

Rural industry

In order to understand the workplace health and safety requirements for the rural industry, and your obligations under the law you must consider and understand relevant legislation and codes of practice.

What law applies

Workplace health and safety legislation, regulations, advisory standards, industry codes of practice

Workplace obligations

Obligations for employers and employees, workplace amenities, first aid and training

Plant, machinery and equipment

Operating plant, machinery and equipment safely

Safe use, storage and disposal of rural chemicals

Use, storage, disposal, transport of chemicals, pesticides, transporting dangerous goods, and record keeping

Orchard operations

Using tractors in orchards, harvesting fruit

Animal hazards

Handling horses, pigs, cattle and sheep, shearing, zoonotic diseases, snakes, spiders, scorpions and centipedes

Rural Industry Action Plan

The Rural Industry Action Plan 2004-2007 outlines key workplace health and safety activities for the industry

What law applies

In order to understand the workplace health and safety requirements for the rural industry, and your obligations under the law you must consider and understand relevant legislation and codes of practice.

General health and safety obligations

To understand your obligations and safety requirements you must be familiar with the:

Workplace Health and Safety Act 1995 which imposes obligations on people at workplaces to ensure workplace health and safety. The *Workplace Health and Safety Act 1995* also helps you to meet your workplace health and safety obligations through:

- The *Workplace Health and Safety Regulation 2008* which describes what must be done to prevent or control certain hazards which cause injury, illness or death
- codes of practice, which are designed to give practical advice about ways to manage exposure to common risks. In particular, the *Risk Management Code of Practice 2007* should be read in conjunction with information on PPE.

Every Queensland employer must have **workers' compensation** insurance. Most employers insure with WorkCover Queensland, while a small number of large organisations have their own insurance. This insurance coverage ensures that employees injured at work receive financial support.

What you must do

It is a requirement of the *Workplace Health and Safety Act 1995* that risks must be assessed and control measures then implemented and reviewed to prevent or minimise exposure to the risks.

If the *Workplace Health and Safety Regulation 2008* describes how to prevent or minimise a risk at your workplace you **must** do what the regulation says. If there is a code of practice that describes how to prevent or minimise a risk at your workplace you **must** do what the code says or adopt and follow another way that gives the same level of protection against the risk.

If there is no regulation or code of practice about a risk at your workplace you **must** choose an appropriate way to manage exposure to the risk. People must, where there is no regulation or code of practice about a risk, take reasonable precautions and exercise proper diligence against the risk.

See the *Risk Management Code of Practice 2007* for further information.

Specific regulations and codes for rural

The following codes of practice and guides have been developed for people in the rural industry:

- *Rural Plant Industry Code of Practice 2004*
- *Safe Design and Operation of Tractors Code of Practice 2005*
- *Rural Chemicals Industry Code of Practice*
- *Rural industry exemption*

Please note, from 18 November 2004 the *Workplace Health and Safety Act 1995* was amended so that:

- all advisory standards that were in force on that day were continued as codes of practice and now expire 10 years after their commencement; and
- all existing industry codes of practice that were in force on that day now expire 10 years after their commencement.

Rural workplace obligations

Employers

Workplace health and safety obligations for employers in rural workplaces

Workers

Workplace health and safety obligations for employees in rural workplaces

Workplace amenities and first aid

Toilets, wash facilities, first aid kits and trained staff

Workplace incidents

Reporting incidents in the workplace

Training

Training for working with animals, chemicals, confined spaces, noise

Personal protective equipment

Requirements for personal protective equipment

Employers

Working on the land can be a hazardous occupation.

As an employer you have a legal obligation to make sure your workers are safe while they are at work by:

- identifying and controlling hazards from animal handling, plant, machinery and equipment, the work processes and the environment;
- maintaining the work area, machinery and equipment in a safe condition;
- organising safe systems of work;
- providing adequate information, supervision, instruction and training of workers to enable them to work safely;
- ensuring workers are aware of potential hazards like the handling, storage and use of chemicals;
- providing ear muffs or plugs for hearing protection, approved eye protection for welding, respirator for pesticide application, gloves to help prevent skin problems and suitable footwear for the job;
- providing proper amenities including first aid;
- consulting with workers on health and safety issues;
- ensuring equipment and hazardous materials are used, stored and disposed of safely.

Some of the risky situations that could happen in the day-to-day farming activities are fairly straight forward and are resolved on the go. However, more complex hazards can and do happen on farms and require a more careful approach to manage the risks such as the development of safe work procedures. A discussion of risk management for rural plant is contained in section 1, 2 and 3 of the *Rural Plant Industry Code of Practice 2004*.

A written risk assessment will help you identify the hazards and come up with a proper solution to the problems.

Keeping records of how you managed the risks through your safe work procedures will allow you to reassess how effective the solutions were and also provide you with evidence of the action you have taken to meet your workplace health and safety obligations.

When children or visitors are present on the farm, extra precautions should be taken to keep them safe including:

- removing keys from the ignition switch of tractors and other vehicles;
- replacing lids on wells and guards on cattle dips;
- locking the pesticide/flammable materials store;
- removing ladders that allow access to silos;
- taking care when operating vehicles or machinery around buildings;
- de-energising power tools or other equipment when you complete the job or if it is interrupted.

Employers and self-employed persons, who store, handle or transport hazardous materials that may affect the safety of people, must comply with the *Dangerous Goods Safety Management Act 2001*.

Workers

As a rural worker you have an obligation to comply with your employer's workplace health and safety instructions at the workplace, to participate in the training offered and use the personal protective equipment that has been provided by your employer. Failure to do so can adversely affect any future award for damages from a work caused injury because of contributory negligence.

More information is provided in Part 8 of the *Workers' Compensation and Rehabilitation Act 2003*.

There are a variety of ways to avoid or manage the risks workers face daily at a rural workplace including:

- Share your knowledge about the risks of your job.
- Report dangerous situations and unsafe equipment to your employer.
- Take advice and follow your employer's instructions and safe work procedures.
- Read product labels and operating manuals and ask your employer if you are in doubt about any of the procedures or the operation of a piece of equipment.
- Advise your employer if you are on medication and check the label for indications that it may make you drowsy.
- Keep passageways and steps clear of rubbish and replace tools and equipment after use.

- Make sure your employer gives you instructions in emergency procedures and find out where the emergency and safety equipment like the first aid kit is located.
- Read the label and material safety data sheet (MSDS) of each product before use and if you don't fully understand the information, make further enquiries.
- Avoid wearing jewellery (neck chains and wedding rings) that can become caught in machinery. Long hair should be tied back or kept under a cap.
- When using power tools, be aware of electrical power and how it can injure.
- Isolate power tools and machines from the power source before carrying out maintenance or repair.
- Store and use gas cylinders in an upright position and secure them to prevent the cylinders falling over. Always check the labels to make sure you know what you are working with.
- Use oxy-acetylene and welding equipment only if you are familiar with operating procedures.
- Direct compressed air or air operated equipment away from the body to prevent direct contact. Grease, paint and air under pressure can cause serious injury if injected into the body.
- Wear a long-sleeved shirt and sunglasses and a factor 30+ sunscreen when working out in the sun to protect yourself from eye damage and skin cancer.

Workplace amenities and first aid

Employers in the rural industry must provide workers with:

- appropriate safe and clear access to and from the workplace;
- clean, safe amenities in a serviceable condition;
- reasonably accessible appropriate and adequate first aid equipment and a trained first aid person to treat an injury suffered by the worker;
- a toilet for each 15 people located within a reasonable distance of the worker, easily accessible by available transport and equipped with facilities to dispose of female sanitary items;
- easy access to adequate clean water, soap or another suitable cleansing agent for hand washing and drying facilities like hand towels, paper towels or a mechanical hands dryer;
- easy access to clean drinking water away from the toilets and not more than 15°C;
- separate drinking containers for each worker;
- a sheltered area to eat meals and take breaks away from work activity that could expose the worker to a health and safety risk.

Examples include:

- a caravan
- a tent attached to a vehicle
- a tractor or harvester cabin

Special steps must be taken to ensure the drinking water supplied from rain water tanks is not contaminated by vermin or bird droppings on rooves.

More information about how to ensure the suitability of drinking water from rain water tanks is provided within the Guidance on use of rainwater tanks by enHealth.

More information on amenities is provided in schedule 8B of the *Workplace Health and Safety Regulation 1997*.

Workplace incidents

Please refer to the workplace incidents section of this site for information about:

- What to do in an emergency
- Types of workplace incidents
- Making 'safe' versus disturbing the scene
- Why do I have to record and report an incident?
- Completing an incident notification form online
- Workers' compensation
- When there is a death in the workplace

Training

Training should be provided for anyone operating, inspecting, auditing and maintaining rural plant in rural workplaces.

Safety training required for other aspects of rural work include, but is not limited to:

- handling and care of animals;
- handling and application of agricultural chemicals;
- prevention of noise induced hearing loss;
- confined space procedures.

