<table>
<thead>
<tr>
<th>Rural Infosheet 1</th>
<th>Tractor Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Infosheet 2</td>
<td>Chainsaw Safety</td>
</tr>
<tr>
<td>Rural Infosheet 3</td>
<td>Machinery Guarding</td>
</tr>
<tr>
<td>Rural Infosheet 4</td>
<td>Skin Cancer</td>
</tr>
<tr>
<td>Rural Infosheet 5</td>
<td>Protecting Your Hearing</td>
</tr>
<tr>
<td>Rural Infosheet 6</td>
<td>Silo Safety</td>
</tr>
<tr>
<td>Rural Infosheet 7</td>
<td>Manual Handling</td>
</tr>
<tr>
<td>Rural Infosheet 8</td>
<td>Safe Use of Pesticides</td>
</tr>
<tr>
<td>Rural Infosheet 9</td>
<td>Pesticide storage — minor quantities</td>
</tr>
<tr>
<td>Rural Infosheet 10</td>
<td>Storage and Disposal of Chemicals</td>
</tr>
<tr>
<td>Rural Infosheet 11</td>
<td>Chemicals — Protective Equipment</td>
</tr>
<tr>
<td>Rural Infosheet 12</td>
<td>Welding</td>
</tr>
<tr>
<td>Rural Infosheet 13</td>
<td>Tractors — Roll-Over PROTECTIVE Structures (ROPS)</td>
</tr>
<tr>
<td>Rural Infosheet 14</td>
<td>Safety in Riding Horses</td>
</tr>
<tr>
<td>Rural Infosheet 15</td>
<td>Safety in Cattle Handling</td>
</tr>
<tr>
<td>Rural Infosheet 16</td>
<td>Sheep Handling</td>
</tr>
<tr>
<td>Rural Infosheet 17</td>
<td>Shearing</td>
</tr>
<tr>
<td>Rural Infosheet 18</td>
<td>Safety in Handling Pigs</td>
</tr>
<tr>
<td>Rural Infosheet 19</td>
<td>Zoonoses</td>
</tr>
<tr>
<td>Rural Infosheet 20</td>
<td>Child Safety on the Farm</td>
</tr>
<tr>
<td>Rural Infosheet 21</td>
<td>Heat Stress</td>
</tr>
<tr>
<td>Rural Infosheet 22</td>
<td>Asthma</td>
</tr>
<tr>
<td>Rural Infosheet 23</td>
<td>Workshop Safety</td>
</tr>
<tr>
<td>Rural Infosheet 24</td>
<td>Farm Water Safety</td>
</tr>
<tr>
<td>Rural Infosheet 25</td>
<td>Electricity</td>
</tr>
<tr>
<td>Rural Infosheet 26</td>
<td>Fire Fighting Safety</td>
</tr>
<tr>
<td>Rural Infosheet 27</td>
<td>Dairy Safety</td>
</tr>
<tr>
<td>Rural Infosheet 28</td>
<td>Hand Tools</td>
</tr>
<tr>
<td>Rural Infosheet 29</td>
<td>Safe Shooting</td>
</tr>
</tbody>
</table>
**FOLLOW GENERAL SAFETY PRECAUTIONS**

- Read and follow all of the manufacturer’s operating instructions.
- Ensure an approved Roll-Over Protective Structure (ROPS) is fitted to the tractor.
- Wear hearing protection.
- Keep children away from tractors and machinery.
- Wear comfortable close-fitting clothing and boots, not thongs.
- Keep an up-to-date maintenance schedule.
- Ensure correct training for tractor drivers. Training should be specialised for the particular needs of the farm.
- Take short breaks regularly when working long hours.
- Adjust the seat so all controls can be operated comfortably and safely.
- Keep all guards in place, including PTO.
- Operate self-starter only from the driving position.
- Do not carry passengers.

**CORRECTLY HITCH IMPLEMENTS**

- Fit attachments according to the manufacturer’s instructions.
- When attaching equipment, always use the mounting points or draw bar provided by the manufacturer. Do not use improvised methods.
- Do not alter, modify or raise the height of the draw bar outside of those adjustments made possible by the manufacturer.
- When a power implement is attached to the tractor, make sure all guards are in place before operating.
- Never hitch above the centre-line of the rear axle, around the axle housing or to the top link pin.
- Do not attempt to adjust or work on implements while they are in motion.
- Do not use or attach implements unless the power shaft or PTO shaft is guarded.

**STOP TRACTORS CORRECTLY**

- Do not dismount from a moving tractor.
- Ensure that the park brake is on and operating effectively before dismounting.
- Do not park a tractor on a steep slope.
- Remove the starting keys when not using the tractor.
- Provide regular maintenance
- Regularly service your tractor.
- ROPS should be checked regularly, particularly after an accident.
- Do not remove or replace belts while the pulleys are under power.
- Stop the engine before servicing or greasing.
- Keep steps and working platforms free of grease and oil to avoid slips and falls.

- If the engine overheats, allow time for it to cool off before removing the radiator cap.
- Change wheels on flat surfaces only. Before removing any wheel, chock the other wheels.
- Avoid improvised lifting arrangements. Use a wide based jack of adequate lifting capacity. When the tractor is jacked up, block it up evenly for additional support.
- Before removing a tyre from the rim, ensure all the air pressure has been released. Use correct procedures. Split rims can cause serious injuries. Tyres should be inflated in a cage for safety.

**PROTECT YOUR BACK**

- Adjust the seat to meet your needs. When buying your next tractor, consider the type of seating.
- Buy your tractor with a seat that has vibration absorbing suspension.
- Ensure there are adequate mirrors to provide all-round visibility.
- Never jump out of the tractor.
- Wear footwear that provides a firm grip when mounting and dismounting the tractor, or when operating foot pedals.

**TRAVEL AND OPERATE SAFELY**

- Fit and use a seat belt on tractors.
- Drive at speeds slow enough to retain control over unexpected events.
- Reduce speed before turning or applying brakes.
- Watch out for ditches, embankments and depressions. Crumbling and slippery banks can cause overturns.
- When stuck in soft ground, back out. If unsuccessful, get help.
- On very steep slopes, if you have no trailing implements, reverse up the slope for greater safety.
- Use as wide a wheel track as possible when working on hillsides and sloping ground.
- Descend slopes cautiously. Keep the tractor in low gear and allow the motor compression to act as a brake.
- Never attempt to mount a moving tractor.

**BE SURE TO:**

- fit an approved ROPS as well as a seat belt.
- service your tractor regularly.
- never allow passengers to be carried on tractors.
BUYING CHAINSAWS
• When buying a chainsaw, bigger is not always best.
• Buy the chainsaw most appropriate for the job.
• Don't forget to equip yourself with appropriate protective clothing.
• Choose a chainsaw that is fitted with safety devices such as a chainbrake, anti-vibration dampers and a chain catcher.

HANDLE CHAINSAWS WITH CARE
• Carefully read the operator’s manual. Obey the safety and operating instructions.
• Use the correct methods for felling a tree.
• Do not cut above shoulder height.
• Do not stand on the felled tree trunk when limbing.
• Check the chainsaw thoroughly before use. Ensure that the chainsaw is in good condition, the chain sharpened correctly and that all safety devices are fitted and in working condition.
• Reduce the danger of ‘kick back’; follow the safety instructions. Use the correct grip.
• Always start the chainsaw according to the manufacturer’s instructions. ‘Drop starting’ is a dangerous practice.

MAINTENANCE
• Maintain your chainsaw regularly.
• Keep the chain sharp and correctly tensioned.
• Always carry the saw with the cutter bar facing backwards and the guard in position when not in use.
• Fit the bar cover when the chainsaw is not in use.
• If in doubt, contact the manufacturer.

BE PROTECTED
• Wear approved protective equipment such as cut resistant pants or chaps, ear muffs, safety glasses or face shield, helmet, boots and close-fitting clothing.
• Never use a chainsaw if you are tired, under the influence of alcohol or drugs, or if the weather conditions are not suitable. Chainsaw operators need to be alert to avoid accidents.

TRAINING
• Chainsaws are not toys. They should be treated with the same respect you would give a loaded weapon.
• Never allow an inexperienced person to use a chainsaw. All chainsaw operators should be properly trained.
• Less experienced operators should always be closely supervised.
• Some operations such as removing branches from standing trees, the removal of trees on wires and cutting trees thicker than the bar guide length, should only be undertaken by a professional.

HAVE YOU:
• read the manufacturer’s instructions?
• maintained the chainsaw in good working order?
• provided and made sure that the appropriate protective equipment is worn?

Used properly, chainsaws are one of the most efficient pieces of equipment on the farm.
ENSURE ADEQUATE GUARDING

Machinery on farms can be extremely hazardous unless it is adequately guarded.

Guarding increases the personal safety of operators and others involved in the normal operation, servicing and maintenance of machines.

When using machines, there may be times when an operator must reach over, under, around or through the machine. Any hazards which can be contacted by these movements must be guarded against and appropriate guarding put in place.

THE USE OF GUARDING

A guard is any shield, cover, casing or physical barrier, which by reason of its form or its location, is intended to prevent contact between that machine part and a person or part of that person’s clothing.

Following is a list of hazardous parts that are likely to cause injury:

- Any rotating shafting (including joints, coupling, shaft ends and crank shafts), gearing (including friction roller mechanism), cable, sprocket, chain, clutch, coupling, cam or fan blade;
- The run-on point of any belt, chain or cable. Belts alone are not hazardous provided that their joints are smooth and without hazardous projections or jointing;
- Keyways, keys, grease nipples, set-screws, bolts or any other projections on rotating parts;
- Any pulley or flywheel that incorporates any openings, spokes, protrusions, etc. that render it anything other than totally smooth;
- Any crushing or shearing points, eg. augers and slide blocks, roller feeds, conveyor fees;
- Ground wheels, and track gear incorporating protrusions, spokes, etc. that are adjacent to an operator’s position (standing platform, seat, footrest) or passenger’s seat;
- Rotating knives, blades, tynes or similar parts of power-driven machines that operate in or near the ground or engage crops;
- Any machine component that cuts, grinds, pulps, crushes, breaks or pulverises farm produce;
- Hot parts of any machine where the surface temperature exceeds 120°C in normal operation.

REDUCE THE RISKS

As a general rule, guards should:

- be designed in a practical way to protect the user but allow easy access;
- be in place on dangerous parts of machinery unless they are, by any reasonable definition, located out of reach of users, operators or bystanders;
- be conveniently placed so that users, operators and service and maintenance people are less likely to remove them permanently;
- have strength appropriate to their use and durability appropriate to the machine;
- protect users, operators and bystanders against dangers caused by ejected material;
- protect users, operators and bystanders against burns caused by hot parts;
- be ventilated where applicable to avoid the machine overheating;
- not be removed before the machine is stopped, isolated and all sources neutralised, e.g. pressure in the hydraulic, LPG gas line.

