



The University of Sydney



# Safety of Quads and Side-by-Side Vehicles on Australian Farms

## A Practical Management Guide



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## ***Principles for quad and side-by-side vehicle safety on farms***

Incidents involving quads are now the leading cause of injury death on Australian farms. Most deaths are due to crush injury and/or asphyxiation associated with quads rolling over, or by injury associated with the victim being flung onto a hard surface as a result of a crash. Farmsafe Australia partners urge farmers to think carefully about their use of quads taking into account the safety risks.

Farmers who are employers or in control of the farm workplace have responsibility under work health and safety (WHS) law to provide safe systems of work for workers and visitors to the workplace, including operation of quads. [\(Go to Page 6\)](#)

To best manage safety in quad and side-by-side vehicle operation on Australian farms and to meet WHS obligations, farmers should:

1. **Machine or vehicle selection** [\(Go to Page 7\)](#)  
Where possible select a machine that has a low risk of rollover. Consider the machines that can be fitted with a suitable operator protective device, including rollover protective structure and operator restraint. Many jobs on Australian farms can be undertaken using alternative vehicles to quads. If using a quad, fit a tested crush protection device.
2. **Conditions of operation** [\(Go to Page 9\)](#)  
Specify the jobs for which the quad /side-by-side vehicle is to be used, the conditions of operation (including speed, load and tow limits), the areas on the farm on which the machine is to be operated and define "no-go" areas.
3. **Attachments and loads** [\(Go to Page 10\)](#)  
The instability of quads makes them unsuitable for carrying loads or towing. For side-by-side vehicles make sure that attachments and loads comply with the specifications in the Operator's Manual, taking into account that loads will reduce stability. This information should be available from the supplier.
4. **Quads and passengers** [\(Go to Page 10\)](#)  
Do not allow passengers on quads.
5. **Quads and children** [\(Go to Page 13\)](#)  
Do not allow children under 16 years to operate or be carried as passengers on quads of any size.
6. **Training operators of quads and side-by-side vehicles** [\(Go to Page 14\)](#)  
Make sure that operators of quads /side-by-side vehicles are trained to operate the machine safely.
7. **Induction to safe operation of quads and side-by-side vehicles** [\(Go to Page 16\)](#)  
Make sure that operators receive a thorough induction to safe operation of the vehicle on the specific property.
8. **Maintenance** [\(Go to Page 17\)](#)  
Ensure that machines are well maintained for safe operation.
9. **Helmets** [\(Go to Page 17\)](#)  
Provide a suitable helmet and ensure that it is worn,
10. **Supervision** [\(Go to Page 17\)](#)  
Supervise safe operation

## *First some definitions....*

### *What is a quad?*

For the purpose of this Guideline, quads are specifically designed motorized vehicles that operate on four low pressure, high flotation tyres. They have a saddle-type seat that is designed for a single operator, handlebars for steering control and may be either 2- or 4-wheel drive.

While developed as a recreational vehicle, quads are in widespread use on Australian farms. Their ability to operate in a range of conditions, including muddy conditions, without leaving a 'footprint' has provided practical advantage in many settings. Their farm use includes:

- Personal travel around the farm
- Mustering livestock
- Supervising workers
- Inspecting crops, pastures, fences, water and livestock



Although used for these purposes, there is continuing evidence of death and serious injury when quads are used for spraying, carrying or towing loads. These activities reduce the stability of quads, leading to an increased likelihood of death or injury from crashes and rollover.

### *What is a side-by-side vehicle?*

In this guideline, side-by-side vehicle refers to other small vehicles designed for off-road use. They can have a bench-type or bucket seats, have a steering wheel and are designed to transport more than one person. They are also equipped with four or more low pressure high flotation tyres and generally have a tray-back designed for carrying small loads.

While side-by-side vehicles are not as commonly used on Australian farms as quads, increasing numbers of farms have moved to using these as a safer option.



## *Why should farmers be concerned about quad safety?*

There is a growing concern world-wide over the number of deaths and serious injuries associated with use of quads in agriculture and for recreation. In Australia, information from the National Coroners Information System indicates there has been over 220 deaths between 2001-2015, with an average of 15 deaths each year.