Training should be provided in relation to all of the employers safe work procedures.

Specific farm safety and chemical training requirements include:

- legislative requirements;
- how to access, extract and interpret the information on labels and MSDSs;
- advice on how to store and use chemicals in the workplace;
- calculate the amount of agricultural chemical to use to give the correct application rate;
- the routes of entry into the body of substances and the risks they pose;
- working with another person when very toxic chemicals are handled;
- the correct use, fit and maintenance of personal protective equipment and clothing.

More information about the training requirements for working with agricultural chemicals is provided in Section 9 Training of the *Rural Chemicals Industry Code of Practice*.

For advice on available industry training refer to AgForce Queensland, Chemcert, Farmsafe Training Queensland or the Queensland Farmers' Federation.

Personal protective equipment

Please refer to personal protective equipment for more information about:

- what is personal protective equipment?
- when should you use it?
- who pays?
- selecting PPE
- using PPE
- storing and maintaining PPE

Rural plant, machinery and equipment

Defining rural plant, machinery and equipment

What is rural plant?

Operating plant, machinery and equipment safely

Tractors, rollover protective structures (ROPS), front end loader attachments, all terrain vehicles, custom plant and machinery, welding, chainsaw operation

Plant associated risks

Electricity, confined spaces, silo safety, working at heights and noise

Defining rural plant, machinery and equipment

Rural plant includes, but is not limited to:

- planters
- harvesters
- hoppers
- silos
- farm vehicles, e.g. tractors and all terrain vehicles (ATVs)
- electric tools such as saws, drills, grinders
- irrigation equipment
- workshop tools and equipment
- implements

Operating plant, machinery and equipment safely

Tractors and front end loader attachments

Risks with tractors, ROPS, FOPS, front end loader attachments, safety features, tractor operation, maintenance and modification, training

All terrain vehicles

Fitting and use of accessories, safe practices

Custom built plant

Qualified persons, considerations, standards, information on safe operation

Welding

Training, dangers of welding, gas welding

Chainsaw operations

Buying chainsaws, safe handling and operating, maintenance, training

Tractors and front end loader attachments

Tractors and front end loader attachments are used for a wide range of rural activities and have been involved in more accidents that have resulted in death than any other piece of rural machinery.

Tractor safety, while recognised as mainly a rural issue, is addressed separately from the rural industry.

More information about tractor safety.

All terrain vehicles (ATV's)

About ATV's

A four-wheeled all terrain vehicle (ATV) is a popular 'workhorse' on the farm and is responsible for a large proportion of injuries resulting from sideways, backward and forward overturns.

Some of the factors and features you need to think about before buying an ATV for the farm include:

- use on the farm or workplace
- terrain and ground conditions
- power and speed
- gear ratio including reverse
- available attachments and accessories
- seat carrying capacity and weight of attachments
- centre of gravity
- tyre pressure

Terrain, speed of operation, mechanical condition of the ATV, carrying passengers and operator skill are risk factors associated with injury causation.

Fitting and use of accessories

It is important to follow the manufacturer's instructions when fitting and using ATV accessories. Instructions include:

- Using only the mounting point or draw bar provided by the manufacturer. Incorrect attachment can increase instability and cause overturns.
- Not altering the height of the mounting point or increase the towing capacity which could affect braking and increase the risk of rollover.
- Ensuring all guards are in place and the machine can be easily operated from the seated position.
- Applying the correct load ratings on the front and rear carrier racks to avoid decreasing stability.

Safe practices

- Ride at speeds slow enough to retain control over the unexpected like unstable trail surfaces, other riders and frightened animals.
- Descend slopes carefully by keeping the ATV in low gear and allowing the motor compression to act as a brake.
- Never allow passengers on the ATV unless it has been specifically designed to carry two people.
- Never allow anybody to operate an ATV without adequate training or if they may be under the influence of alcohol or drugs.
- Keep children away from the ATV and its attachments.
- Ensure all guards are in place, particularly foot plates.
- Adjust all controls so they can be operated comfortably and safely when seated.
- Always wear helmets, face shields, goggles, boots or shoes, gloves and suitable clothing.
- When working outdoors be aware of the risk from heat stress, solar radiation and dehydration.

More information about riding ATV's safely is provided in Section 8, Part C of the *Rural Plant Industry Code of Practice 2004*.

A checklist of points to check for ATV's is provided as part of the Rural Mobile Plant Safety Tool.

Custom built plant

The design and manufacture of custom built equipment should be done by or with the assistance of a suitably qualified person and by following the relevant Australian Standards and Codes of Practice.

All potential hazards should be identified through a process of risk management which identifies suitable control measures. The process should take into account foreseeable misuse of the equipment.

Designers and manufacturers should consider the stability, operation, service access as well as the inclusion of ROPS and purpose-designed towing points which are clearly marked. Any cyclic or dynamic loads also need to be considered at the design stage to ensure that they do not subsequently affect the integrity of the structure.

Towing points should not be located in such a position that the towing force is likely to de-stabilise the equipment being towed. Extra care should be taken when towing agricultural equipment through tilled and water logged soils as the forces required to recover a bogged machine may be difficult to estimate and could result in a rollover or component failure during towing.

Records should be kept to show that all design and manufacture has been done to a recognised standard.

The designers, manufacturers and suppliers must provide employers with information about the safe operation of the plant and employers must train their workers.

Welding

The Welding Technology Institute of Australia has issued a Technical Note on Health and Safety in Welding that provides practical advice on managing the risks associated with welding.

Training

Welders should be suitably trained and experienced for the work to be performed to minimise risks and hazards.

When choosing someone to do welding work make sure the person has the necessary level of competence to do the work safely.

Consider:

- the person's qualifications or statement of attainment;
- if the person holds a certificate issued by the Welding Technology Institute;
- if the person can demonstrate recent experience and complete a weld test.

Personal protective equipment and clothing

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 and preferably overalls.

All protective clothing and equipment should be kept clean and in working order to ensure its longevity and protection.

Dangers

The dangers associated with welding include:

- **The arc** - the temperature can reach 6000 degrees celsius. The intense ultraviolet and infra-red rays can be harmful to both the welder and anyone else nearby. It is not unusual for welders who are not wearing overalls to suffer symptoms similar to extreme sunburn.
- **The fumes** - depending on the item being welded, in the open air, fumes may be adequately dissipated. However, in confined spaces fumes may be

hazardous to health and precautions should be taken. Where it is not possible to ensure good ventilation, a suitable respirator should be worn.

- **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.
- **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.
 - Do not 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

- Gas leakage is one of the greatest risks involved with gas welding. Leaking fuel gas is usually recognised by odour. Oxygen leaks are potentially more dangerous as they are usually not recognised easily.
- Leaking oxygen leads to an oxygen enriched atmosphere where normal events such as naked flames, cigarettes, sparks and electrical faults become more dangerous situations. Oils and greases may spontaneously ignite in the presence of pure oxygen.
- Under no circumstances should any fittings of oxy-acetylene equipment be allowed to be contaminated with grease or oil.
- Regulators can fail in two ways - by the controlled forward flow of gas which is known as regulator creep or by the reverse flow of another gas in the gas lines. Regular maintenance should 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 explosion in varying degrees of severity, resulting in damaged equipment and operator injury.
- Operators should never use 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 which 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 which 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 near welding and don't keep your lighter in your pocket - it could explode. Simple prevention may save your life.

Chainsaw operations

Buying chainsaws

- When buying a chainsaw, bigger is not always best.
- Chainsaws should be chosen with the type of work they are to be used for distinctly in mind.
- Don't forget to equip yourself with the appropriate protective clothing.
- Choose a chainsaw which is fitted with safety devices such as a chainbrake, anti-vibration dampers and a chain catcher.

Safe handling and operation

- **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.
- Wear protective equipment such as cut resistant pants or chaps, ear muffs, safety glasses or face shield, helmet, boots and close fitting clothing.
- When operating a chainsaw it is important to maintain a firm grip - get a good foothold and keep the saw close to your body.
- Always cut at peak revs to have a better chance of cutting through any obstruction.
- 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.
- If in doubt, contact the manufacturer.
- Fit the bar cover when the chainsaw is not in use.

Training

- Chainsaws are not toys and should be given the same respect you would 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.

Plant associated risks

Electricity

Exclusion zones, safety switches

Working in confined spaces

Types of confined spaces, hazards, safety procedures

Silo safety

General safety, safe entry, checking machinery, avoiding structural failures and falls

Working at heights

Height hazards, things to consider, reducing risk

Noise

Indicative noise levels, reducing noise

Electricity

Electrical safety regulations regarding exclusion zones and safety switches now apply to the rural industry.

Working in confined spaces

Working in a confined space has the potential to increase the risk of injury from noise, being overcome by fumes, gases or oxygen depletion, high or low temperatures, manual handling and slips, trips and falls.