CHILDREN AND MACHINERY

Children on or visiting your farm are often at risk of being injured by machinery. Minimise the risks, teach your kids about safety on the farm and get them to tell their friends.

- Agricultural machinery is not a playground. Make sure guards are on machines, especially when children are in the vicinity.
- Many accidents on farms are preventable; little fingers can reach into places you may not realise possible. What starts off as fun can quickly turn into tragedy.

REDUCE OR ELIMINATE RISK BY:

- re-designing work processes.
- using correctly designed and properly fitted equipment.
- replacing machinery, material or processes with less hazardous ones.
Statistics show that incidents of skin cancer are increasing. Rural workers spend most of their time outside. They are therefore most at risk.

**Remember**
- You do not actually have to get sunburnt to damage your skin and risk skin cancer.
- Skin cancers are mostly related to over-exposure to the sun taking place over a period of time. Most skin cancers can be prevented by protecting the skin from the sun.

**TYPES OF SKIN CANCER**

There are various types of skin cancer:
- **Basal Cell Carcinoma**
  Starts as a small lump which flattens out as it grows. One of the two most common growths, it can be easily treated and cured.
- **Squamous Cell Carcinoma**
  The other most common growth; however, it is more likely to spread to other parts of the body.
- **Malignant Melanoma**
  The most dangerous type of skin cancer. Often starts as a dark mole. This type is responsible for over 1000 deaths in Australia each year.
- **Sunspot (Keratosis)**
  A small scaly patch of skin occurring on the arms, face, nose and ears. It is not strictly a form of cancer but indicates excessive exposure to solar UV radiation.

**PROTECTION**

Everyone on the farm, including children, should be encouraged to protect themselves against the sun.
- Highest risk time in the sun is between 10 a.m. and 4 p.m.
- Wear protective clothing, such as a shady hat, a shirt with long sleeves and trousers.
- Use a sunscreen with a high sun protection factor (SPF 15+) before you go out into the sun.
- Noses, lips, ears, bald heads and the backs of hands need extra protection.
- Reapply sunscreen regularly, particularly if you are perspiring.
- Over-exposing yourself to the sun’s rays increases the risk of skin cancers, now and in the future.
- Use a tractor with shade protection fitted.

**CHECK FOR EARLY SIGNS**

Checks should be made for early signs of cancer. These include:
- any unusual skin condition that doesn’t heal in four weeks;
- any sore, ulcer or scaly patch on the skin;
- a white patch on the lips that doesn’t heal;
- any mole that seems to grow quickly;
- any mole that changes shape or colour;
- any mole that bleeds or repeatedly itches.

If any of these early warning signs is noticed, a doctor should be consulted.

**DO YOU:**
- reduce the amount of exposure during peak times?
- wear a hat, sunscreen, a long-sleeved shirt and trousers?
- check for early signs of skin cancer?
How many times have you heard or even said ‘Oh, the noise doesn’t bother me, you get used to it’.
The truth is that you don’t get used to it. The apparent increased tolerance that is gained is actually the result of deafness.

Deafness can be caused by:
• exposure to noise above the recommended level;
• exposure to constant noise — even below the recommended level;
• sudden loud noises, e.g. gunshot.
The most important point to remember about noise is that the effect is cumulative, so damage depends on your exposure and the length of that exposure. Hearing loss is irreversible.

EARLY WARNING SIGNS
Some early warning signs of hearing loss include:
• ringing in the ears after work;
• difficulty understanding a normal conversation;
• turning the volume up to hear the radio or television when others appear to hear adequately;
• failing to hear background noises such as a ringing telephone or a doorbell.

REDUCE NOISE AT ITS SOURCE
You can reduce noise at its source by:
• purchasing quieter machinery and equipment. Noise levels vary between brands and models;
• modifying equipment to reduce noise;
• keeping machinery well maintained.

REDUCE EXPOSURE TO LOUD NOISE
Keep people away from noisy machinery by:
• limiting the amount of time workers spend in a noisy environment;
• using protective equipment when it is not possible to reduce noise at its source.

USE PROTECTIVE EQUIPMENT
• When noise exposure cannot be reduced, personal hearing protection is required. For example, hearing protection should be worn when operating a tractor, when shooting or using a chainsaw.
• Ear muffs should be tried on before buying to ensure comfort and that the seal around the ear is adequate.
• The SLC 80 figure, which stands for Sound Level Conversion, indicates in decibels the noise level reduction expected when the protectors are worn correctly. The higher the SLC 80 value, the better the protection.
• Ear plugs may be more comfortable for some farmers but must be inserted with clean hands. Re-usable plugs must be cleaned regularly. Cotton wool is not sufficient.
• Clean and maintain hearing protectors. Replace worn or damaged parts. Keep protectors near the area of noisy activity, e.g. in the cab of the tractor.
• Earphones do not provide good protection from noise.

Remember
• Once your hearing is gone, it is gone forever and hearing aids are of little help. They can make speech louder but cannot make it clearer.

Protect your hearing.
Reduce the risk of hearing damage by reducing exposure to noise

DO YOU:
• limit your time in a noisy environment?
• buy quieter machinery and equipment?
• wear ear muffs or ear plugs when using a tractor, chainsaw or constantly noisy machines, or when shooting?
LOCATE SILOS SAFELY
• Locate silos clear of houses, overhead power lines, animals, children and water holes.

AVOID DANGEROUS ATMOSPHERES
• The atmosphere in confined spaces such as in silos can be dangerous.
• The atmosphere in a silo with a dusty atmosphere, e.g. one being filled, may be explosive, particularly if the humidity is low. Do not smoke in the vicinity of silos.
• High temperatures in silos can also result in heat stress for people entering them.
• Do the job from outside if possible.
• Wear respiratory equipment when appropriate.

SAFE FUMIGATION
• Ventilate the space. Read the instructions on the fumigant container to find the venting period required before entering the silo.
• Always follow the manufacturer’s instructions.
• Open phosphine containers in the open air, not in the shed or silo.
• Hold containers away from the face and stand upwind.
• Wear protective clothing and equipment.
• Have a person stand by while fumigating.
• Place tablets in the silo using a tube from the roof.
• Clearly mark all areas under fumigation with ‘DANGER — UNDER FUMIGATION’ signs.

AVOID SUFFOCATION BY GRAIN
• Don’t enter a silo unless you have to.
• If you enter a silo, have somebody stand by in case of difficulties.
• Never enter a silo before turning off the auger and ensuring that no-one can start filling or emptying augers while you are inside.
• Stay on the ladder above the level of compacted or bridged grain while dislodging it.
• Ensure external ladders start at a height inaccessible to children.

CHECK MACHINERY
• Guard auger drive train (belts, pulleys drive shafts) and the rotating screw fitting.
• Locate mobile augers on firm, preferably flat ground, and operate at a shallow (less than 45°) angle to prevent them overbalancing.
• Lower mobile augers when transporting.
• Never start augers hidden from your view before checking that the area is clear of people.

AVOID STRUCTURAL FAILURES
• Every stored material has different characteristics — a silo designed to store one product may not be suitable for another. Care must be exercised whenever a new product is stored in a silo.
• Follow the manufacturer’s instructions precisely for preparation of the concrete pad.
• Use the ‘bedding-in’ procedure when filling by drawing off a rubbish bin full of grain.
• Keep people, especially children, well clear whenever filling or emptying.
• Seemingly simple changes to a silo can drastically alter its structural stability. An engineer should be consulted before modifying a silo. Equipment that is attached to a silo can impose dangerous loads.

AVOID FALLS
• Provide protection in the form of a simple roof platform together with ladder cages where required.
• Provide a wire mesh guard that is hinged permanently on all external openings above the maximum level of grain.
• Use a safety harness.

KNOW SAFETY PROCEDURES
• If trapped by grain, don’t panic — the grain will pack tighter. Shield your face and chest with your arms and clothing to create space for breathing.
• Plan your escape. Always have a person watch from the outside. The watcher should have clear instructions about what to do in an emergency. The first instruction is, ‘Do not follow me in’.
• If only one person is on standby and cannot pull you out without entering, they must call for help. Only then may someone enter wearing a breathing apparatus and a lifeline. One or more people outside can help to pull you out.
• If someone else is trapped in a grain silo, empty the bin by opening any side outlet, then cut flaps in the cone or walls all around the base using power tools.

DO YOU:
• take precautions against dangerous atmospheres within the silo?
• use protective equipment such as safety harnesses?
• make sure that no one can enter the silo and be suffocated?
• service all machinery regularly and maintain it in good working order?
• check whether the silo is structurally able to store different products before you fill it?
REDUCE MANUAL HANDLING
• Plan ahead. Consider safe work methods such as lifting, carrying, holding, lowering, pushing and pulling.
• Eliminate unnecessary tasks.
• Avoid double handling.
• Use mechanical aids.
• Carry out a safety check first.

LIGHTEN THE LOAD
• Where possible, choose light-weight materials.
• Break up loads into smaller loads, e.g. smaller fertiliser bags.
• Half fill containers.
• Get help and share the load.

REDUCE BENDING, TWISTING AND reaching movements.
• Re-arrange work layout.
• Keep tools and equipment within easy reach.
• Build benches to waist height.
• Keep frequently used items at waist height.

FOLLOW A SAFE PROCEDURE
• Plan the handling.
• Clear the way.
• Wear appropriate protective clothing.

USE CORRECT BODY TECHNIQUES
Lift in this way:
• Bend your knees and keep your back straight. Keep the load close to your body, lift with your leg muscles and support the load with the weight of your body.
Put down a load this way:
• Use your leg muscles and lower the load by bending your knees — not your back.

AVOID MUSCLE FATIGUE
• Warm-up first.
• Take frequent breaks.
• Change jobs to use different muscles.
• Gradually get used to the job.
• Use tractors with a well sprung seat.
• Consider your posture.

CONSIDER MECHANICAL AIDS
Consider using the following aids:
• Special trolleys to move and tilt drums;
• Post drivers for fencing;
• Small mobile hoists or forklifts;
• Mobile ramps on skids that can be towed behind a truck or utility for use in loading and unloading;
• Tools such as crowbars, trolleys, hooks and jacks.

Think back. Reduce the risks of manual handling and the cost of back injury.

DO YOU:
• always use safe handling procedures?
• consider using mechanical aids where possible, e.g. trolleys or forklifts?
• minimise handling, twisting and reaching movements?
TOXICITY OF PESTICIDES
Use pesticides in accordance with registered labels. Some pesticides can be very hazardous if not used correctly. Toxicity varies with the type of pesticide, the composition, dilution and method of absorption into the body. It also depends on how often and for how long you are exposed. The effect of a pesticide will depend on personal differences and state of health. Harm to health may occur suddenly or develop gradually over years. Pesticides enter the body through:
• absorption through skin contact, especially the eyes;
• inhalation of fumes, vapours and dusts;
• accidental ingestion while eating, drinking or smoking.

