable ladders stored and locked away when not in use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Noise	Always	Sometimes	Never
Noisy tasks are identified, eliminated or minimised.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise in the workshop is kept to a safe level, not exceeding the exposure standard of 85dB(A) – able to hear and speak without shouting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Screens, partitions or guarding are used to control noise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct hearing protection is readily available and worn as required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audiometric testing is carried out if needed and testing records are kept.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advisory/warning signage is in place (e.g. <i>Hearing Protection Must Be Worn</i>).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dusts and fumes	Always	Sometimes	Never
Risk assessments are done for work processes that generate dust, smoke, fumes or gases.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate PPE is issued and worn.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local exhaust ventilation is installed where needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventilation and dust collection systems are regularly inspected and cleaned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality is monitored (e.g. workers do not suffer from dry, irritated eyes).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health monitoring is carried out where required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>