- The majority of those who have died were quad operators however passengers (and bystanders) are also at risk.
- Children are at increased risk of serious injury and death - age is more important than size and weight.
- Quad related deaths are associated with a wide range of work activities in agriculture including mustering, spraying pesticides, transporting and travelling on the property. There are significant numbers of deaths associated with leisure operation of farm quads.
- There is a tendency for quads to rollover, resulting in deaths and serious injuries.
- Carrying loads on quads makes an already unstable vehicle more prone to rollover, increasing the potential for deaths and injuries.
- In most cases, injury is caused by blunt force with the body part crushed between the quad and the ground or other surface. Alternatively there is contact of the body with a rock, tree or other surface after the rider has been flung from the quad by momentum.
- The body parts injured and associated with death were mostly the torso, head and cervical spine. Death commonly results from crush injuries and asphyxia.
- Earlier quad models were associated with injury to the foot and ankle, however the improved design of foot plates has reduced this risk.

Work Health and Safety *risk* associated with quad operation on Australian farms should therefore be *assessed* as **HIGH**, with employers and those in control of the workplace being required to take active steps to control that risk.



## *The basic principles of risk management for safety*

These are the principles for reducing injury risk in any workplace. They are also what the WHS regulations require in all states. There is a 'hierarchy', or *ranking of effectiveness* for injury prevention:

More effective

### *1. Elimination of the hazard*

Where possible, an injury risk must be eliminated, or removed. This is obviously the most effective way to reduce risk. While it is often not practicable to eliminate a particular hazard, the law requires that you must at least think about elimination as the first option.

### *2. Substitution for a hazard of lesser risk*

Where it is not possible to remove a hazard altogether, you need to consider if the hazard can be 'substituted' for something that will do the same job, but is less risky. There are small vehicles available on the market that may be suitable for your farm work. Substitution of quads by other more stable vehicles (including side-by-side vehicles), is a key option that all farmers should consider.

### *3. Other engineering measures to prevent injury*

Designing machinery to isolate the worker from the hazard is the basis of many safety improvements. For quads, there is evidence supporting the fitment of suitably tested crush protection devices (CPDs) to prevent death or serious injury in the event of a rollover. For side-by-side vehicles, a ROPS and seat belts are essential.

### *4. Safety rules*

Whatever machine or vehicle is being used, you must make sure that it is operated safely. Your farm rules should include:

- Giving effective safety induction and training to workers who use the vehicle.
- Providing workers with information about the risks and how these risks can be reduced.
- Always wearing the seat belt in side-by-side vehicles.
- Supervising workers using quads or side-by-side vehicles.
- Never carrying passengers on quads.
- Not allowing children under 16 years to operate quads of any engine size.
- Not carrying or towing any loads on quads.
- Always wearing a helmet on quads and assessing the risks when using side-by-side vehicles.

### *5. Personal protective equipment - helmets*

Personal protective equipment must be provided and used where workers cannot be protected from a hazard by other control measures. This includes providing helmets to protect from head injury for riders of quads, motorbikes and side-by-side vehicles (where required), plus attention to manufacturers' safety advice.

Less effective

*The more effective controls must always be considered first. In practice, best practice in WHS risk management will require a mix of the above measures.*

## Selecting the safest machine or vehicle for the job

Quads are popular and useful machines for many common farm jobs. However, safety of the operators is a key issue you should take into account. When deciding what is a safe farm machine or vehicle for the specific jobs, think about the following:

### *What jobs are to be done with a quad or a side-by-side vehicle and under what conditions?*

Some jobs can be done efficiently by using vehicles that are safer than quads. For example, many farm managers have moved to using side-by-side vehicles that are more stable and less inclined to rollover. They are also fitted with a Rollover Protective Structure (ROPS) and seat belts.

On the other hand, these side-by-side vehicles may not be suitable for some of the jobs that quads are now used for - for example, for flood mustering of stock.

For some jobs, you may decide that the general farm utility, tractor or motorbike might be the safest option.

### *What safety features should you look for when buying the vehicle?*

When considering the type of machine(s) to purchase, consider the following:

- Size of machine - suitable to the size and strength of the operator(s), plus the conditions of the operating environment (steering can be "heavy" for some older and female operators).
- Stability and likelihood of rollover and crush protection provided in event of rollover.
- For quads, is the machine fitted with a Crush Protective Device (CPD) to limit death and injury in the event of a rollover.
- For side-by-side vehicles, is the machine fitted with a ROPS and seatbelt. The seatbelt **MUST** always be worn.
- Foot plates that protect the foot and lower leg from injury.
- Load specifications meet your needs for planned attached or towed loads (noting quads are not suitable to carry or tow loads).
- Speed and capacity to limit speed.
- 4-wheel drive or 2-wheel drive (4-wheel drive may be safer in wet conditions).