READ THE LABEL AND THE MSDS
Material Safety Data Sheets (MSDS) provide detailed information on the safe use of a chemical. MSDS should be available from your chemical supplier.

APPLY PESTICIDES SAFELY
• Use the least toxic pesticide available for control of the pest.
• Ensure that only the recommended rate of pesticide is used.
• Wear protective clothing and equipment appropriate to the pesticide as described on the label.
• Prepare only enough pesticide for immediate use.
• Keep a record of the use and results.
• Ensure equipment works properly and does not leak.
• Cover feed and water containers near areas where livestock are grazing.
• Don’t eat, drink or smoke while pouring, mixing or spraying.
• Don’t pour concentrated pesticides into tanks above shoulder height.
• Never work alone if you are using a highly toxic pesticide.

SPRAYING
• Spray with minimal drift and preferably in low wind conditions.
• Never spray in high wind conditions.
• Use a suction method of transferring pesticides to a spray tank. A vortex mixing system can also be used where the pesticide concentrate is added to a water supply during spraying without having to be pre-mixed.
• Prevent nozzles from becoming blocked by using the correct filters and pesticide formulation and ensure that water and equipment is clean.
• Clear blocked nozzles using a soft bristle brush or compressed air. Never suck or blow blocked nozzles to clear them.

CLEAN UP
• Thoroughly clean all spraying and protective equipment where run-off will not contaminate the environment or create a hazard.
• Wash work clothing separately from domestic clothing or use disposable clothing.
• Wash yourself well after a spray operation.
• After handling pesticides, wash hands with soap and water before eating, drinking, going to the toilet or smoking.

TAKE PRECAUTIONS
• Provide a first aid kit that includes a towel, clean clothing, an approved resuscitation mask for expired air resuscitation, disposable eye wash bottle and eye wash solution, soap, nail brush, and clear instructions on what to do with this equipment. This kit should be kept handy and protected from dust and dirt.
• Keep fresh water close by for washing.
• Advise someone where you are going and how long you intend to be gone, otherwise ensure you have a two-way radio for emergency calls.
• It is useful for at least one member of the family or a contract team to attend first aid courses.
• Before use, check the labels, MSDS or other safe handling guides of your pesticides to see what emergency treatment or procedures may be required and make suitable arrangements.
• Stop work immediately and seek medical attention if there is any sign of muscular spasm, chest pain, nausea, vomiting, diarrhoea, blurred vision, excessive saliva in the mouth or difficulty in breathing. Suspect pesticide poisoning if you develop any of these symptoms.
• If regularly using toxic pesticides, an annual medical examination is recommended before and after the spraying season. You may require more frequent health surveillance with some chemicals.
• For skin contact: Wash with soap and water, and rinse with clean water. Remove any contaminated clothing and seek medical advice.
• For eye contact: Hold eye open under running water for 15 minutes. Seek medical advice.
• For swallowing: Ring the Poisons Information Centre on 131126 (national).

BE SURE TO:
• read labels and MSDS carefully.
• wear appropriate protective clothing while spraying and mixing.
• know what effects pesticides may have on you.
• know correct first aid procedures for use with various pesticides.
Follow these guidelines if you store less than 1,000 kilograms or litres combined of agricultural pesticides on your farm (this information is from AS2507:1998 — The Storage and handling of agricultural and veterinary chemicals, for minor storage only).

## USE A STORE

- Your chemicals store must be a dedicated shed or room.
- It must not be used for any purpose other than storing and measuring out pesticides.

## SELECT THE RIGHT SITE

Your store must be located at least:

- 15 metres from the property boundary
- 10 metres from buildings occupied by people or livestock
- 5 metres from watercourses, dams, drainage or sewage lines
- 3 metres from stored flammable materials
- and well above maximum flood level.

The site should preferably be located:

- in an open area with low risk to wildfires
- to ensure good air circulation and to avoid temperature extremes
- near the tank mixing and filling area.

## STRUCTURE OF THE STORE

The store should:

- be structurally sound to wind and weather; it is important to have a good roof with no leaks
- be fire resistant; internal cladding is preferred
- have wall and roof insulation for a moderate storage temperature
- have clear access and outward opening doors.

## THE FLOOR

The floor of the store:

- must be impermeable and preferably graded in order to help when collecting spills and washing down
- must be graded or bunded to contain 25% of the total liquid in the store. Check that doorways and service entries/exits do not compromise containment
- if water is used to wash down any spill inside, the pipe from the bund should have a normally-closed valve fitted
- should be clear of fixtures and items in order to aid a total clean-up in the event of a spill
- should be non-slip for worker safety.

## VENTILATION

- You must have adequate ventilation in order to prevent a build up of chemical vapours.
- Having lower vents just above the bund and upper vents in the walls or roof is highly recommended.

## LIGHTING

Lighting in the store must be adequate in order to read labels and to measure out chemicals.

## SHELVING

Shelving in the store must be:

- sturdy and made of non-absorbent materials
- located on the coolest side of store and away from direct sunlight, electrical and heat sources
- sufficient to avoid stacking and allow easy access to and use of the pesticides.

## WATER SUPPLY

- The site of the store must have access to a clean and reliable water supply for filling tanks and emergency use.
- The water supply must be clean, reliable and capable of providing 15 minutes of continuous flow to wash chemicals off any part of the body.

## SECURITY

- The store must be lockable, and must be kept locked to prevent unauthorised entry.
- Windows and vents must be designed to prevent entry by children and others.
- Only authorised staff should have access to the store’s keys.
SIGNAGE
Put up signs:
• at all entry points: ‘PESTICIDE STORE’, ‘AUTHORISED STAFF ONLY’, ‘NO SMOKING’
• inside the store: ‘NO SMOKING’, ‘SPILL KIT’.
HAZCHEM placarding is not required if you store less than 1,000 kilograms or litres combined of agricultural pesticides on your farm.

SPILL KIT
Keep a spill kit in the store, and signpost it so people know of its existence. It needs to contain:
• absorbent material for liquid spills (eg ‘kitty litter’)
• hydrated lime for neutralising some spills (such as organophosphates and carbamates)
• a shovel and broom
• heavy duty plastic bags and bins to contain contaminated material.

MATERIAL SAFETY DATA SHEETS (MSDS)
• You must obtain MSDS for all products in the store.
• It is preferable that they are located in the store, and in a folder for ready reference.

PESTICIDE INVENTORY
• You must keep an inventory of all the pesticides in your store in an area other than the store — for example, in your office. This ensures access by emergency services.
• However, it is suggested that you also keep a copy of this inventory in the store itself.
• You should update the product listing and quantities at least every three months (it is easy to keep a running balance on the store copy).

MEASURING EQUIPMENT
• Use scales and jugs appropriate and accurate for measuring out the quantities and volumes you use.
• Regularly check the accuracy of your scales.
• Jug markings must be clear and readable.

PESTICIDE STOCK MANAGEMENT
• All products must be in their original package with labels intact.
• Keep ‘registered’ products only in the store.
• Containers need to be kept closed to prevent any accidental spills.
• Open containers in a well-ventilated area only.
• It is suggested that you arrange herbicides, insecticides and fungicides on separate shelves.
• You should place powder or granular products above liquid products on shelving.
• Separating incompatible chemicals may be required — check the warnings on product labels.
• Empty containers and packaging waiting to be safely disposed of must be secure. Allocate a separate storage zone in the store. For DrumMuster requirements and availability check your local council or call 0407 059 432.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
• PPE includes overalls, waterproof pants and coat, gumboots, rubber gloves, respirators, goggles, face shield, PVC aprons, and hats.
• PPE should be located near the store — but must not be in the store.
• Clean PPE should be kept separate from dirty PPE that is awaiting cleaning or disposal.
• PPE should be appropriate to the chemical being used. Refer to the product label and material data safety sheet (MSDS).

FIRE EQUIPMENT
• Mount a dry powder extinguisher near and outside the store.
Rural Info Sheet 10

STORAGE AND DISPOSAL OF CHEMICALS

READ THE LABEL
- The label provides advice on safe handling, storage and use.
- Information about the chemical's identity and toxicity is also provided.

READ THE MSDS
Material Safety Data Sheets (MSDS) provide detailed information on health hazard information, precautions for use and safe handling information as well as chemical data. MSDS also provide information on storage and disposal procedures. MSDS are available from chemical suppliers.

STORING CHEMICALS
- Store in a well-ventilated and well-lit shed that is lockable and which has an impervious floor and impervious shelving.
- Storage sheds must not be in flood areas.
- Check the label for advice about storage.
- Store away from respirators, protective clothing and equipment.
- Keep pesticides separate from animal feeds, fertilisers, seeds and other chemicals.

- Ensure appropriate materials are located close by to clean up any spills. These may include soil, water, absorbent pillows, lime or sand.
- Store the chemical in the original containers with labels intact. If labels come off, always re-label the container.
- Never store chemicals in drink or food containers.
- Keep incompatible chemicals separated.

DISPOSAL
- Check the label for advice on disposal of chemicals or containers.
- Triple rinse empty containers to remove all traces of the chemical.
- Uncap, puncture and crush all rinsed containers.
- Where possible, return containers to the manufacturer or supplier; or
- Ask your local government about its requirements for disposal.

Don't burn containers

TRANSPORT
- Avoid transporting chemicals with food, water, animal feed or other reactive hazardous substances.
- Secure hazardous substances on the vehicle so they can’t move or fall.
- Keep a record of the chemicals you are carrying.

CARE FOR THE ENVIRONMENT
- Observe any warnings on the label regarding toxicity to non-target areas (animals and plants).
- Contact your local government authority for information on the procedures for the safe disposal of containers or remaining chemicals.

DO YOU:
- always read the label and the MSDS first?
- ensure chemicals are stored in an appropriate secure place?
- follow acceptable practices for disposal?
Chemicals enter the body through:
• skin contact;
• inhalation of fumes, vapours and dusts.
• accidental ingestion, e.g. eating, smoking, drinking.
Buying and using the right protective equipment is often not enough to ensure maximum health benefits. Equipment that is not properly maintained and cleaned can be hazardous.

SELECTING PROTECTIVE CLOTHING AND EQUIPMENT
Questions that must be addressed when selecting protective clothing and equipment are:
• Is it suitable for the chemical and its concentration?
• Does it fit the person properly?
• Is it comfortable and easily put on and removed?
• Are there sufficient resources and commitment to ensure that the equipment is properly maintained?
• Is equipment well maintained and in good order?