Storage tanks, silos, field bins, wet and dry wells, vehicle service pits, manure and silage pits are just some of the examples of confined spaces anyone working on a farm or a rural workplace could expect to work in.

Some of the environmental hazards linked to working in confined spaces include:

- oxygen deficiency caused by absorption of grains;
- carbon monoxide build up in wells from the exhaust of an operating internal combustion engine if located too near its opening;
- the presence of contaminants in the atmosphere caused by disturbing decomposed organic material in a bin letting out toxic substances;
- the build-up and release of gases like ammonia, methane, carbon dioxide and hydrogen sulphide in manure pits;
- suffocation caused by solids such as grain, sand or fertiliser.

If you are working in a confined space, you must follow certain procedures including:

- placing a stand-by-person outside the confined space to talk to anyone in the confined space and implement emergency procedures if required;
- providing personal protective, rescue, first-aid and fire suppression equipment and training for workers entering the confined space;
- supplying safety harnesses and safety or rescue lines where there is a danger of falling during the ascent or descent to access the confined space;
- erecting signs that show entry is only permitted after signing the entry permit;
- ensuring the area is well ventilated.

Other safety procedures

- If trapped by grain, don't panic or the grain will pack tighter. Shield your face and chest with arms and clothing to create space for breathing.
- Empty the bin as quickly as possible by opening any side outlet then cut flaps in the cone or walls all around the base using power tools.
- Access to tools, breathing equipment, communications and first aid in an emergency is part of the emergency planning and training procedures.

More information about working in confined spaces is available from:

- Section 8 Part G of the *Rural Plant Industry Code of Practice 2004*
- Part 15 – Confined spaces of the *Workplace Health and Safety Regulation 1997*
- Australian Standard AS 1319 – *Safety signs for the occupational environment*

Silo safety

General safety

- The atmosphere in silos can be dangerous.
- Silos should be located clear of houses, overhead power lines, animals, children and water holes.
- The dust in a silo may be explosive particularly if the humidity is low – **do not smoke** or have any other ignition sources.
- High temperatures in silos can result in heat stress for anyone entering them. If possible, **do the job from outside**.
- Wear appropriate respiratory equipment particularly when fumigating.

Safe entry

- Do not enter a silo unless you have to.
- If a silo must be entered, work in confined space procedures must be put in place including having somebody standing by in case of difficulties.
- The responsible person should ensure that adequate checks have been done prior to issuing to a worker a confined space permit to enter.
- A warning notice of possible dangers should be placed adjacent to the entry point and maintained in good condition.
- **Never** enter a silo before turning off and isolating the auger and make sure no one can start an auger while someone is inside.
- Stay on the ladder above the level of compacted or bridged grain while dislodging it.
- Make sure ladders start above child height.
- All entry points should be locked and keys held in a safe place under the supervision of a responsible person.

Check the machinery

- Guard auger drive train (belts, pulleys, drive shafts) and the rotating screw flighting.
- Locate mobile augers on firm, preferably flat ground, and operate at shallow (less than 45°) angles to prevent them overbalancing.
- Lower mobile augers when transporting.
- Never start augers hidden from your view before checking the area is clear of people.
- Make sure all machinery is serviced and maintained regularly.

Avoiding structural failures and falls

- Take care when a new product is stored in a silo because every stored material has different characteristics and a silo designed to store one product may not be suitable for another.
- Follow manufacturer's instructions exactly for preparation of the concrete pad.
- Use the 'bedding-in' procedure when filling by drawing off a rubbish bin full of grain.
- Keep people well clear when filling or emptying the silo especially children.
- An engineer should be consulted before modifying a silo because a simple change can drastically alter its structural stability. Equipment attached to a silo can impose dangerous loads.
- Provide a simple roof platform and ladder cages where necessary.
- Provide a wire mesh guard which is hinged permanently on all external openings above the maximum level of grain.
- Use a fall arrest system where ladders are without safety cages and to anchor to the roof platform.

Working at heights

Falling from a height is a serious injury risk when repairing, maintaining or gaining access to silos, windmills, towers, sheds/barns, mezzanine floors and other structures.

It is important when you are working high above the ground to think about some of the risks including:

- height of the work
- presence of guard rails or other edge protection
- roof pitch and surface conditions
- weather conditions like wind strength
- complexity of task

To prevent anyone falling, the following controls should be put in place:

- Consider alternatives to working at height e.g. fill feed silos pneumatically from the feed supply truck.
- Erect edge protection or guard rails.
- Place a fall protection cover over an opening.
- Provide a travel restraint or fall-arrest harness system.
- Provide an industrial safety net.

Ladders should not be used when working at a height unless strict procedures included in Pt 18 Div 5 of the *Workplace Health and Safety Regulation 1997* are followed.

The type of work that can be safely performed on a ladder is limited.

Scaffolding or an elevating work platform provides a much safer way to work at heights.

More information about working safely at heights is provided in Section 8 Part H of the *Rural Plant Industry Code of Practice 2004*.

Noise

Some indicative noise levels from plant and machinery that expose rural workers to excessive noise includes:

- Chainsaw operation – 120dB(A).
- A pig shed at feeding time – 105dB(A).
- Tractors operating under load without a cab – 100dB(A).
- Angle grinders and grain augers – 95dB(A).
- Shotguns/rifles – 140dB(C).
- Aircraft at 15m – 140dB(A).

Some of the ways to reduce noise exposure on the farm include:

- Buy quieter machinery and equipment and keep it well maintained to reduce rattles and vibration.
- Apply vibration-reducing mats under stationary machinery and stiffening plates to vibrating surfaces.
- Fit sound absorbent materials to walls and ceilings of noisy workshops.
- Rearrange workshops so noisy tools are located towards the front or openings of the shed to disperse the noise outside.
- Wear suitable hearing protection like earmuffs or ear plugs near noisy equipment or when discharging a firearm.

When selecting hearing protection, it must be comfortable, effective and suitable for the job and meet *AS/NZS 1270 Acoustics - Hearing protectors*. Ear muffs should be tried before buying to ensure comfort and to check the seal around the ear is adequate.

The hearing protection selected must provide an appropriate attenuation of the noise to which the person is being exposed.

General purpose earmuffs for the farm will have a Class 3 or 4 rating, or an SLC80 rating between 18 and 25 decibels. The SLC80 stands for Sound Level Conversion valid for 80% of wearers and indicates the noise level reduction in decibels expected when the protectors are worn correctly. For some farm equipment and firing firearms, hearing protectors with a Class 5 rating or SLC80 of 30 decibels or greater are required to provide protection.

Ear muffs and re-usable ear plugs should be cleaned with lukewarm soapy water, dried and stored in an airtight container to keep them hygienic when not in use. Disposable ear plugs should not be re-used.

Keep the ear plugs or muffs in a tractor cab or near a chainsaw or rifle and display signs near equipment to remind workers to wear them.

Firearms should never be fired without wearing hearing protection with a very high rating protection level. Wearing a combination of ear plugs and ear muffs is recommended.

Safe use, storage and disposal of rural chemicals

Using chemicals

General safety, phosphine fumigation, spray drift, residue levels, labelling, applying chemicals, personal protective equipment, health surveillance

Storing chemicals

Storing chemicals safely

Disposing of chemicals and containers

Disposal requirements, disposal locations

Transporting chemicals and dangerous goods

What to consider, keep a record

Using pesticides

Follow instructions, applying pesticides, spraying pesticides, cleaning up pesticides, other information

Record keeping

Requirements for record keeping

Using chemicals

General safety

Assess chemicals, read the MSDS, separate incompatible substances, safe work procedures

Phosphine fumigation

Hazards of inhalation and flammability

Spray drift

Control measures, health risks, requirements under the law, neighbours and spray drift

Residue levels

Maximum residue levels

Labelling

Labelling requirements

Applying chemicals

Application methods, re-entry periods

Personal protective equipment

Check the MSDS for suitability, other requirements

Health surveillance

Requirements for health surveillance

General safety

When using chemicals:

- Assess each chemical used, looking at how often each is used and for what purpose.
- Provide MSDSs to all workers using the chemicals and train them in health and safety requirements and risks involved with the chemicals.
- Compile a list of features relating to the use of chemicals for workers including:
 - how the chemical enters the body (nose, mouth or skin);
 - what personal protective equipment is needed;
 - symptoms if a person is affected;
 - actions if a person suspects they have been affected by a chemical.
- Ensure all spray equipment is operating as designed.
- Develop and maintain safe work procedures to protect workers and members of the public from exposure.
- Conduct a risk assessment for each new chemical before it is introduced to the workplace and prepare a safe work procedure.

- Provide washing facilities and a lunch room well away from chemical stores.

Phosphine fumigation

Phosphine fumigants are widely used on farms to control insect infestation in many different stored grains and to control rodents and rabbits. Phosphine gas is the by-product of the action of moisture on metal phosphide tablets.