### *Does the mix of machines and systems on the farm enable farm work to be undertaken safely?*

Most farms will need more than one vehicle or machine to safely undertake the mix of necessary jobs efficiently and safely. Some jobs may need a different machine depending on the circumstances, for example, if it is wet, or if a trained operator is not available.

Remember to think about the other risks of the planned work - for example, spraying using a side-by-side vehicle without a cabin can expose the worker to risk of contamination with pesticides. You should think about your farm needs and your machine/ vehicle requirements, keeping safety in mind.

*This is how one horticulture and sheep business is dealing with their safety issue*

A larger "corporate" enterprise runs farms producing stone fruit, a vineyard and broadacre farms in NSW. This business has undertaken significant changes in response to difficulties associated with use of quads.

The company had documented 24 quad 'flip-overs' on its farms before making some key changes. When quads were being used for towing fruit, the trailer load tended to become "pushy". The Safety Officer himself had experienced one rollover on a big quad where the towed trailer pushed it. It wasn't over the tow weight limit. The terrain is mildly sloping in the orchards and vineyards.

The company now has one quad on its horticulture property used for supervision and checking, and one on a sheep property. It has replaced its other quads with John Deere Gators for most of the work previously done by quad bikes and now has six Gators and two motorbikes that are being phased out.

Regular maintenance is undertaken by the on-farm mechanic, who does all the routine maintenance.

Worker induction and training of workers to operate the Gators is undertaken by the Safety Officer. The induction includes having the worker read the operator's manual, undertaking basic checks, noting the farm speed limit which is 8-10 kph on roads. Gators are governed to 25 kph. Each worker has 8 hours training with the Gator, in which time they are taken all over the property, and are made familiar with the tracks to be taken and areas off limits for side-by-side vehicle operation.

Full road helmets are used by riders, except where work involves talking to people.

No 'flip-overs' have occurred to date with the mix of machines in place.

(It was noted that Gator was retaining a good resale value).



## *Options to consider for selected farm jobs:*

### *Inspecting*

Perhaps the most universally useful role for quads has been as a means of getting around the farm for checking water, fences, stock and supervision of work.

While rollover deaths do occur on flat ground, possibly one of the safest places to use quads is where the surface of tracks and paddocks are smooth and even.

Other options that are in use and could be considered are:

- Farm utilities
- Side-by-side vehicles
- Motorbikes



### *Moving produce (fruit and vegetables) on the farm*

Quads are not suitable for carting and towing loads. Loads decrease stability and increase the risk of rollover. Other options must be used to reduce the risk of rollover include:

- Side-by-side vehicles with or without trailer
- Farm utilities
- Small tractors with trailer

### *Spraying weeds*

Quads are not suitable for spraying and commonly feature in the farm deaths recorded in Australia. Other options must be used to reduce the rollover risk and include:

- Side-by-side vehicles with fitted tank or towed tank
- Farm utilities
- Small tractors
- Knapsack sprays



### *Mustering*

Quads have proved useful for mustering sheep and cattle, however many deaths have been recorded. Other options that are in use and must be considered include:

- Motorbikes
- Side-by-side vehicles
- Farm utilities
- Horses



### *Transport*

Quads have been used for personal transport around farms and have come into their own for work in wet conditions.

Other options include:

- Farm utilities
- Side-by-side vehicles
- Small tractors (that also function well in wet conditions)

## *Loads and attachments*

### *How do loads increase risk?*

Loads carried raise the centre of gravity and will increase the likelihood of the machine rolling over. Therefore extreme care should be taken with loading the machine.

The evidence is that quads should not be used for carrying or towing loads; this decreases stability and makes an already unstable vehicle, more unstable.

Side-by-sides are significantly more stable and are designed for carrying and towing heavier loads. The manufacturer and supplier will provide advice on load limits for each side-by-side vehicle. This information will be found in the Operator's Manual and will include information on load weight limits and tow loads. These should never be exceeded.

### *What about liquid loads such as spray tanks?*

Liquid loads in mounted or trailed spray tanks can shift as a machine corners or moves up an incline, reducing stability and increasing potential for rollover. While baffles within tanks may reduce this effect, changes still occur and increased risk. Spray tanks should never be used on a quad.

Side-by-side manufacturers advise that tanks should be limited in size (limited to the manufacturer's load limit for the specific machine), be baffled and secure with suitable mounting methods and locations. The tanks should:

- Be as low as possible;
- Be rounded and not have sharp edges;
- Have internal baffles that substantially restrict the movement of liquid as the tank is tilted; and,
- Should not be mounted/ attached in a manner that obscures the rider's line of sight or visibility.