CARE OF PROTECTIVE CLOTHING AND EQUIPMENT
• Keep all items of protective clothing clean and in working order.
• Wash hats, boots, gloves, overalls, aprons and visors or goggles at the end of each day or after each spray operation.
• Overalls should be laundered in hot water, separately from the household domestic wash. Wash all other items with warm water and soap, rinsing well.
• Check gloves carefully for tiny (pinpoint) holes. Fill gloves with water and squeeze; discard if holes are evident.
• Keep eye goggles clean, especially if they have a headband. Headbands are often made of material that absorbs pesticides and it is in contact with the forehead which is one of the most absorptive areas of the body.
• Keep contaminated clothing and equipment in a box, not in your vehicle. Keep a spare set of protective clothing in your vehicle.

MAINTENANCE OF RESPIRATORS
• After use, remove filters and set aside.
• Wash respirators in accordance with the manufacturer’s instructions.
• Store respirator in a sealed plastic bag or box, away from direct sunlight and extreme temperatures.
• Wipe the outside surface of respirator filters with a damp cloth, but do not allow water to enter the filter.
• Clean and store respirators in a sealed container or a plastic bag to maximise their useful life.
• Periodically check the one-way valves on your respirator to make sure that they are still soft, pliable and functional.
• Check that the face piece of the respirator has not deteriorated. It should be soft and comfortable and maintain a good face seal.
• Ensure that filters are changed and used in accordance with the manufacturer’s recommendations.
• Replace dust filters when it becomes difficult to breathe through them.

Choose protective clothing carefully and keep it clean

DO YOU:
• ensure that the correct protective clothing and equipment is available?
• keep protective clothing and equipment clean and well maintained?
• ensure that respirators are correctly stored and maintained?
USE PROTECTIVE CLOTHING AND EQUIPMENT
Welders should consider using appropriate protective clothing which should include:

- a shield or helmet with a filtered lens;
- fire resistant gloves; a leather apron;
- boots;
- leather spats;
- a felt skull-cap or beret;
- overalls.

To ensure its longevity and protection, all protective clothing and equipment should be kept clean and in working order.

ENSURE ADEQUATE TRAINING
The dangers involved in welding should never be underestimated. Everyone who welds should be properly trained.

DANGERS
The dangers associated with welding include:

- **The arc itself**
  The temperature of the arc can reach 6000°C. The intense ultraviolet and infra-red rays can be harmful to both the welder and anyone else nearby. Welders who are not wearing overalls can suffer symptoms similar to extreme sunburn.

- **The fumes**
  In confined spaces, fumes may be hazardous to health and precautions should be taken. Where it’s not possible to ensure good ventilation, wear a respirator with Australian Standard certification.

- **The volatile combination of heat and gas**
  Fatalities have resulted where drums and other containers have exploded as a result of some welding or cutting work. The nature of the previous contents should be established to ensure that any heating does not liberate toxic fumes or cause an explosion.

- **Heat**
  The finished work will be very hot.

- **The electrical circuit**
  The electrical circuit is perhaps the greatest hazard to the welder. The risk of electrical shock is high and welders should note the following points:
  - Never attempt to connect or change welding cables before switching off the power at the mains first.
  - Always install the welding machine as near as possible to the power point.
  - Always keep the welding machine terminals and cable connections clean and tight.
  - Only use welding cables that are fully insulated throughout their entire length.
  - Work on a well-insulated floor wherever possible.
  - Wear rubber insulated shoes.

  - Always wear dry gloves when handling equipment that is live, e.g. when placing an electrode in a holder.
  - Always get a qualified electrician to do any electrical repairs.
  - Don’t attempt to use gas pipes or water pipes as part of the welding circuit, as explosions or shocks to other workmates may result.

GAS WELDING
Perhaps one of the greatest risks involved with gas welding is that of gas leakage. Leaking fuel gas is usually recognised by odour. Oxygen leaks are potentially more dangerous as they are usually not easily recognised. Leaking oxygen leads to an oxygen enriched atmosphere where naked flames, cigarettes, sparks and electrical faults become dangerous. Oils and greases may spontaneously ignite in the presence of pure oxygen.

- Do not allow oxy-acetylene equipment fittings to be contaminated with grease or oil under any circumstances.
- Regularly maintain regulators. Regulators can fail in two ways — by the controlled forward flow of gas which is known as regular ‘creep’ or by the reverse flow of another gas in the gas lines. Regular maintenance can avoid these situations.

Either of these failures can be recognised by a higher than expected reading on the operational or low pressure gauge. The gauge needle creeps beyond the pressure set for actual welding or cutting.

Excess pressure or the presence of a different gas in a regulator can cause fire and explosions in varying degrees of severity, resulting in damaged equipment and operator injury:

- Never wear equipment fitted with a regulator in which a ‘creep’ condition is known to exist.
- Use the correct colour and type of hoses and fittings recommended by the manufacturers. Copper must never be used on acetylene lines as substances that may spontaneously detonate are formed.
- Flashback arresters should be fitted to all oxy-acetylene equipment to overcome the danger of flashback.
- Oxy-acetylene equipment should not be left near hot equipment or metals that could burn the leads. Gas leaks can be tested by using soap and water.
- Proper attention to maintenance of equipment is necessary to prevent accidents.
- Don’t smoke when welding or around welding and don’t keep your lighter in your pocket — it could explode. Simple prevention may save your life.

ARE YOU:

- properly trained in the use of welding equipment and in welding practices?
- equipped with the appropriate protective equipment?
- aware of the danger signs such as ‘creep’ and other gas regulator failures?
Statistics from all over Australia show that accidents with tractors are the main cause of death on farms. Farmers, farm workers, farmers’ spouses and children have been killed or seriously injured by falling from moving tractors or being crushed when tractors roll over sideways or tip over backwards.

In recent years, tractor accidents have injured or killed more people than any other piece of rural machinery. Estimates show the overturning of a tractor takes from about half a second in fourth gear and one and a third seconds in first gear.

Nearly three out of four tractor deaths were caused by tractors overturning. A further one in five died from falling off a tractor.

Without roll-over protection, drivers and passengers stand little chance of escaping without being injured or killed. However, most of those lives could have been saved if roll-over protection was fitted.

It makes sense to have roll-over protection fitted to your tractor

**TRACTOR SUPPLY**

- Any new tractor for which there is a manufacturer’s Roll-Over Protective Structure (ROPS), should have one fitted at the point of sale.

**TRACTOR OWNERS**

- Under normal circumstances, all tractors should only be operated if a ROPS has been fitted.
- In some instances, it may not be practical to operate the tractor with a ROPS fitted as the farming task will not be able to be performed satisfactorily. In this case, the owner must ensure that the tractor is operated with due care.

**BUYING AND SELLING TRACTORS**

- Suppliers can sell tractors without ROPS if there is no approved frame. The purchaser should then ensure that a ROPS is fitted.
- If a manufacturer’s ROPS is not available or cost prohibitive, an alternative ROPS should be manufactured and fitted by a competent person.
- If using a tractor as a trade-in to a dealer, you do not need to fit a ROPS before sale. The subsequent user should ensure a ROPS is fitted.

**REMEMBER:**

- Tractors are the main cause of death on farms.
- For those tasks that are unable to be performed with a ROPS, make sure you take extra care.
CONSIDER THE RIDER

- Plan ahead — consider safe work practices. Get assistance if necessary.
- Wear appropriate gear — leather soled riding boots are recommended as they are designed to easily slip out of the stirrup in case of an accident. Do not use boots that have been repaired with half soles. Jeans, jodhpurs or long trousers will prevent chafing and a hat will provide protection from the sun.
- A safety approved riding helmet (e.g. polo or pony club style) should be worn where there is an above-average risk involved, e.g. inexperienced riders, horse breaking, etc.
- Make use of aids — whips, spurs, breastplates, running rings, etc.
- Know your limitations and avoid riding horses that are likely to exploit those limitations.
- Respect horses; they have the strength, speed and ability to cause injury.
- Concentrate and be alert; you can never be sure how a horse will react in a given situation.

CONSIDER THE EQUIPMENT

- Keep bridles and bits in good condition and fitted so that the horse is comfortable.
- Ensure saddles and girths are kept in good repair. Stirrup leathers, girth straps and surcingles should be well oiled and checked regularly.
- Stirrup irons should be strong enough not to collapse if a horse falls. They should be of a size that allows the foot to slip in and out freely without allowing it to be forced completely through.
- Keep saddle cloths free from burrs and other foreign material.
- Horses vary in conformation, temperament, ability and in levels of training. Some require breastplates or cruppers to keep the saddle in place and running rings, nosebands or headchecks to keep their head and neck in a position for easy control.

CONSIDER THE HORSE

- Riders need to be very careful when galloping close to a beast at high speed. It is extremely dangerous to allow the horse to touch a beast behind the point of the shoulder under these circumstances. The horse can fall by touching the beast’s hind legs or from the beast turning completely under the horse’s neck.
- In stock yards, be careful riding under gate caps. Some are too low for the horse and rider to pass under safely.
- High speed chases on horses can cause accidents. Where practicable, use dogs to control stock.
- Extra care should be taken when riding in slippery or boggy conditions.

BE SURE TO:

- wear approved safety riding helmets.
- maintain riding equipment in good order.
- know your limitations.
Consider the Handler

- Plan ahead — consider safe work practices. Get assistance if necessary.
- Wear appropriate clothing. This includes protective footwear and a hat for protection from the sun.
- Make use of facilities and aids — headbails, branding cradles, whips, drafting canes, dogs, etc.
- Know the limitations of yourself and others — work within those limitations.
- Respect cattle — they have the strength and speed to cause injury.
- Concentrate, be alert and try to anticipate an animal’s reaction to a given situation.

Consider the Facilities and Conditions

- Yards and sheds need to be strong enough and of a size to match the cattle being handled.
- Good yard design assists the smooth flow of stock. Avoid sharp, blind corners and ensure that gates are well positioned.
- Keep facilities in good repair and free from protruding rails, bolts, wire, etc. and free from rubbish.
- Where cattle need restraining, use crushes, headbails, cradles, etc.
- Footholes and well placed manways are important.
- Try to maintain yards in a non-slippery state.
- Cattle are more unpredictable during cold, windy weather.

Consider the Stock

- Safety in cattle handling varies according to a number of factors — age, sex, breed, weight, horn status, temperament and training of the animal.
- A period of intensive handling in yards and tailing-out as weaners can make subsequent handling of mature animals easier.
- Bulls are more aggressive during mating season and extremely dangerous when fighting. Separate into different yards where appropriate.
- Cows and heifers are most likely to charge when they have a young calf at foot.
- Isolated cattle often become stressed and are likely to charge when approached.
- Cattle with sharp horns are dangerous and dehorning is recommended where practicable. Dehorned and polled cattle, however, can still cause injury.