Inhalation of phosphine gas

When phosphine gas is inhaled, it can react with moisture in the lungs to form phosphoric acid, which can be serious or fatal.

Inhalation of the gas may occur from:

- leakage from fumigated silos or stacks
- inappropriate fumigation practices
- sleeping in trucks which have had phosphine placed in the load
- fumigating in enclosed sheds
- entering or examining silos or stacks immediately after fumigation
- leaving tablets and/or canisters in inappropriate places (e.g. ute floor)
- cleaning and/or hosing out silos that have been used for fumigation when the product has not reacted completely

Symptoms of poisoning from inhalation can be:

- coughing
- chest tightness
- headache
- double vision
- nausea
- vomiting

Exposure may lead to:

- anaemia
- bronchitis
- diarrhoea
- visual, speech and motor disturbances

Phosphine gas has an odour of decaying fish. However do not rely on the odour of phosphine to determine whether the atmosphere is safe because the odour threshold for phosphine is above the exposure standard.

If the odour threshold for phosphine is detected, evacuate the area immediately.

Respiratory protection

If a person has been overcome by phosphine gas, the rescuer must wear adequate respiratory protection to avoid also becoming a victim.

Respiratory protection includes:

- A full-face filter respirator or self-contained breathing apparatus must be worn if concentrations exceed 0.3ppm.
- The filter must be approved for phosphine and suitable for short-term exposure only (type B for inorganic gases).
- The filter should be immediately discarded and destroyed if there is any hint of phosphine odour inside the face-piece.
- Self-contained breathing apparatus should be used for operations such as breakdowns when longer exposures at higher concentrations may occur.
- Facial hair will prevent an adequate seal of the mask against the skin.
- A suggested life of 1 hour only for filters at usual exposure levels of operators in routine testing procedures is a recommended safeguard.

Flammability

Phosphine gas is flammable and may ignite when concentration in air exceeds 1.8%.

Materials added to tablets release carbon dioxide and ammonia with phosphine gas which are designed to prevent spontaneous ignition of the gas under normal circumstances.

Phosphine gas also reacts violently with acids and with compounds containing fluorine, chlorine, bromine and iodine.

Safe practices

Safe practices include:

- Always read the label before use and follow the manufacturer's instructions.
- Obtain a material safety data sheet (MSDS) from your chemical supplier which details information about treatment and symptoms of phosphine poisoning as well as chemical data.
- Wear correct respirator and protective clothing (see MSDS and label). Impervious gloves (e.g. PVC) should be worn when dispensing pellets by hand.
- Have an observer standing by who should have access to respiratory protection.
- Never use phosphine while grain is in transit.
- Monitor atmosphere around fumigation using hand pump and gas detector tube. The concentration should not be higher than 0.3ppm.
- Before moving grain after fumigation, make certain that all gas fumes have been dispersed. It is inadvisable to treat grain in airtight containers because of difficulties dispersing all gas fumes.
- Open phosphine containers in open air, not in shed or silo.
- Dispose of spent phosphine tablets correctly.
- Keep canisters locked away in a cool, dry place away from all habitation.
- Do not place tablets into tarped truck-loads of grain.
- Dispose surplus or part-filled containers in approved council land fills or according to the instructions on the label.
- Never increase dosage to have a "better kill" of the insects.
- Always keep out of reach of children.

Spray drift

About spray drift

Agricultural spray drift is the physical movement of agricultural chemicals (eg pesticides) through the air at or soon after application, to any site other than where it was intended to be applied.

Some degree of agricultural spray drift will occur from nearly all applications of agricultural chemicals, whether they are applied using ground spray equipment or through aerial application. However, there are requirements under the law [[link down](#)] and ways of managing the risk [[link down](#)] to eliminate or minimise spray drift.

Health risks

The health risks associated with exposure to spray drift vary dependent on the individual, level of exposure and agricultural chemical used.

If you are exposed to spray drift and your skin has come into physical contact with agricultural chemicals, always shower and wash with soap then change into clean clothes.

For some people, exposure to spray drift can cause “sensory irritation” such as asthma symptoms, headaches or nausea. These symptoms can be a reaction to the odour, and are not necessarily a response to toxicity, or over-exposure to chemicals.

If you feel unwell after exposure to spray drift you should seek medical advice and/or testing, or call the Poisons Information Centre for immediate advice on 13 11 26 if you know what you have been exposed to. Your doctor can also contact the Australian Pesticides and Veterinary Medicines Association for advice.

Report an adverse reaction with agricultural chemicals

Requirements under the law

There are requirements under the law for the distribution of agricultural chemicals that relate to the management of spray drift. For example it is an offence to carry out ground or aerial distribution with equipment or under meteorological (weather) conditions that might reasonably be expected to cause damage to crops not intended to be treated, or livestock.

For more information on these requirements, including advice on avoiding spray drift, refer to the:

Aerial distribution of agricultural chemicals
Ground distribution of herbicides
[Agricultural chemicals users' manual.](#)

Managing the risks

Where there is a risk that neighbours and other members of the public could be exposed to chemical spray drift specific controls should be put in place.

Some of the controls include:

- notifying the neighbours before the application;
- having a buffer zone (eg trees on the boundary) to capture droplets before they can drift onto neighbouring properties;
- using low volatile formulations in areas where sensitive crops are grown nearby or where elevated temperatures may occur after spraying;
- using equipment designed with characteristics that produce a nearly uniform droplet size;
- using non-drip valves and recirculating systems;
- frequent and accurate spray rig calibration;
- using a rain drop nozzle may allow spraying to occur in a wider range of meteorological conditions without creating a drift hazard;

- taking weather conditions into consideration - for example:
 - winds between 3 - 15 km/hour (not too still, not too windy);
 - spraying into crosswinds rather than directly into or with the breeze;
 - considering humidity, as low humidity can contribute to spray drift for water based pesticide formulations;
- stopping spraying if wind direction changes or becomes variable.

More information about how to manage spray drift refer to Section 10 of the *Rural Chemicals Industry Code of Practice*.

For detailed information, guidelines and principles for responsible agricultural chemical use refer to the Agricultural chemicals users' manual

Reporting and resolving spray drift issues

Common issues relating to the use of agricultural chemicals and spray drift and ways to resolve them include:

Health effects

If you feel unwell after exposure to spray drift you should seek medical advice and/or testing, or call the Poisons Information Centre for immediate advice [<http://www.health.qld.gov.au/poisonsinformationcentre/>] if you know what you have been exposed to. Your doctor can also contact the Australian Pesticides and Veterinary Medicines Association for advice.

If you are concerned about the health and safety of workers spraying chemicals, or others exposed to spray drift, contact Workplace Health and Safety Queensland Infoline on 1300 369 915 or visit a district office.

Consulting and notifying neighbours about spray operations

Consulting with and notifying neighbours or the community about spray operations, including when they are occurring and what is being sprayed, allows people to prepare for the possibility of spray drift, including:

- negotiating the time of spraying so family activities can be planned to minimise exposure, or your neighbour can plan to be away from the area at the time of application
- closing all windows and doors and keeping children inside when spraying is taking place

Contact your local Chemical Liaison Group through your local council for more information.

Alleged damage to crops or stock

If you believe spray drift has caused agricultural damage you can contact the Department of Primary Industries and Fisheries on 13 25 23.

Unpleasant odour or annoyance

If the issue originates from a workplace you can contact your local council. You can also contact the nearest Dispute Resolution Centre.

If the issue originates from a domestic premises, you can [contact your local council](#).

Environmental effects

If you believe wildlife (for example frogs, fish or birds) has been killed as a result of agricultural spraying, or a watercourse has been contaminated, you can contact the Environmental Protection Agency.

Rainwater tank contamination

Agricultural chemicals used in spray applications are already diluted, and any spray drift landing on a roof will be greatly diluted by rain water. First flush dumping systems, which should be on all rainwater tanks, also help prevent spray drift from contaminating tanks.

However, if your tank water has an obvious odour or unpleasant taste it should be emptied and new water brought in.

Residue levels

Each agricultural chemical registered for sale has been approved for use under conditions specified on the label. Additional "off-label" uses may also be approved and these are published in various sources such as Infopest.

Infopest is available from the Queensland Department of Primary Industries.

For each chemical/food crop/animal combination a maximum residue level (MRL) is established that is, the maximum level of the chemical permitted to be present on a crop or animal product at the time of harvest or slaughter.

To reduce the risk to health from consumption of or contact with treated produce, withholding periods, shown on agricultural chemical labels, should be observed at all times.

Residue levels above the maximum residue level (MRL) are an indication of incorrect chemical use. This can lead to rejection of produce and long term damage to agricultural markets.

More information is provided in Section 10.2 of the *Rural Chemicals Industry Code of Practice*.

Labelling

All chemical containers must be labelled.