### *What about passengers?*

Quads are not designed to carry passengers. The longer saddle seat is said to be designed for operator movement for optimal control of the machine.

Farmers and managers should note that employers are required under WHS regulations to ensure that "plant is used only for the purpose for which it was designed ..." Carrying passengers not only increases the risk of an incident and serious injury, it could be considered to be a breach of the WHS regulatory requirements.

Passengers should not be carried on quads. If it is necessary for two persons to be transported, find other machines for the job, such as a farm utility or side-by-side vehicle.

## *Machine modification*

If any modification is made to a machine, it is important to check whether your changes have increased the risk of injury. For example, changing the tyres to higher, narrower tyres than those supplied, will raise the centre of gravity and decrease stability of the machine.

For any change you make, you must check for safety hazards and then plan for ensuring that no-one is harmed by your changes. It is your responsibility to make sure your safety plans are enforced and make a note of your actions.

Making sure that quads are not carrying or towing loads and that the 'No Passenger' rule is enforced on the farm are important ways of providing a 'safe system of work' and 'maintaining a safe working environment'.

## *Limits of terrain*

### *Are some terrains not suitable for operation of quads /side-by-side vehicles?*

Yes. While quads have been called "All-terrain" machines, there are limits to the degree of slope and type of terrain over which they can be operated safely. A 2009 Victorian Coroner's inquest into eight quad fatalities recommended that "Quad bikes must not be described as All Terrain Vehicles or ATVs. So described, a false impression is created, which warnings are unable to erase". This position has been maintained in subsequent inquests in Queensland, New South Wales and New Zealand.

Terrain that poses a particular rollover risk for quads and side-by-side vehicles include slopes, rough and rocky ground, tussocky vegetation, contour and dam banks. However, in a recent USA review, nearly half the quad rollover injuries occurred on flat ground.

Farmers and farm managers can reduce risk of quad and/or side-by-side vehicle injury by:

- Identifying the high risk areas of the farm and establishing rules for how work is to be undertaken safely in these areas e.g. using a horse to muster in hilly areas.
- Establishing "No-Go" areas on the farm where the machine may not be operated.
- Improving the surfaces of tracks for safer access to particular areas of the farm.

Manufacturers strongly warn against use of quads and side-by-side vehicles on paved or bitumen surfaces, due to the flotation design of the tyres. Riding on paved surfaces may seriously affect handling and control.

A farm hand had been employed by the owner of the property for some years. In the early afternoon he rode the quad from the house to the shed where he used several lengths of rope to tie steel to the rear of the quad. The steel was to be taken to the rear of the property where fencing contractors were erecting rural fencing.

He then rode down the dirt road. Part way along the route, he decided to leave the dirt road and travel along a makeshift road which he had apparently travelled many times before. This makeshift road consisted of travelling over long grass and down a steep uneven gradient. Whilst traversing the slope it appeared to the investigators that the quad toppled over and landed on top of the rider who died from crush injuries. Due to the location of the deceased only 4-wheel drive vehicles were able to get to the deceased.

Defining areas of the farm and tracks that are safe for quads /side-by-side vehicle operation, and defining "no go" areas are important parts of providing a *"safe system of work"*

## *Speed of operation*

While many quad incidents occur at what would be considered to be "low" speeds, the likelihood and severity of injury is greater at higher speeds, particularly in instances where the operator may be ejected from the vehicle.

It is more likely that quads and side-by-side vehicles can be safely controlled at lower speeds, allowing obstacles and hazards on the ground to be seen and corrective action taken.

A suggested rule of thumb is:

*"Operate at speeds and on slopes and rough terrain so that all four tyres remain on the ground at all times"*

Farm speed limits for all vehicles and machines should be established and enforced.

Two young men got onto a quad owned by the rider. The quad was ridden out of the property and onto a road. At some point the quad left the road going up an embankment where it hit a small tree. The quad continued to travel up the embankment where it rolled and the occupants were thrown from the quad due to impact. As a result of being thrown the passenger suffered a severe head injury by impacting heavily onto a rock and died.

The rider survived and allegedly admitted to going too fast and 'losing it'.