Consider the Operation

- Avoid working in overstocked yards as you could be crushed or trampled.
- When drafting cattle through a gate, work from one side to avoid being knocked down by an animal trying to go through.
- Take care when working with cattle in a crush, e.g., to vaccinate, apply tail tags, etc., as a sudden movement of stock can cause arms to be crushed against rails or posts.
- Approach cattle quietly and make sure that they are aware of your presence.
- When closing a gate behind cattle in a crush or small yard, stand to one side or with one foot on the gate in case the mob forces the gate back suddenly.
- To avoid being kicked, attempt to work either outside the animal’s kicking range or directly against the animal where the effect of being kicked will be minimised.
- In dairies there is a high risk of being kicked. Try to follow a regular routine so as not to alarm cows, e.g., placing cold water on their teats.
- Be careful when working on the head of an animal that it is restrained in a head bail because they can still move forward or backward suddenly.
- Take care when using certain equipment such as brands or knives for castrating and bangtailing, etc.
- When working with stud cattle, train animals to accept intensive handling through gradual familiarisation, e.g., grooming, washing, clipping, etc.
- When leading cattle on a halter, never wrap the lead rope around your arm or hand. If the animal gets out of control, you could be dragged.
- Bulls should be fitted with a nose ring. When being led, their heads should be held up by the nose lead.
- Be aware of the possibility of contacting diseases such as Leptospirosis and Q fever when working with animals. These diseases are transmitted through contact with blood, saliva and urine (refer to Info Sheet 19 for more information).
- Hygiene is important — vaccinating herds against such diseases is recommended.

Safety in cattle handling depends upon age, sex, breed, temperament, training of the animal and you!

Be Sure To:

- Concentrate and be alert when handling cattle.
- Keep facilities in good repair.
- Take care when working near animals.
GENERAL
- Use yard design that will encourage sheep to work freely.
- Yards of Bugle design could be considered.
- Build yards on sloping ground for better drainage.
- Keep shadows to a minimum where not required to provide shade. Build protective coverings over working and drafting races where practical.
- Avoid slippery surfaces, especially in races and forcing yards.
- Keep dust levels to a minimum.
- Observe recommended withholding periods for drugs or chemicals before stock is slaughtered.
- Rural workers should exercise on a regular basis to maintain a high level of physical fitness and to guard against injuries, especially back injuries.
- All rural workers who undertake heavy physical work should maintain a well-balanced diet to ensure energy levels are maintained and to preserve good health.
- Read labels on chemical containers carefully and follow manufacturer’s instructions and safety directions.

LIFTING SHEEP
- If sheep need to be lifted, get assistance where possible.
- When lifting alone, sit the sheep on its rump, squat down, take a firm hold of its back legs whilst keeping the sheep’s head up to restrict movement. Pull the animal firmly against your body and lift using your legs, not your back.
- If lifting over a fence do not attempt to drag the sheep over the fence, rather work from the same side as the animal.
- To save lifting, put a drafting gate at the end of the handling race. It is advisable to have several positions for ‘drop gates’ in the race to hold sheep that are to be drafted off.

RAMS
- Rams can be aggressive and unpredictable. Treat them with caution.
- When working rams in a race, ensure that you are protected from those behind you. This applies particularly when checking testicles, etc. A well-positioned drop gate is useful to reduce the hazard.

TRANSMITTABLE DISEASES
- Animals carry diseases that are transferable to humans. Be familiar with the symptoms so that you can determine if disease exists in the flock.
- If signs of disease appear, have the disease confirmed and animals tested. If the disease is present, treat affected animals appropriately and vaccinate to prevent further occurrence.
- Diseases are transferred by urine, blood and saliva and through open wounds (e.g. scabby mouth).
- Keep open wounds covered. Wash well with soap, water and antiseptic if contact is made with urine, blood or saliva from diseased animals.
- Personal hygiene is important at all times.

TAKE CARE WHEN HANDLING SHEEP

BE SURE TO:
- maintain hygiene standards to avoid diseases.
- read labels on chemical containers before use.
- design and maintain yards to increase safety.
GENERAL

• Shearers and rural workers should exercise on a regular basis to maintain a high level of physical fitness to guard against injuries, particularly back injuries.

• All rural workers who undertake heavy physical work should maintain a well balanced diet and high fluid intake to ensure the required energy levels and to avoid heat stress.

• Ensure that all entrances (steps, etc.) to shearing sheds and accommodation are safe.

• Ensure suitable and functional fire-fighting equipment is available in shearing sheds and quarters.

SHEARING AND CRUTCHING

• Ensure floors in catching pens are kept dry where possible; wet floors become slippery and cause falls.

• Avoid back injuries from falls by ensuring that grating is clear, securely nailed down and free of any obstruction.

• Allow sheep to empty out before moving into the shed.

• Ensure sheds are well lit and ventilated.

• Keep shed hands off the board and clear of shearers unless they need to be there or are called upon to give assistance.

• Keep the board clean and dry at all times.

• Get assistance when stacking or loading bales.

• Ensure that belt drives and grinders are properly guarded.

• Keep dogs clear of the work area when not being used. Don’t tie dogs in a position where employees could trip over the dog or its leash.

• If electricity is available, have electric motors fitted to the wool press to reduce air and noise pollution.

MEETING NUTRITION NEEDS

Iron

• Principal food sources are lean meat, liver, kidneys, legumes, and green leafy vegetables.

• A regular intake of lean meat is important.

Vitamin C

• Principal food sources are fruits and some vegetables. Citrus and tropical fruits are good food sources. Vitamin C is important for promoting iron absorption.

Avoid back injuries

BE SURE TO:

• maintain good posture and use your legs, not your back.

• exercise regularly to maintain physical fitness.

• ensure a balanced diet.
**GENERAL**
- Use land design that will encourage pigs to work freely.
- Keep shadows to a minimum. Build protective coverings over working and drafting races where practical.
- Avoid slippery surfaces, especially in lanes and loading yards.
- Keep dust levels to a minimum and avoid smoking in dusty areas.
- Rural workers should exercise on a regular basis and maintain a high level of fitness to guard against injuries, especially back injuries.
- All rural workers who undertake heavy physical work should maintain a well balanced diet to maintain energy levels and to preserve good health.

**CHEMICALS, VACCINATIONS AND MEDICATION**
- Read labels on chemicals and antibiotic containers carefully. Follow manufacturer’s instructions and safety direction.
- Sterilise needles, teeth cutters, ear pliers and ensure operators observe hygienic practices.
- Observe recommended withholding periods for drugs and chemicals before pigs are slaughtered.
- Wear appropriate protective clothing.
- If headaches or any other discomfort is suffered after handling chemicals, seek medical advice and have appropriate tests performed. Avoid these chemicals if possible in the future and use full protective clothing and breathing filters when handling chemicals in the feedmill.
- Ensure correct dosage rates are used.

**LIFTING PIGS**
- When lifting pigs, get assistance where possible.
- When lifting alone, squat down, take a firm hold of its back legs, pull the animal firmly against your body and lift, using your legs not your back.
- If lifting over a fence, do not attempt to drag the pig over the fence — work from the same side as the animal.

**TRANSMITTABLE DISEASES**
- Animals carry diseases that are transferable to humans. Be familiar with the symptoms so you can tell if these diseases exist in the herd.
- If signs of disease appear, have the disease confirmed and animals tested. If the disease is present, treat affected animals appropriately and vaccinate to prevent further occurrence and maintain a vaccination program.
- Diseases (e.g. Leptospirosis) are transferred by urine, blood and saliva and through open wounds. Keep open wounds covered and wash well with soap, water and antiseptic if contact is made with urine, blood or saliva from diseased animals (refer to Information Sheet No. 19 for further information).
- Maintain personal hygiene at all times.

**CONSIDER THE STOCK**
- Safety in pig handling varies according to a number of factors — age, sex, breed, weight, temperament and training of the animal.
- Boars can be aggressive and unpredictable. Treat them with caution.
- Boars are most aggressive during mating and extremely dangerous when fighting.
- Prevent boars coming in contact with each other at all times.
- When moving boars, use a drafting board.

**CONSIDER THE HANDLER**
- Plan ahead. Consider safe work practices. Get assistance if necessary.
- Wear suitable footwear; and gloves when appropriate. Wear a dust mask when mixing feed.
- Make use of facilities and aids — nose ropes and drafting boards.
- Know the limitations of yourself and other stockpersons — work within those limitations.
- Respect pigs — they have the strength and speed to cause injury.
- Concentrate and be alert — you can never be sure how an animal will react to a given situation.

**CONSIDER THE FACILITIES AND CONDITIONS**
- Ensure suitable fire fighting equipment is located throughout the piggery and feedmill.
- Have emergency phone numbers in bold print displayed near the phone.
- Keep well-stocked first aid kits.
- Pens and lanes need to be large and strong enough to match the pigs being handled.
- Good pen design assists the smooth flow of pigs. Avoid sharp, blind corners and ensure gates are well positioned.
- Keep facilities in good repair and free from protruding rails, bolts, wire and rubbish.
- Where pigs need restraining, use crushes and nose ropes.
- Try to maintain lanes in a non-slippery state.

**BE SURE TO:**
- read labels on chemical containers.
- keep well-stocked first aid kits.
- observe high standards of personal hygiene.
Zoonoses are animal diseases that can affect people. Zoonoses are in general:

- capable of causing serious illness and considerable lost productivity
- poorly understood by those at risk
- difficult to diagnose
- difficult to treat
- relatively uncommon in the general community
- occupational hazards in animal-based industries
- preventable by using good hygiene and sound animal husbandry practices

Zoonoses may be overlooked by the medical profession. Sometimes zoonoses which can be treated are mis-diagnosed as diseases which cannot be treated. People who believe they may have contracted a zoonosis should promptly consult a medical practitioner, and should assist by providing a detailed history of recent animal contacts.

Domestic animals are a common source of infection, and those most at risk are abattoir workers, farmers, veterinarians, livestock handlers and animal laboratory workers. There are many zoonoses; they can be bacterial, fungal, viral or parasitic, and this information sheet can only touch on some of the more common ones.

**BE SURE TO:**
- observe high standards of hygiene.
- take care when handling animals.

**GASTROENTERITIS**

A wide range of animal pathogens have the ability to cause human gastroenteritis. *Salmonella, Campylobacter, E. coli, Giardia, Cryptosporidia* and *Yersinia* are the principal ones in Tasmania. Infection can come from livestock, wildlife or companion animals, and in particular, younger animals.

Humans become infected when food or hands are contaminated with animal faeces, emphasising the importance of hygiene. Wash hands thoroughly after touching animals or animal faeces and don’t eat or smoke on the job. Open water supplies, including rivers and streams, are also common sources of gastro-enteric organisms. Be clean and be careful!

**RINGWORM**

Ringworm is the general term for mammalian skin infections caused by several microscopic fungi. Ringworm is quite contagious and spreads by fungal spores from animals to humans and between humans. It is a common disease of vets and their families.

Though usually fairly mild, it can become a serious problem with severe itching, and may require prolonged treatment. Ringworm can occur on the scalp, body and groin. Typical lesions are well defined and spread outwards, with red borders and scaly centres.