The Queensland *Agricultural Standards Act 1994* states agricultural chemical labels must contain the following information:

- the identity and amount of the active constituent and any other poisonous substance;
- the poison schedule, any cautionary statements, safety directions and first aid instructions;
- the pests controlled by the chemical, and crops, animals or other host situations for which it is registered;
- the application rates for the chemical;
- any restriction on methods of application;
- the withholding periods;
- directions for storage;
- batch number, manufacture or expiry dates and mixing instructions.

It is important when decanting chemicals the container the chemicals are being transferred to is labelled properly.

More information about container labelling and application equipment is provided in Section 3.1 Labels of the *Rural Chemicals Industry Code of Practice*.

More information about decanting is provided in Section 3.1.1 Decanting of the *Rural Chemicals Industry Code of Practice*.

Applying chemicals

There are requirements under the law for the use of agricultural chemicals under the Agricultural Chemicals Distribution Control Act 1966. For more information on these requirements from the Department of Primary Industries and Fisheries refer to:

[Aerial distribution of agricultural chemicals](#)

[Ground distribution of herbicides](#)

[Agricultural chemicals users' manual](#).

For detailed information, guidelines and principles for responsible agricultural chemical use refer to the [Agricultural chemicals users' manual](#).

Some aspects of safe application methods include:

- Selecting appropriate equipment for a particular chemical or use situation.
- Selecting the right nozzle to ensure accurate and even application.
- Calibrating of equipment to reduce spray drift.
- Calculating the right amount of chemicals.
- Decontaminating equipment and clothing and disposal.
- Maintaining nozzles, hoses, regulator gauges and cartridges for respirators.

After spraying chemicals, strict re-entry periods should be observed especially where contact with foliage and skin is unavoidable. Where a re-entry period is not stated on

the label, re-entry to a spray site should only be after dusts have settled or sprays have dried.

More information is provided in Section 8.5.6 Re-entry periods of the *Rural Chemicals Industry Code of Practice*.

Personal protective equipment and clothing

When selecting and maintaining personal protective equipment and clothing:

- Read the MSDS to determine if the clothing is suitable for the chemical and the chemical concentration.
- Make sure the clothing fits properly, is comfortable and easy to put on and remove.
- Choose an appropriate respirator for a wearer with facial hair.
- 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 in warm water and soap, rinsing well.
- Check gloves carefully for tiny (pinpoint) holes. Fill gloves with water and squeeze, discard glove if holes are evident.
- Keep eye goggles clean, especially if they have a head band. The head band is often made of material that absorbs pesticides and is in contact with the forehead, one of the most absorptive areas of the body.
- Keep contaminated clothing and equipment in a box, not loose in your vehicle. Keep a spare set of clean protective clothing in your vehicle.
- After use, remove filters and set aside.
- Wash respirators in accordance with 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 filters 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 should maintain a good face seal.
- Ensure that filters are changed and used in accordance with the manufacturer's recommendations.
- Dust filters must be replaced if breathing becomes difficult.

More information about the selection and maintenance of personal protective clothing and equipment is provided in Section 8.2.6 and Section 8.3 of the *Rural Chemicals Industry Code of Practice*.

Health surveillance

Anyone working directly with organophosphorus compounds (OPs) and carbamates should have health surveillance (blood and/or urine tests).

More information about managing exposure is provided in Section 7 - Managing exposure, and Section 7.3 - Estimating the risk, of the *Rural Chemicals Industry Code of Practice*.

Storing chemicals

Fires, spills, accidental inhalation or ingestion can occur with stored chemicals.

When storing chemicals:

- Assess what quantity and duration of the chemical to be stored and the toxicity and stability.
- Consult with local authorities on the storage of fuel.
- Store in a well ventilated, well lit lockable shed that has an impervious floor and shelving and in a flood free area.
- Check the label for advice about storage.
- Store away from respirators, protective clothing and equipment.
- Store chemicals in a depot with a bund or some other spill containment system where possible.
- Ensure appropriate materials (chemical gloves, boots, apron and respirators) are kept close by to clean up any spills including soil, water, absorbent pillows, lime or sand.
- Store the chemical in the **original** containers, with labels intact. If labels come off always relabel the container.
- **Never** store chemicals in drink or food containers.
- **Secure** chemicals from unauthorised access.
- Reduce combustible debris in and around a chemical storage depot. Keep grass mowed for about 3 m around.
- Ensure **fire-fighting** equipment is available and accessible to the depot (supplies of water, sand or extinguishers may be required).

More information is provided in Section 6.2 - Reducing the consequences or probability of an incident of the *Rural Chemicals Industry Code of Practice*.

More information about emergency procedures is provided in Section 6.3 Controlling incidents of the *Rural Chemicals Industry Code of Practice*.

More information on placarding, labelling, material safety data sheets and training for hazardous materials is available from hazardous materials.

More information on the design and construction of storage areas for agricultural and veterinary chemicals is provided in AS 2507 - *The storage and handling of agricultural and veterinary chemicals*.

Disposing of chemicals and containers

When disposing of chemicals and containers:

- 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. **Do not burn containers.**
- Ask your local government authority about collection requirements.

The chosen disposal site should:

- Be sited to avoid seepage and run off which may contaminate other areas.
- Have a minimum depth of at least half a metre and a maximum depth of one metre.
- Be in an area where there is no danger of contaminating dwellings, underground water, surface water, crops or livestock.
- Be level, preferably with a clay liner and have lime spread across the bottom.
- Have a heavy duty plastic pit liner which may be used where there is risk that chemicals may leach from the immediate area of the pit.

Drums, other packages and containers marked “returnable” should be returned to the supplier.

More information about drum disposal is provided on the DrumMuster website.

More information is provided in Section 8.5.3 - Disposal of unwanted or unused chemicals, 8.5.4 - Disposal site and pit, and 8.5.5 - Disposal of containers of the *Rural Chemicals Industry Code of Practice* and from the *Environmental Protection Act 1994* (PDF, 1.93 mB).

Transporting chemicals and dangerous goods

Many chemicals used in rural workplaces are classified as dangerous goods.

When transporting chemicals:

- Avoid transporting 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.

More information on transporting dangerous goods is provided in the *Rural Chemicals Industry Code of Practice*.

Using pesticides

General rules and risks

All pesticides must be used in accordance with registered labels or APVMA permit conditions. Some pesticides can be very hazardous if not used correctly so it is necessary to read and apply the information supplied in the Material Safety Data Sheets (MSDS).

When using pesticides, the three major risk areas are:

- The risk to a person, property and the environment by accidental events such as spillage or fire.
- Daily chemical exposure of anybody at the workplace.
- Chemical exposure to anyone on an adjacent property who may be affected by the application of chemicals such as spray drift.

Applying pesticides

When applying pesticides:

- Use the least toxic pesticide available for pest control.
- Ensure 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 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 pesticides

To manage and reduce health and safety risks when spraying pesticides:

- Spray when weather conditions are suitable and stable - for example winds between 3 - 15 km/hour (not too still, not too windy) and consider humidity, as low humidity can contribute to spray drift for water based pesticide formulations.
- 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 are clean.

- Clear blocked nozzles using a soft bristle brush, or compressed air. Never suck or blow blocked nozzles to clear them.

There are requirements under the law for spraying pesticides or agricultural chemicals. For more information refer to:

[Aerial distribution of agricultural chemicals](#)

[Ground distribution of herbicides](#)

[Agricultural chemicals users' manual.](#)

Cleaning up pesticides

- Continue to wear protective equipment to prevent skin contact and splashes during 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.
- Wash hands with soap and water after handling pesticides before eating, drinking, going to the toilet or smoking.

Other information

- The first aid kit should contain 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 all 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 to spray and how long you intend to be gone. Otherwise, ensure you have a two-way radio for emergency calls.
- It is important that at least one person attends a first aid course to make sure a basic level of first aid is able to be administered in an emergency.
- Before use, check the labels and 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 pains, nausea, vomiting, diarrhoea, blurred vision, excessive saliva in the mouth or difficulty in breathing. These symptoms could indicate pesticide poisoning.
- If regularly using toxic pesticides, a medical examination is recommended before and after the spraying season. You may require more frequent health surveillance with some chemicals.
- Remove any contaminated clothing and seek medical advice.
- For eye contact, hold eye open under running water for 15 minutes. Seek medical advice.

- If swallowed, ring the Queensland Poisons Information Centre on 13 11 26.

More information on how to manage chemical risks is provided in Section 5 - Managing the risks of chemicals and Section 8 - Controls to reduce exposure of the *Rural Chemicals Industry Code of Practice*.

Record keeping

Accurate records should be kept and maintained as proof that correct procedures for storage, use and disposal of chemicals were in place.

Records can range from a simple annotation on an MSDS or a diary entry to a fully documented report.

More information about how to keep accurate records is provided in Section 5.5 Record Keeping of the *Rural Chemicals Industry Code of Practice*.