Most human cases come from cats, calves or other humans. Infected animals usually have bald patches, but not always. Many cats are symptomless carriers. Fungal spores can remain infective off an animal, eg on yard-railings and harnesses, for months. Diagnosis is not always easy, requiring laboratory confirmation. Asking the right question helps! Do you have close contact with a companion animal? Do you permit a cat or dog to sleep on your bed? Do any of your animals have bald patches?

Sensible personal hygiene, such as a hot shower after work, will minimise the risk of acquiring ringworm, or worse still, spreading it to your family.

**ROSS RIVER VIRUS**

Ross River virus disease is spread by mosquitoes and causes much lost productivity Australia-wide. Animal hosts of Ross River virus are marsupials, particularly wallabies. In Tasmania it is basically a summer and autumn infection in coastal areas, coinciding with the mosquito season.

Ross River virus disease causes fever, headache, fatigue, skin rashes and joint pains - altogether an unpleasant experience. There is no treatment and recovery can take up to two years. In some patients, recovery is prolonged and complicated by chronic fatigue syndrome. The relatively long incubation period of 10-14 days leads to many mis-diagnoses of this disease. A blood test is available.

People whose work involves exposure to mosquitoes in coastal areas should adopt preventative measures, especially between dusk and dawn. Long trousers and long sleeves should be worn. Light coloured clothing is said to be less attractive to mosquitoes. Effective insect repellents contain DEET - diethyl toluamide.

**TETANUS**

Animal environments, especially in concentrated areas such as yards, stables and shearing sheds, may be heavily contaminated with tetanus spores. Cuts or abrasions, especially deep penetrating wounds, can become infected. It is important to maintain adequate tetanus protection. All at risk employees should have a booster injection (ADT, or Adsorbed Dipheria Tetanus) every ten years. Staff who receive a tetanus-prone injury should have a booster injection if five or more years have elapsed since the last booster.

Source: *Australian Immunisation Handbook 1997*

**TOXOPLASMOSIS**

Toxoplasmosis is caused by the ubiquitous protozoan parasite *Toxoplasma gondii*, carried by cats. Oocysts (“eggs”) pass out in cat faeces. When eaten by a wide range of mammals and birds, they develop into tiny cysts in muscles and internal organs, including the meat of domestic animals. Toxoplasmosis can cause abortion in sheep and goats.

see over...
Humans are known to become infected through:
- contact with the faeces of cats
- eating raw vegetables contaminated by cat faeces
- eating improperly cooked meat.
- occupational exposure.

Toxoplasmosis can cause serious illness in unborn babies whose mothers do not have toxoplasmosis antibodies. Pregnant women should not handle cats or aborted or premature lambs. Salad vegetables must be well washed before eating and meat needs to be well cooked (70°C for at least 5 minutes).

### PSEUDOCOWPOX

An infection peculiar to the dairy industry, pseudocowpox is also called Milker’s Nodule. This is caused by a virus and is acquired through contact with the teats of cows, or the mouth or muzzle of calves. It produces brownish-red papules on the fingers or hands which take up to six weeks to heal. There is no specific treatment. Wash hands well after working in milking sheds.

### ERYSIPELOID

The skin infection erysipeloid is caused by the bacterium *Erysipelothrix rhusiopathiae*. It is essentially an occupational disease affecting people who handle animal and fish products. Abattoir workers are also at risk.

The organisms abound in and around fish tanks and cages, notably in the bottom sediment. They may be present on the skin of commercially caught fish. Unprotected hands, especially any with cuts or scratches, may become infected, producing an unpleasant, dry, purple sore accompanied by tingling and itchiness. Serious complications (arthritis and septicaemia) may occur, but are rare.

Prevention is by cleanliness in the workplace, and sensible first-aid attention to cuts and abrasions. Where possible gloves should be worn, particularly when cleaning out fish tanks. Antiseptic lotions and barrier creams are of value. Penicillin treatment is usually effective.

NB: Erysipeloid should not be confused with human erysipelas, the name given to a specific streptococcal infection.

### CLA (CASEOUS LYMPHADENITIS) OR “CHEESY GLAND”

An unpleasant occupational disease of the sheep industry, Cheesy Gland is caused by the bacterium *Corynebacterium pseudotuberculosis*.

Cheesy Gland abscesses are common in sheep and sometimes rupture, especially during shearing, releasing infection.

Humans become infected through skin wounds and abrasions. People working in and around sheep yards and woolsheds, and abattoir workers are at risk.

Cheesy Gland causes the same nasty abscesses in humans, is difficult to treat and may recur. Good personal and woolshed hygiene is essential. Staff working with sheep should thoroughly clean and disinfect wounds. Existing wounds should be covered.

### ORF (SCABBY MOUTH)

Scabby mouth is a very common and highly contagious viral skin infection of sheep and goats. The virus is extremely long lived in the environment. Most properties are infected and are likely to permanently remain so.

In humans, the skin condition is given the peculiar name “orf”.

The virus is found wherever sheep and goats live, and spreads to people, usually via broken skin. This happens when contact is made with a scabby muzzle, or through exposure to scabby mouth vaccine, which is a live virus vaccine.

Orf is an occupational disease of shearers and sheep farmers. It consists of blisters or vesicles, usually on the hands or arms. These develop into nasty ulcers with covering scabs. The sores can be quite painful. There is no treatment, apart from taking precautions against secondary bacterial infection. Healing can take up to six weeks.

Fortunately strong immunity develops and orf is normally contracted only once in a lifetime.

Prevention is through sensible hygiene. Wounds and abrasions should be protected from infection.

### LEPTOSPIROSIS

Leptospirosis is an infectious bacterial disease affecting farm animals, wildlife and man. It is an occupational disease in the dairy and meat industries.

The bacteria are found in the urine from infected and carrier cows. They may also be present in large numbers in foetal tissues, uterine fluids and placental membranes.

Humans can become infected through skin abrasions, through the mouth, nose or even the eye. Milkers are right in the line of fire, with urine splashing into their faces as they work in the pit behind and below the cows.

Leptospirosis can be quite debilitating, causing severe headaches, fever, aches and pains. Blood tests are available, but if the medical practitioner is not given a full history, leptospirosis may remain undiagnosed. Antibiotics can be effective if treatment is commenced early.

The risk of contracting leptospirosis from properly vaccinated herds is greatly reduced.

No human vaccine is available. Waterproof, protective clothing should always be worn in an operating milking shed, ideally, with goggles as well. Gloves should be worn when handling foetal tissues, uterine fluids and placental membranes.

### FOR FURTHER INFORMATION

Department of Primary Industries, Water & Environment video, *Is it a Zoonoses Doctor?*, produced by Dr Tim McManus, is available from the Tasmanian Rural Industry Training Board.

To make your farm a safe place, you must think safety before an accident occurs. The checklist of questions that follow will help you guard against accidents.

**WATER**
- Are swimming pools, nearby dams, irrigation channels, troughs, open tanks, creeks, etc. adequately fenced so that small children will not wander into them and risk drowning?
- Are septic tanks, seepage pits and sheep dips fenced?

**PADDOCKS**
Are nearby paddocks adequately fenced so that small children are not at risk from:
- animals?
- vehicles?
- moving machinery?
- road traffic?

**WORKSHOP**
- Are there adequate gates or doors to ensure that young children on their own cannot enter workshops where hazardous equipment is stored and used?

**PESTICIDES**
- Are farm pesticides kept locked and out of reach of children?
- Are pesticide mixing and wash down bays adequately fenced and guarded to prevent access by children?
- Are orchards fenced and children prevented from entering after spraying?

**FIREARMS/EXPLOSIVES**
- Are all firearms and ammunition locked away out of reach of children?
- Are all explosives locked away from children?

**ANIMAL PENNS/STOCKYARDS**
- Are children adequately protected from dogs who might attack or bite?
- Are animal pens and stockyards secure against small children wandering into danger with confined stock?

**LADDERS**
- Are ladders stored safely away to prevent children from climbing on structures such as roofs, trees, etc. and risk falling?
- Are ladders to tall silos, bins and tank stands, windmills, etc. adequately guarded against children attempting to climb them?

**A SAFE PLAY AREA**
- Is there a fenced off, safe area for children to play?

**EMERGENCY FIRST AID**
- Does the farm have an emergency plan for dealing with a serious farm accident?
- Has the farm a suitable first aid kit and a person trained in first aid?

**DO YOU:**
- safeguard children from potential hazards?
- have a suitable first aid kit on hand as well as someone trained in first aid?
- set a good safety example for children?

Set a good example. When children start to help out on the farm, they will follow your example. If you work safely, so will they.

**SILOS OR GRAIN STORAGE**
- Are grain storage bins, silos, trucks, etc. adequately guarded to prevent access by children?

**MACHINERY, EQUIPMENT AND APPLIANCES**
- Are tractors, trucks and other farm machinery kept locked and children prevented from playing on them?
- Have any dangerous items of equipment been left accessible to children?
- Are there appliances and electrical tools left turned on or engaged and accessible to young children?
EFFECTS
The effects of heat stress range from simple discomfort to life-threatening illnesses such as heat stroke. It causes increased sweating which leads to loss of body fluid and then reduced heat tolerance. This leads to reduced capacity for work, inefficiency and can lead to an increased risk of accident.

Warning signs of heat stress are:
• tiredness;
• headache;
• nausea;
• loss of concentration;
• muscle cramps;
• dizziness.

CAUSES
Some of the factors that can cause heat stress are:
• temperature;
• humidity;
• movement of air;
• the person’s clothing;
• acclimatisation of the person;
• requirement of personal protective clothing or equipment to be worn;
• physical activity;
• the radiant temperature of the surroundings.

PEOPLE MOST AT RISK FROM HEAT STRESS
Working in a hot environment is more likely to have an adverse affect on people who are:
• overweight;
• medically unfit;
• unhealthy, particularly if suffering from heart disease, circulation problems or skin disorders;
• dehydrated, whether this is from an alcoholic hangover, failure to replace water and salt lost in sweating, or from medically prescribed diuretic drugs;
• not acclimatised to heat.

HAZARD REDUCTION
Indoor
• Open windows and doors to allow natural cross ventilation or install air conditioning if practicable.
• Provide quiet fans or ventilators to lower temperature and increase air movement.
• Insulate roof, walls or other heat making equipment.

Outdoor
• Wear loose fitting cotton clothing to promote good air circulation around the body and enhance the cooling evaporation of sweat.
• Use sunscreens that are broadband spectrum and have a high sun protection factor (SPF 15+).
• Wear broad brimmed hats that shade head, neck, face and ears.
• Wear close-fitting sunglasses (labelled to show they meet the Australian Standard AS 1067).
• Use a wetted scarf.
• Provide shaded rest areas.
• Provide an ample supply of cooled, non-alcoholic drinks and ensure they are easily accessible.
• Consume small quantities of water at frequent intervals to avoid involuntary dehydration.
• Reschedule heavier work to other days to avoid prolonged spells in the open sun.
• Where practicable, rotate schedules of workers engaged in the heavier tasks.

TREATING HEAT STRESS
If heat stress should occur, the following action should be taken:
• make sure that the injured person is removed from heat and allowed to rest in the coolest available place;
• cool the injured person down with a fine spray of water and fan;
• remove excess clothing;
• if conscious, give the person cool but not cold water to drink;
• contact a doctor, nurse or first aid officer immediately.
• do not give salt or alcohol.

BE SURE TO:
• keep hydrated — drink plenty of fluids.
• stay out of the sun as much as possible.
• rest frequently in a cool place.
Asthma affects as many as 1 in 5 children and at least 1 in 10 adults. Asthma is the main cause of hospitalisation of children in Australia. Each week 15 Australians die from asthma. Many common triggers of asthma are prevalent on farms.

**WHAT IS ASTHMA?**
Research has shown asthma to be an inflammatory condition of the small airways in the lungs. The inflammatory process has three major effects on the small airways:
- swelling of the lining of the small airways;
- constriction of the small airways;
- excessive production of secretions that accumulate in the small airways and reduce the flow of air.
Collectively and individually, these three components of inflammation decrease the size of the small airways and reduce the amount of air passing in and out of the lungs. This causes difficulty in breathing.

Asthma should not be taken lightly — it can be a life-threatening condition.

**THE SIGNS AND SYMPTOMS OF ASTHMA**
Asthma may be recognised by:
- wheezing;
- coughing;
- breathlessness;
- chest tightness.

Any one or more than one of these symptoms may occur. Wheezing, although common, does not have to be present and coughing, especially at night may be the only indication of asthma.

**COMMON TRIGGERS**
Common triggers of asthma can be:
- infection — colds or flu;
- allergies — grain, dust, pollens, some food, animal dander, food additives and some medications (e.g. Aspirin);
- exercise;
- climate or temperature changes;
- irritants — smoke (cigar, cigarette, burning off), dust, air pollution, fumes (e.g. aerosols, perfumes, paint, petrol, bleach, car exhausts, chlorine, soaps and detergents);
- emotions — stress, anger, panic, laughing, excitement.

**CONTROL OF ASTHMA**
Since asthma has been recognised as an inflammatory disorder, the management of the condition has altered and improved.

Today the aim is to keep the asthmatic well controlled and free of asthma symptoms. This may take time to establish because the doctor and the asthmatic need to determine the correct medication, the correct dosage and the correct delivery system to achieve good control.

Nearly all asthmatics can and should be well controlled. Unfortunately, many asthmatics mistakenly believe that to have asthma means to forfeit a normal lifestyle.

**ASTHMA MANAGEMENT**
- Ask your doctor for an asthma management plan.
- See your doctor for a regular review of your asthma.
- Know the signs of worsening asthma and know when you need to seek help.
- Know what to do in an asthma crisis.
- Use a Peak Flow Meter when you begin to feel unwell or you have signs of worsening asthma.
- Have your inhaler technique checked by your doctor or a nurse.
- Use a Peak Flow Meter to find out what your trigger factors are.

**IMPORTANCE OF GOOD CONTROL**
- Lead a normal life with no signs and symptoms.
- Maintain normal lung function.
- Reduce the risk of severe asthma, hospitalisation, or even death.

**INADEQUATE CONTROL OF ASTHMA**
The following symptoms can indicate inadequate control of asthma:
- waking at night with asthma;
- reduction of activity level;
- using a relieving medication (Ventolin, Bricanyl) more than once or twice a week with less effect.

Some reasons for inadequate control of asthma can be:
- inadequate preventative therapy, i.e. Becotide, Becloforte, Pulmicort, Intal Forte;
- inadequate inhalation.
Correct inhalation technique is fundamental to asthma control. If poor inhalation technique is the problem, inhaled medication does not reach the small airways to relieve constriction or control inflammation.

There are many inhalation devices available to overcome this problem for all ages.
If you suspect inadequate asthma control, discuss this with your doctor. The problem is often easy to identify and simple to remedy.

**REMEMBER:**
- Asthma can be controlled;
- Consult your doctor for more information about asthma;
- Use a Peak Flow Meter to control your asthma.
Perhaps more than in any other occupation, agriculture involves a broad cross-section of skills. Workers often perform tasks that in other industries are normally carried out by a variety of skilled tradespeople. Research has shown that machinery/equipment maintenance and repair and associated farm workshop jobs are among the most common activities in which injuries occur on farms. While many of these are of a minor nature, many more serious injuries have resulted in the victim requiring prolonged hospital treatment or enduring painful and expensive rehabilitation before returning to work. Often there is partial, temporary or permanent disability. Most farm workshop accidents can be avoided if appropriate and adequate precautions are taken.

**GENERAL**
- Is the work area as free from hazards as possible?
- Are tools and equipment properly guarded?
- Are tools and equipment used in a safe manner?
- Do workers use appropriate personal protective equipment?
- Is the area equipped to handle emergency situations, e.g. fire extinguishers, first aid kits?
- Is the workshop managed to keep it that way?

**SAFETY PRECAUTIONS**
- Read the operator’s manual and observe all safety precautions for all equipment.
- Protect yourself from electric shock (check power tools before use).
- Keep all guards and shields in place.
- Give the job at hand your full attention.
- Let each tool work at its own speed, do not force it.
- Always wear appropriate personal protective clothing.
- Maintain secure footing and balance at all times.
- Keep tools clean and sharp.
- Turn the switch off immediately if the power tool stalls or jams.
- Wherever possible, use clamps or a vice to hold your work.
- Provide enough light so that you can see what you are doing.
- Store power tools safely to prevent damage to the tool and cord, and to prevent unauthorised use.
- Maintain power tools in good order. Replace or repair worn or faulty equipment immediately.

**BE SURE TO:**
- keep the workshop free from hazards.
- observe appropriate safety precautions.
- have a properly equipped first aid kit on hand.
CHILDREN AND WATER

The following are places that are attractive to children, especially on hot days.
- open tanks;
- septic tanks;
- wells;
- irrigation;
- fuel drums;
- creeks;
- troughs;
- dams;
- sheep dips;
- pits.

It is crucial to make sure that children understand water safety. To make sure children are protected from water hazards, it is essential to take the following steps:
- supervise children when they are near or around water;
- make sure children are taught to swim and have learnt water safety skills;
- fence off a safe play area;
- put lids on wells and inspection holes;
- fence off dams, irrigation channels, troughs and pits;
- build steeper levees on dams and irrigation channels;
- keep up regular maintenance and safety checks;
- identify all the water hazards on the farm;
- make sure that someone in the family and/or on the farm knows resuscitation techniques.

DANGERS! HOT WATER

- Water from hot water taps can cause serious burns.
- The problem is that often the hot water temperature is too hot. At 60°C it takes only one second for hot water to cause third degree burns. At 50°C it takes a whole five minutes. It seems a small difference in temperature, but it can mean the difference between a safety time and hospitalisation, skin grafts and scarring for life.
- Reduce your hot water temperature to help prevent burns.

Young children are curious and energetic and do not understand danger

WORKING AROUND WATER

- Working in wet conditions may significantly increase the risk of slips. Take extra care.
- Take extra care when working with electrical equipment near water.
- Be aware that wet conditions may exacerbate the effects of ambient temperature.
- Take care when working near steam from cooking or processing operations, as it can cause thermal burns and increase workplace humidity.
- Moist conditions favour the growth of several pathogenic organisms.

BE SURE TO:
- be aware of all the water hazards on your farm.
- make sure children know water safety.
- keep hot water to 50°C or below.
GENERAL PRECAUTIONS

• Always employ a licenced electrical contractor to carry out alterations, repairs or additions to your electrical installation.
• Keep wiring and equipment in good repair.
• Don’t overload your wiring installation.
• Don’t remove guards or covers from electrical switch gear.
• In areas exposed to the wind and rain, always use weather-proof outlets and fittings.
• All lights exposed to the risk of breakage by farm tools should be fitted with wire guards.

EARTH WIRES

The earth wire is one of the most important safety features of any installation. Its purpose is to divert any current leakage to the ground, and cause a fuse to blow or a circuit breaker to operate should a fault develop in the installation.

The earth wire is usually a bare copper or green/yellow insulated wire that is connected to a water pipe or to an earth stake driven into the ground.

OUTDOOR POWER LINES

• Always keep well clear of overhead power lines. Contact with them usually means death.
• Do not go near fallen power lines. Treat all such lines as being live. Keep everyone from the area and immediately notify your electricity supply handling authority.
• Be careful handling irrigation pipes in the vicinity of overhead wires. Their lengths are usually in excess of the clearance available.
• Make sure that high equipment such as bale loaders are kept well clear of overhead wires.
• Never ride on the top of high loads.
• If your crop-dusting is done from an aeroplane, be sure to let the pilot know beforehand if there are any power lines in the vicinity.
• Never fly kites or model planes near overhead wires.
• Do not plant young trees in the vicinity of power lines as in future years they could prove hazardous.

FUSES

• Fuses and circuit breakers are the safety valves of an electrical installation. They cut off the current if equipment is seriously overloaded or a short circuit develops.
• If a fuse burns out, turn off the switch and examine the equipment before replacing the fuse wire. If it burns out again, consult a competent electrical contractor.
• Be sure that the rating of fuse wire is the correct one for the equipment concerned.

FARM WORKSHOP

• When buying portable electric tools, the double-insulated type is preferred.
• Never use an electric light socket as a power outlet for operating a portable tool.

WELDING EQUIPMENT

• Be sure to switch off the supply to the welder before connecting the welding leads to their terminals.
• Check that the leads are correctly connected to the terminals marked ‘electrode’ and ‘work’.
• Don’t use leads if they have bare sections; replace them.
• Never handle exposed metal parts of electrode holders, or electrodes, with bare hands while the supply to the welder is switched on. Never rest the electrode on your body.
• Always use an independent earth lead. Never rely on building structures or the earthing conductor of the electrical installation.
• Be sure to keep waste material away from the welder.

ELECTRIC FENCES

• If electric fences are not properly constructed, they can be lethal. Before buying, check with your retailer that the fence controller conforms to Australian Standards and if in any doubt consult Electricity Standards and Safety on 6233 7585.
• Be sure to erect a warning notice if your electric fence adjoins public access ways.
• If the controller is battery operated, disconnect the battery when recharging it. Never use a battery charger, instead of a battery, to supply the fence controller.