Orchard operations

Tractors

Using tractors in orchards

Harvesting fruit

Picking and emptying bags, ladders, hydraulic ladders, grading, fruit packing and carton making, safe use of pruning equipment

Tractors

Tractors used in an orchard are not required to be fitted with a ROPS if obstructions from low branches and hail netting guy wires may interfere with the operation of the tractor. However, if the tractor is to be used elsewhere on the farm it must be fitted with ROPS.

Harvesting fruit

Picking and emptying bags

- Select a bag which is the right size for you or one that is slightly smaller.
- Make sure the straps are put on properly and adjusted so the bag is comfortable. The straps should be flat on your shoulders or back – not twisted.
- Keep your back straight, hips and knees bent and the load close to your body when emptying bags into bulk bins.

Ladders

Ladders are used for most operations in tree fruit production including picking, pruning and thinning.

When using a ladder:

- Choose one that is right for your size, weight and for the trees.
- Check the ladder is structurally safe and report any faults to your supervisor.
- Make sure spurs are not worn off or safety chains are on ladders if they don't have spurs.
- Place the ladder side-on to the tree in a stable position as close as possible to the highest fruit to be picked. If the front on position is used access to the tree can be restricted by the ladder.
- Stabilise the ladder by pushing the back two legs into the ground using your hands to push down on the rungs.
- Stand on the first rung and exert pressure on the front prong by pushing forward with your hand on a high rung.

- Climb the ladder with an empty picking bag and pick the fruit furthest away from the ladder.
- Stand underneath the ladder to lift it up and shifting it so that you can comfortably reach the target area.

Hydraulic ladders

Ground conditions, height of cradle above ground, weight of fruit in picking bag and structural modifications place limitations on the use of hydraulic ladders in orchards.

When using hydraulic ladders:

- Check tyre pressure and oil levels daily.
- Keep a lookout for overhead powerlines and avoiding using them during an electrical storm.
- Ensure operators are capable of operating hydraulic ladders correctly.

Grading

When grading:

- Ensure all the machinery is turned off and isolated before doing repairs to any grading or carton making machinery and be aware of forklifts operating in the shed.
- Keep the guards in place.
- Clean regularly around graders and inside guards where squashed fruit or water could cause accidents, fires or breakdowns.
- Keep power leads uncoiled and away from water.
- Check around the graders for partially severed power leads or fused motors and use an electrician to fix any problems.
- Rotate tasks or job enhancement to reduce static postures.
- Stand on rubber mats to reduce static loads.
- Minimise or avoid repetitive tasks.
- Adjust grading conveyor heights to eliminate bending or reaching, reducing the loads being lifted.

Fruit packing and carton making

Before lifting a carton of fruit make sure you:

- Remove all rubbish from the packing area including any dropped fruit and strapping.
- Wear the right shoes.
- Keep your back straight, hips and knees bent and the load close to your body.

Safe use of pruning equipment

When using secateurs and compressed air pruning guns:

- Know how to use them properly.
- Keep the secateurs and guns sharp and free of worn parts.

- Prune at a safe distance from co-workers and avoid holding the tree wood you are about to prune.
- Make sure the air hose is disconnected before working on pruning guns.
- Make sure trigger safety switches are applied when moving the guns between rows and climbing up ladders.
- Unplug hoses and release stored air from the compressor during long breaks.
- Avoid using compressed air to clean clothing or dust particles from the body.

Animal hazards

General information

General hazards and considerations for working with animals

Horse handling

About horses, riding safety

Cattle handling

About cattle, handling safety, other factors

Sheep handling

General information, mulesing, jetting, dipping and drenching, mustering, lifting sheep, diseases from animals

Shearing

The physical demands of shearing, dangers of heat stress

Pig handling

Working with pigs, lifting, other factors

Diseases from animals

Leptospirosis, Q-Fever, Hendra virus, Lyssa virus, Hydatid disease

Dangerous snakes

Types and locations, first aid, avoiding snake bite

Distinctive spiders

Types and bites

Scorpions and centipedes

Types, avoiding bites

General information

Farm animals can cause serious injury if not handled properly. Handling animals may involve riding, drenching, dipping, tagging, branding and shearing. Animals can give a swift, hard kick, so watch their behaviour, respect their size and strength and where possible don't stand behind them.

People need to know their limitations around animals and work within them to avoid injury. By understanding animal temperament and behaviour, injury risk can be reduced.

Animal handlers should maintain a high level of physical fitness on a well balanced diet. Read labels on chemical and antibiotic containers carefully and follow manufacturer's instructions and safety directions. Material safety data sheets

(MSDS) provide important information on safety risk from agricultural chemicals and should be read before use.

If headaches or any other discomfort is suffered after handling chemicals, seek medical advice and have appropriate tests performed. Avoid these chemicals if possible and use full protective clothing and breathing filters when handling chemicals.

Animals can also transmit zoonotic diseases. Avoid contact with their urine, blood and saliva by wearing the correct personal protective equipment. Keep wounds covered with waterproof dressings and practice strict personal hygiene.

Horse handling

Horses have the strength, speed and ability to cause injury if they are not handled properly. People need to consider their limitations around horses and avoid riding horses which are likely to exploit those limitations.

When horse riding:

- Wear leather soled riding boots, jeans, jodhpurs or long trousers, and a safety approved riding helmet.
- Use whips, spurs, breastplates and running rings.
- Ensure bridles, bits, saddles and girths are kept in good repair and fit the horse comfortably.
- Keep the stirrup leathers, girth straps and surcingles well oiled and checked regularly.
- Choose strong stirrup irons and the appropriate 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.
- Be aware that horses vary in conformation, temperament, ability and 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.

Other practices that need to be considered include:

- Riders need to be careful when galloping close to a beast. It is extremely dangerous to allow the horse to touch a beast behind the point of the shoulder. The horse can fall by touching the beast's hind legs or from the beast turning completely under the horse's neck.
- Be careful riding under gate caps in stock yards. Some are too low for horse and rider to pass under safely.
- Take extra care when riding in slippery or boggy conditions.
- Match riders to horses that are within riders handling capabilities.
- Only tolerate a bucking or bolting horse during the breaking-in and early stages of training.
- If a horse is likely to buck, it is best to saddle it and give it some exercise prior to mounting. This can be done by lunging or leading it from another horse.

The horse can then be mounted and ridden in a small yard before being ridden in an unconfined area.

- If a horse is likely to bolt it should be ridden in a yard first. If it bolts in an unconfined area, gradually circle the horse by applying pressure to one rein until the horse is under control.
- Always remain alert and in a position of control whilst mounted. Only adjust equipment from the ground.

Cattle handling

Cattle are more unpredictable during cold windy weather, where cows have calves or if bulls are in proximity to cows in season. Age, breed, sex, experience, horn status, temperament, training and weight are all risk factors that can impact on safety.

Experienced stock people will control the movement of stock and avoid too strong a reaction by the animal by working on the edge of the flight zone.

Handling animals requires that they be outsmarted rather than out fought and that they be out-waited rather than hurried.

When cattle handling:

- Make use of facilities and aids such as head bails, branding cradles, whips and drafting canes.
- Build yards and sheds strong enough and of a size to match the cattle being handled.
- Avoid sharp, blind corners and ensure gates are well positioned.
- Keep facilities in good condition and free from rubbish.
- Use crushes, head bails and cradles to restrain cattle.
- Maintain yards in a non-slippery state.

Other factors that need to be considered include:

- 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 the mating season and extremely dangerous when fighting. Separate into different yards where applicable.
- 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.
- Avoid working in overstocked yards.
- While drafting cattle through a gate, work from one side to avoid being knocked down.
- When working with cattle in a crush to vaccinate or apply tail tags, be careful not to crush arms against rails or posts from sudden movement of stock.
- Approach cattle quietly and make sure 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 injury attempt to work either outside the animal's kicking range or directly against the animal.
- Follow a regular routine so as not to alarm cows.
- Restrain the animal in a head bail when working on the head.
- Take care when using brands or knives for castrating and bang tailing.
- When working with stud cattle, train animals to accept intensive handling like grooming, washing and clipping.
- When leading cattle on a halter, never wrap the lead rope around your arm or hand.
- Fit bulls with a nose ring and lead by holding up their heads with a nose lead.
- Be aware of the possibility of contracting diseases such as leptospirosis and QFever when working with animals. These diseases are transmitted through contact with blood, saliva and urine.
- Practice strict hygiene and vaccinating herds against such diseases is recommended. A vaccine is also available to protect humans against contracting QFever.

Sheep handling

General information

- Build yards on sloping ground for better drainage and of a design that will encourage sheep to work freely.
- Build protective coverings over working and drafting races.
- Avoid slippery surfaces in races and forcing yards and keep dust levels to a minimum.
- Observe recommended withholding periods for drugs or chemicals before stock are slaughtered.
- Ensure the brakes and suspensions on motorcycles are regularly maintained.
- Wear a helmet and appropriate protective equipment and clothing that protect arms, legs and feet when riding motorcycles.
- Treat rams with caution as they can be very aggressive.
- When working rams in a race ensure you are protected from those behind you. A well positioned drop gate is useful to reduce the hazard.

Lamb marking and mulesing

- Hold lambs firmly when held by hand.
- Use a cradle where possible.
- Catchers should wear protective gloves.
- Work out a system along the cradles so that operators are not in danger of being cut, sprayed with chemicals or jabbed with a needle.

- Sterilise all knives, shears and ear pliers and ensure operators observe hygiene practices.

Jetting, dipping and drenching

- Choose the most efficient chemical for the job and the least harmful to humans. Always wear protective clothing, goggles and breathing equipment where specified.
- Use positive air supply hoods. If headaches or any other discomfort are suffered after handling chemicals seek medical advice and have appropriate tests done. Avoid using these chemicals if possible in future.
- Ensure correct mixing rates are used.
- Keep equipment well maintained and check regularly to avoid leakage of chemicals.
- Do the work in the shade to reduce risk of heat stress.

Mustering

- Plan the muster as sheep movement is affected by wind direction and location of water.
- Allow plenty of time and do not rush the stock.
- Use dogs to control the mob.

Lifting sheep

- If possible have two people to lift sheep.
- When lifting alone, sit the sheep on its rump, squat down, take a firm hold of its back legs while keeping the sheep's head up to restrict movement. Pull the animal firmly against the body and lift **using your legs not your back**.
- If lifting the sheep over a fence do not attempt to drag, work from the same side as the animal.
- Put a drafting gate at the end of the handling race to save lifting. It is advisable to have several positions for 'drop gates' in the race to hold sheep that are to be drafted off.

Diseases from animals

Animals carry diseases that are transferable to humans, sometimes referred to as zoonotic diseases – be familiar with the symptoms so that you can determine if these diseases may exist in the flock.

Shearing

All rural workers who do heavy physical work should maintain a high level of physical fitness, a well balanced diet and high fluid intake to guard against injury and heat stress.

More information about health and safety in shearing is available from Victorian WorkCover.

Pig handling

- Use lane design that will encourage pigs to work freely.
- Build protective coverings over working and drafting races.
- Avoid slippery surfaces in races and forcing yards and keep dust levels to a minimum.
- Sterilise needles, teeth cutters, ear pliers and ensure operators observe strict hygiene practices.
- Observe recommended withholding periods for drugs and chemicals before pigs are slaughtered.
- Wear appropriate protective clothing.
- If possible have two people to lift pigs.
- When lifting alone, squat down, take a firm hold of its back legs, pull the animal firmly against the body and lift **using your legs not your back**.
- If lifting the pig over a fence do not attempt to drag, work from the same side as the animal.

Other factors that need to be considered include:

- Age, sex, breed, weight, horn status, temperament and training of the animal.
- Boars are more aggressive during the mating season and extremely dangerous when fighting. Prevent boars coming in contact with each other at all times.
- When moving boars use a drafting board.
- Make use of facilities and aids such as nose ropes and drafting boards.
- Pens and lanes need to be large and strong enough to match the pigs being handled.
- Avoid sharp, blind corners on pens and ensure gates are well positioned.
- Where pigs need restraining use crushes and nose ropes.
- Maintain lanes in a non-slippery state.

Information about electrical safety in a piggery is available from Department of Primary Industries and Fisheries.

Diseases from animals

Some of the diseases from animals (zoonotic diseases) that can affect rural workers include:

- Leptospirosis
- Q-Fever
- Hendra virus (Equine Morbillivirus)
- Lyssavirus
- Hydatid disease

Leptospirosis

What is leptospirosis?

Leptospirosis (or Weils Disease) is an infectious zoonotic disease caused by bacteria and spread in the urine of infected animals (wild and domestic) and in water and soil contaminated with infected urine. It is not spread from person to person.

The leptospirosis bacteria thrive in wet and moist conditions and are spread mostly by rodents, cattle, domestic farm animals and native animals.

Some of the risk factors to be considered include:

- the presence of animals that may transmit the disease;
- areas on the farm where animals like rats and mice frequently shelter;
- high water levels in areas with poor drainage;
- certain animal habitats like long grass.

Leptospirosis is a notifiable disease.

Who is most affected?

Banana farmers in the Innisfail/Tully region and dairy farmers on the Tableland are most affected.

Cows with hardjo that are pregnant or lactating may abort, give birth to weak or stillborn calves, have a sudden milk drop, fever, infertility and mastitis. Infection with pomona in calves can be fatal but is rare in calves in Far North Queensland.

The at risk group who contract leptospirosis are men over 15 years of age who work outdoors.

About the bacteria

There are 23 strains of leptospirosis in Australia including hardjo, zanoni, pomona and australis and the current vaccine only covers hardjo and pomona.

Leptospirosis is caused by a spiral shape bacteria that is very persistent in the environment. Anyone handling animals should wear protective clothing and water resistant footwear to reduce the risk of infections.

Leptospire can survive for several hours in plain water and longer in puddles and stagnant water such as effluent ponds but up to six months in soil or water in the right conditions.

What can I do about it?

Leptospire can be temporarily cleaned out by:

- using disinfectants or bleach
- high temperatures, extremes of acid (pH) and sunshine

These methods may only be effective for hours or days if there is a risk of animal urine recontamination.

For banana farms the banana industry Leptospirosis control checklist provides practical advice on control measures to help minimize the risk of Leptospirosis.

For dairy farms the dairy industry Leptospirosis control checklist provides practical advice on control measures to help minimize the risk of Leptospirosis.

Health effects

Leptospirosis occurs in mild and severe forms and some strains are more harmful than others. Early detection and treatment will limit the infection and prevent serious illness.

The infection can enter through:

- the membranes of the eyes and nose;
- the mouth by licking your lips, eating or smoking before washing and drying your hands;
- the skin if you have cuts, sores and abrasions.

Some strains have very serious health effects including bleeding from the lungs, liver damage and kidney failure if they are not treated properly.

It is possible to have been exposed to leptospirosis without feeling any symptoms at all. The effects of infection can sometimes take from 2 to 21 days to appear making it difficult to trace the exact cause.

The mild form of the disease is often 'self-limiting' causing flu-like symptoms including:

- fever and headaches;
- chills and sweating;

- severe muscle pain (calves and thighs);
- vomiting and bloodshot eyes.

To find out about your obligations as a banana or dairy farmer, manager, visitor, contractor or farm resident, check out the rural employers section.

More information is available from the Queensland Health Public Health fact sheet on Leptospirosis.

Dangerous snakes

About dangerous snakes in Queensland

Dangers of snakes, what to do for snake bite

Types and where they are found

The most dangerous snakes, description, habitat, and threat rating

First aid

First aid for snake bites

How to avoid snake bites

How to avoid being bitten by snakes

About dangerous snakes in Queensland

Queensland has twelve potentially dangerous snakes. The risk posed to people by these snakes depends on the venom toxicity, venom yield, fang length, temperament and bite frequency of each species.

Snake identification is difficult. Colour seems an obvious feature but in many cases, colour patterns vary particularly with very dangerous snakes where individuals of the same species may be very different in colour and different species can be similar.

It is important to understand why and how snakes bite. Snakes are not aggressive and do not seek confrontation with humans but may retaliate if provoked.

Some snakes, such as the Eastern Brown are nervous and very easily provoked. Others like the Red-bellied Black are more likely to attempt to deter threats by displays of hissing, flaring the body and thrashing around. As a last resort, they will bite. Once provoked, Eastern Browns and coastal Taipans may deliver several bites in quick succession while others such as the Mulga Snake will grip the victim and chew.

Some snakes give a warning bite with little or no injection of venom. However a dangerous snake always has the potential to inject enough venom to cause life-

threatening symptoms with each bite particularly if it has been provoked or if it delivers multiple bites.

Types and where they are found

Taipans

There are two kinds – **Coastal and Western Taipans**.

The **Coastal Taipan** is regarded as Queensland's most dangerous snake and is found along the length of eastern, coastal Queensland in dry forests, grasslands and cultivated areas.

The **Western Taipan** is restricted to the ashly downs of the south-west corner. This snake has the most toxic venom of any land snake but is rated the sixth most dangerous partly because of its remote habitat.

Black snakes

The **Mulga snake** also known as the **King Brown** is the second most dangerous snake found in arid and semi-arid areas throughout Queensland. **Collett's Black snake**, **Red-bellied Black snake** and **Spotted Black snake** rate eighth, ninth and tenth on the risk scale. **Collett's** is restricted to the black soil plains of central Queensland, the **Red-bellied** to the east coast and the **Spotted Black** to the south-east corner.