FARMHOUSE

• If possible, avoid using more than one appliance on one power point.
• Inspect all cords and plugs frequently but be sure to disconnect them from the power point first. Discard damaged plugs and worn cords.
• Avoid running cords under rugs, over radiators, in door jambs or through windows.
• Be careful not to touch any electrical appliances while your hands are wet or if you are standing on a wet floor. Never touch bare electrical elements unless the supply has been disconnected.
• Never use a portable electric radiator in the bathroom.

DO YOU:

• make sure any alterations or repairs are carried out by a licenced electrical contractor?
• inspect cords and plugs regularly?
Fire fighters are personally responsible for protecting themselves and fellow workers from injury when engaged in fire fighting, hazard reduction or similar activities.

**AWARENESS**
- Never work alone.
- Anticipate changes in behaviour of the fire due to wind changes, local topography or fuel type.
- Watch for erratic fire behaviour.
- Beware of burning limbs and trees in previously burnt country; look up and live.
- Keep clear of all vehicles and machinery — the operator may not see you.
- Avoid deep slopes above a fire.
- Observe and keep in mind local topography:
  - the position of tracks, clearings, creeks and any other likely spots and landmarks;
  - avoid danger areas such as steep slopes, dense vegetation and steep narrow gullies.
- Select escape routes before entering the fire zone.
- Obtain the latest forecast with particular attention to wind changes. However, the general forecast may not apply in your area due to fire effects, terrain or local factors.
- Relate local weather to possible fire behaviour.

**PERSONAL EFFORT**
- Maintain self-control under threat situations.
- Panic is infectious and drains energy.
- Avoid exhaustion from over-exertion or prolonged periods of effort.
- Avoid unnecessary shouting and whistling — it may confuse others.

**LIMITS OF ENDURANCE**
- Lack of rest reduces physical strength, the ability to think clearly and speed of reactions. Arrange relief for yourself and your team.
- Take a break at every opportunity.
- If feeling ill, drowsy, faint or nauseated, take action for heat stress.

**DRINKING**
- It is a mistake to do without water for long periods. Dehydration can make you sluggish, irritable, impatient, muddle-headed, tired and sleepy.
- When sweating freely, replace fluids and salts. Drinking small quantities frequently is better than having one large gulp every hour.
- Replace salt by taking salt in food or drink, e.g., Vegemite, etc., or lightly salted (one level teaspoon per litre) water.
- Aerated drinks blow up the stomach and make hard work uncomfortable. Beer won’t help either.
- No alcoholic drinks. Wait until the fire is finished for ‘one with the boys’.

**PROTECTIVE CLOTHING**
- Protect against falling objects — wear an approved safety helmet.
- Make sure your safety helmet is properly adjusted. Under severe conditions wear a chin strap.
- Wear safety glasses, goggles or a face shield to prevent injury from windblown dust, smoke irritation or during chainsaw operations.
- Working boots must be in good condition. Wear approved safety boots.

**HEAT AND SMOKE**
- Protect against radiant heat.
- Take refuge:
  - light a back burn and use the burnt country as a refuge;
  - use gravel pits, or clearings in the forest and roads;
  - lie down on the ground - air is freshest and coolest at ground level.
- Conserve energy.
- Resist panic reactions to danger.
- Use vehicles to shelter from heat radiation when the temperature becomes uncomfortable.
- Don’t take refuge in elevated water tanks. Immersion in lukewarm water can kill.
- Limit breathing rate when smoke is dense — wait for small pockets of fresh air.
- Dense hot smoke could damage lungs but dry air at 350°C can be breathed for some time with no lung damage.
- If it is necessary to move through the flames:
  - don’t linger in front of the flames;
  - use clothing to the best advantage as a shield;
  - select an opening where flame height is lowest;
  - move through the flames onto burnt ground as quickly as possible;
  - beware always of the danger from burning limbs and trees in burnt country.
- As a last resort, if trapped, lie on the ground taking advantage of any protection available.

**BE SURE TO**
- beware of burning limbs.
- know the local topography.
- consume plenty of fluids.
GENERAL
While many of the hazards on a dairy farm occur on other farms as well, there are some special characteristics that set dairy farming apart from other industries.

• Dairy farmers are required to carry out a range of daily tasks under different conditions.
• Dairy work is undertaken in physical isolation and thus requires a higher level of occupational health and safety protection.
• Dairy workplaces and work processes are often less easily controlled, e.g. climate, working with animals.
• Dairy work is often undertaken at rush times where prevailing seasonal or climatic conditions may result in downgrading or loss of product and/or price if work is delayed.

SAFETY IN THE DAIRY
• Is lighting adequate for early morning or evening milking?
• Are concrete surfaces roughened to provide extra traction from both stock and workers?
• For your dairy type, does the design minimise the amount of lifting and bending that is required, e.g. lifting buckets?
• Are there exposed moving parts in the dairy (particularly rotaries) that pose a risk of people being trapped?
• Are moving parts on compressors, pumps, electrical motors and grain augers properly guarded?
• Is there a lanyard-operated emergency stop system available for rotary dairies in addition to the forward/stop/reverse lanyard?
• Does the dairy have Residual Current Device (RCD) installed on the electrical circuit board?
• Are all-weather covers present on power boards in wet areas?
• Do milk line supports and union joints meet the recommended safety levels?
• Are projections which may be at head height, such as the handles on milk filter casings, protected with some form of padding?
• Are exhaust pipes clear of walkways?
• Are exhaust systems in good order to reduce the level of noise and fume emissions?
• Are effluent disposal ponds fenced off from children and stock?
• Are all water outlets that are not suitable for human consumption clearly marked?
• Are hot water taps inaccessible to children?

BACK SAFETY
Some of the activities on a dairy farm that can lead to a bad back are:
• poor design features of equipment so that it is not appropriate to the operator;
• long hours working on tractors;
• stock feeding;
• fencing;
• calf feeding;
• hay and silage preparation;
• irrigating.

To reduce the risk of chronic back injury, take the following precautions:
• ensure the design features of the equipment you use are appropriate to the operator;
• use specialised equipment to help you lift where possible;
• use your legs, not your back, when lifting.

HOT WATER
• Hot water can be a hazard on any farm, and in fact in any household. Dangers are exacerbated on a dairy, however, where its use is crucial.

REMEMBER:
• Ensure adequate lighting for milking.
• Use specialised equipment where you can.
• When lifting, use your legs, not your back.
Using the wrong tool, using a tool in poor condition, using a tool the wrong way and keeping tools in unsafe places are the four main causes of injury through hand tools. Most accidents can be prevented by following safe practices when using tools.

**GENERAL**

- Use tools of an appropriate size and shape for the job.
- Wipe oil, grease and dirt from tools with a dirty rag before starting a job.
- Clean tools and keep in trays or boxes when not in use.
- Shut off machines before adjusting them.
- Wear safety glasses when using punches, chisels, hammers or grinding devices.
- Use safety equipment when removing and installing heavy parts.
- Hold safety meetings to teach workers about the care and safe use of tools.
- Keep a first aid kit and a doctor's name, address and phone number handy for emergencies.
- Don't use home-made or re-worked tools, or tools not designed for the job.
- Don't use pipe extensions or other 'cheaters' or wrenches too light for the job.
- Don't place tools where they can fall and strike someone.
- Don't carry pointed or sharp tools in your pockets.
- Don't throw tools — hand them. Use a rope or cord to raise or lower tools and equipment.

**WRENCHES**

- Always pull on a wrench — never push.
- Always face wrench jaw openings in direction of pull.
- When pulling on a wrench, brace against a backward fall by placing one foot behind the other.
- Inspect ratchet wrenches periodically and replace worn or defective parts.
- Keep moving parts of adjustable wrenches clean and lubricated.
- Don’t try to work with a wrench in a cocked position. Use angle connections so that the wrench will fit flat and square on the nut or bolt head.
- Don’t use wrenches with spread-out jaw openings or sockets with battered or rounded walls.
- Don’t use a wrench as a hammer.
- Don’t pound on a wrench to loosen a frozen nut; use penetrating oil, a heavier wrench or one designed for impact work.

**SCREWDRIVERS**

- Use the right-length screwdriver so that it can be applied at right angles to the screw head.
- Use the largest-sized screwdriver that will fit snugly into the screw slot.
- Use a screwdriver with an insulated handle for electrical work.
- Don’t use a screwdriver with a worn or broken tip.
- Don’t use a screwdriver as a punch, chisel or pry-bar.
- Don’t hold a small part in your hand while working on it with a screwdriver — put it into a vice.

**PLIERS**

- Point the inside of plier cutting jaws away from your face to prevent injury from flying cuttings.
- Don’t use pliers with smoothly worn gripping sections or with loose rivets or nut and bolt assemblies.
- Don’t use pliers for bolt turning — they are designed for gripping and cutting only.
- Don’t overload cutting pliers. If wire can’t be cut with one hand squeezing pliers, use a larger pair of pliers.
- Check the insulation on pliers — a pin hole can be fatal.

**CHISELS AND PUNCHES**

- Use a chisel with a cutting edge of the same width or wider than the area to be cut.
- Use the largest punch to fit the job without binding.
- Hold chisels and punches loosely with the palm up, or use a tool holder.
- Don’t use chisels and punches with ‘mushroomed’ heads — metal may chip off and cause injury.
- Don’t use a chisel, punch or pry bar to remove gears, wheels or bearings from a shaft — use a pulling tool.

**HAMMERS**

- Use a hammer heavy enough for the job.
- Don’t use a hammer with a cracked head or handle.
- Don’t use a hammer with a ‘mushroomed’ or battered and rounded striking face.
- When spalling rock with a heavy hammer, wear eye protection.

**FILES**

- Fit a sharp end with a handle.
- Place small objects in a vice for filing.
- Don’t hit a file with a hammer.
- Don’t use a file to pry, chisel or punch.

**ELECTRIC, PNEUMATIC TOOLS**

- Frequently inspect the condition of switches, control valves, electric cord and hose connections. Store electric cords loosely coiled in a clean, dry place.
- Keep electric tools away from oil, hot surfaces and chemicals.
- Ground electric tools to prevent possible electric shock.
- Don’t patch damaged cords — shorten or replace them.
- Don’t hang a cord over a nail or sharp edge or allow it to kink.
- Don’t leave a cord where it can be run over or damaged.
- Don’t use electrical tools in wet areas or where flammable gases or vapours are present.
TEN GOLDEN RULES

There are ten golden rules for handling firearms on any farm.

- Treat every gun with respect as though it were loaded. **This is the cardinal rule of gun safety.**
- Carry only empty guns, taken down with action open, into your car, camp or home.
- Be sure that the gun barrel and action are clear of obstruction.
- Carry the gun so that you can control the direction of the barrel even if you stumble.
- Be sure of your target before you pull the trigger.
- Never point a gun needlessly.
- Never leave your gun unattended.
- Do not climb with a loaded gun.
- Never shoot at a flat hard surface, or the surface of water.
- Remember, gun powder and alcohol in excess is a dangerous mixture.