Death Adders

The Common **Death Adder** rates as the third most dangerous. It is found across the Gulf of Carpentaria, the base of Cape York and down the eastern half of Queensland. It inhabits a range of habitats excluding rainforests. The much smaller closely related species of **Death Adders** inhabit the arid interior of the State and Cape York.

Brown snakes

The **Eastern Brown** snake ranks fourth and is the most dangerous snake commonly seen over much of Queensland. This snake is frequently found around human habitation but not in rainforests. The related **Western Brown** snake rates sixth and is found in arid and semi-arid regions of Queensland. Other species of **Brown snake** found in Queensland are the **Ingram's Brown** and the **Speckled Brown** whose bites are unlikely to prove fatal and the **Ringed Brown** snake from north-west Queensland is potentially dangerous because of its size and similarity to the **Eastern Brown** snake.

Tiger snake

The **Tiger snake** found in Southern Australia, rates the fifth most dangerous Queensland snake. It is restricted to the coast and near mountains of the south-east corner of Queensland and is patchily distributed through heaths, rainforests and wallum habitats.

Rough-scaled snake

The **Rough-scaled snake** is the eleventh most dangerous Queensland snake and is found in tall open forests, heaths and rainforests of coastal north-east and south-east Queensland.

Small-eyed snake

The **Small-eyed snake** is the smallest and rated the twelfth most dangerous found in forest and heath through eastern Queensland south of Cairns and commonly found in settled areas.

First aid

- Keep the patient still and as calm as possible and bring transport to them.
- Maintain vital functions.
- Immediately apply a pressure immobilisation bandage (in an emergency, clothing strips or pantyhose could be used) over the bite site at the same pressure as for a sprain without blocking circulation.
- Apply a bandage over the top of clothing to as much of the rest of the bitten limb as possible.
- Apply a splint to keep the limb still.
- Seek medical help immediately (for example, call 000).
- If the snake has been killed, bring it with the patient but do not waste time trying to kill it.
- Do not wash the wound.
- Do not use a tourniquet.
- Do not cut or suck the wound.
- Do not give alcohol or food to the patient.

Snake venoms are relatively slow acting but prior consumption of alcohol or drugs, health and age of the victim and allergies may complicate their effects.

How to avoid snake bites

Ways to avoid snake bites include:

- Leave snakes alone particularly if they have been provoked or if they are injured.
- Know appropriate first aid.
- Wear appropriate clothing and boots in known snake areas.
- Do not put hands or feet in or under logs, rocks, tin, hollows or crevices and watch where you are walking.
- Place stacks of tin, timber or similar materials on pallets or supports to get it off the ground.
- Keep homes and workplaces free of food or shelter for rodents.

For more information about snakes in Queensland, check out the Queensland Museum's website.

Distinctive spiders

Funnel web spider

Funnel webs are potentially the most dangerous spiders in the world. In Queensland they tend to be more common in moist, cool rainforests and have been found as far north as Gladstone, west to Toowoomba and in the Brisbane area around the base of Mt Cootha, the Daisy Hill Forest Park and adjacent parts of Springwood. They have also been found in remote mountain rainforests west of Mossman in North Queensland.

Distinguishing features are a shiny black head, closely grouped eyes, moderately long legs, black or dark plum body. The head or body of a female funnel web can cover a 50 cent coin, and the legs easily span the width of an adult hand.

Both males and females are very aggressive and bites from either sex are potentially dangerous, even fatal. The bite may cause severe pain followed by numbness of the affected area, vomiting, sweating and muscular cramp.

First aid for **funnel web** spiders

- Keep the patient calm and still.
- Apply a pressure immobilisation bandage immediately.
- Seek immediate medical help.

Whistling spider

Whistling spiders is another type of Trapdoor spider and makes an audible hissing sound when disturbed. It is not usually aggressive but will rear up if provoked. The bite is painful and may cause severe nausea and vomiting for six to eight hours. Dogs quickly succumb to their bite.

In Queensland it is found in the north and west and is very large with legs spanning around 12cm.

Mouse spider

Mouse spiders are common in suburban gardens, native bushland and some rainforests throughout Australia. They vary in size from a 5 to a 20 cent coin in leg span and are often confused with funnel webs. The venom is believed to be as dangerous and dry bites are common.

From underneath, the fangs of the mouse spider cross at the tips but in the funnel web and all other Trapdoor spiders, the fangs lie parallel when closed.

Golden Trapdoor spider

Golden Trapdoor spiders are found throughout Queensland mostly near tracks in national parks in the south-east. Their heads are golden brown and glossy and they put a "door" (a thick plug of soil and web) on their burrows. No bites have been recorded.

Redback spider

Redback spiders are hardy animals that breed freely, live in hidden places, disperse easily and are very difficult to control or eradicate. They build their webs under window sills, guttering and eaves, in the corner of windows and doors, under steps and verandas, around pot plants and in crevices of bricks.

The adult female usually has a black body and legs, a distinct red mark on the upperside and a red hourglass on the underside. Males and young redbacks are a dirty white colour with six black spots on the top of the abdomen and a white hourglass underneath. Males are much smaller than females and rarely seen.

The female is able to store the sperm of a male and use it over a period of two years to lay several batches of eggs. Redbacks normally lay from 40 up to 300 eggs in a sac and usually make three to five sacs at a time.

Both males and females can bite but female bites are more common. The initial bite is often felt but may be painless although some victims have reported burning

sensations. Puncture marks are not always obvious. In most bites, intense local pain is experienced about five minutes after. The main symptom of a redback bite is local sweating at the bite site.

First aid for **redback** and other spider bites

- Apply antiseptic and an ice pack to the bite.
- Do not use a pressure immobilisation bandage.
- Seek medical advice and if possible take the spider.

The best way to control redback spiders is to push a stick quickly into the web as far as it will go and roll the spider, the eggs and web onto the stick. Remove the stick from the web and crush the spider and the eggs. Insecticide spraying does help but is not very effective.

Brown Huntsmen spider

Brown Huntsmen are commonly found inside houses and sheds. In the day they hide under bark and at night they hunt over tree trunks and the ground. Many young may be found in bathrooms where they emerge from an egg sac attached inside the pipes. Huntsmen are not aggressive but could bite if they handled. The bite is painful but seldom produces more than a mild headache, local pain or swelling.

Wolf spider

Wolf spiders vary in size from a one cent coin to almost the width of an average adult hand. They are drab-coloured with dark brown or black heads marked with lighter radial markings resembling a Union Jack pattern. From the front, the spiders have two large and two smaller pairs of shiny black eyes and two large fang-bearing bumps with a distinct orange patch on the side. Wolf spiders are ground hunters often disturbed in gardens where they build burrows in the soil or live among fallen leaves. If they are mishandled, they may bite and cause rapid pulse, dizziness, nausea, swelling and persistent pain and tingling but most bites have no reaction.

For more information about some of Queensland's most distinctive spiders, check out the Queensland Museum's website.

Scorpions and centipedes

Large brown scorpions are common in gardens and forests throughout eastern Queensland and found under logs and rocks and in shallow burrows in earth banks. The tail sting is not known to be dangerous and the scorpion usually retreats rather than fights.

Large golden scorpions include some of the biggest scorpions in Queensland and are common and west of the Great Dividing Range. The sting is not known to be dangerous.

Common garden **centipedes** may reach 15cm and are found throughout northern Australia. They live in logs and spaces formed between rubbish and even newspapers. They move rapidly and bite with two powerful “jaws” below the head. The bite causes severe pain which may last several days but no deaths have been recorded from the bite.

Ways to avoid being bitten include:

- Do not put hands, feet or head into or near a spider’s web or a spider may drop or rush out and bite.
- Do not put hands, feet or head into gloves, helmets or boots without checking.
- Fold clothes inside out before taking them inside.
- Do not provoke, poke or blow on spiders or they will jump and bite.
- Do not crush anything you feel walking on you. Get somebody to knock it off. Spider juices are often toxic or bacterially dangerous.
- Strip beds and remake before going to sleep.
- Ensure bed clothing of babies or infants does not hang on to the bedroom floor.

Rural Industry Action Plan

The Queensland Workplace Health and Safety Strategy Rural Industry Action Plan 2004-2007 was released in February 2005 and identifies the key workplace health and safety activities to be undertaken in the rural industry from 2004 to 2007.

This action plan contains a range of goals:

- improve data management and analysis
- identify priorities and influence the workplace health and safety agenda
- strategic evidence based development of workplace health and safety legislation, standards and codes
- access to information resources that assist in achieving industry compliance
- practical industry guidance based on sound risk management principles and industry/worker experience
- specific and general industry deterrence strategies
- improve methods for increasing industry workplace health and safety awareness of obligations holders and the broader community
- increase skills of all industry stakeholders
- improve incentives for genuine prevention efforts.

Full download suitable for printing (PDF, 638 KB).

The action plan supports the Queensland Workplace Health and Safety Strategy 2004-12.

Read about other action plans.