Setting safe speed limits for quads /side-by-side vehicle operation on the farm is an important part of providing a *"safe system of work"* and *"maintaining a safe working environment"*

## *Age of rider*

### *Should children ride quad?*

No - children and youth under the age of 16 years are at greater risk of serious injury while operating quads than older operators. This increased risk appears to be independent of the weight and height of the child and is related to developmental stage. The largest fleet of quads is in Northern America, where medical authorities in Canada and the USA indicate that children should not ride quads of any size. The small child-sized quads have also been involved in several fatal cases in Australia and New Zealand, nearly all of which involve rollovers.

Quad manufacturers provide clear labels or decals on quads warning of the dangers to child operators on adult sized quads. Quads of any size and children under 16 years are a fatal mix. It is therefore essential that operation of adult sized quads on farms is limited to competent adult operators and that smaller child-sized quads be replaced with suitably sized motorbikes (which are much less common in the deaths data).

*Restricting operation of quads to competent adults over 16 years of age is an important part of employers ensuring that "plant is used only for the purpose for which it was designed..."*

### *What about older farmers?*

Around half of the quad deaths on Australian farms involve older farmers, probably reflecting the average age of farmers who operate these vehicles. However, it should be noted that as we get older our physical capability and agility is reduced, plus our vision, hearing and sense of balance may be impaired. This will make it more difficult to use "active riding" techniques recommended by manufacturers.

In the event of an incident, older people are also more likely to suffer fractured bones than younger people. All these factors add to the risk of injury from losing control of a quad and should be considered in selecting the right vehicle for the job, plus the conditions present when operating the vehicle. A large number of older farmers are trading out of quads and purchasing side-by-side vehicles as they are inherently safer (more stable, have ROPS and seat belts fitted), allow carriage of a load and passenger (including children), and are easier to use in a seated position.

### *What about the risk for young men?*

Young males are a known group of riders who are at increased risk as a result of their so called "risk taking behaviours". This is well recognized by the road traffic authorities and deaths data for quad riders tends to reflect this view. The degree of supervision required is therefore increased for young male workers and this should be taken into account in decision making about the type of vehicle to be used.

*Matching the machine to the age and behaviours of operators is an important part of employers maintaining a "safe system of work"*

## *Skills assessment, training and induction for safe operation of quads and side-by-side vehicles*

It is important that workers who operate any vehicle or machine on the farm have the necessary skills to operate the machine safely in the specific work environment. Farmers who are employers must assess skills, provide safety induction and training as is necessary. All operators must have read the Operator's Manual provided with the machine - this is a necessary part of knowing how to use the machine safely.

### *How can I assess the skills of workers to operate the machine?*

A practical safety skills assessment should be carried out for each person who is to operate the vehicle and when a new vehicle is brought into use. This will generally involve the operator demonstrating knowledge about the machine and its operation (*Tell me about....*) and then demonstrating riding skills in a safe environment (*Show me....*).

This assessment might include:

#### *Pre-start-up*

1. Dressed in suitable work clothing, footwear for operation
2. Describe the purpose and correct use of vehicle controls
3. State why this farm's rule is that passengers will not be carried on quads and why children must not use them
4. Check that tyre pressure and condition is appropriate, guards, chain tension etc are in good working order
5. Check operation and adjustment of all controls, including brakes
6. State why carrying loads or towing is not permitted on quads and that the manufacturer's load specifications must be maintained for side-by-side vehicles

#### *Operation*

1. Wearing helmet and other personal protective equipment specified by the manufacturer
2. Start motor within a reasonable time
3. Ride in forward direction around a defined course - figure-8 around soft obstacles
4. Brake at corner of defined course
5. Reverse around at least part of the course
6. Ride vehicle demonstrating control over more difficult terrain - e.g. hill slope, gully, channel bank

Make sure that you keep a note of your assessment.



### *What training is needed for safe operation of quads and side-by-side vehicles on farms?*

All workers who use quads and side-by-side vehicles must be competent to operate them safely. No operator should be using the machine for farm work without being assessed as competent in operation of the vehicle.

Training may be provided by a training provider. Use a trainer from a Registered Training Organisation, who can train to develop the skills necessary for rural production and issue a Certificate of Competency. Make sure that you keep a note of all training provided.

### *What skills should rider training cover?*

Operator rider training should include:

- Use for which the machine is designed
- Safety risks associated with its use including rollover
- Suitable attire, including need for helmet and eye protection etc as recommended
- Controls
- Pre-operation checks
- Starting, operation, cornering, braking, parking
- Stopping quickly, swerving
- Reverse riding
- Riding strategies - terrain, speeds, reading the environment
- Riding different terrains - including inclines, mud and water
- Loading and towing restrictions for quads and suitable limits (as specified by manufacturers) for side-by-side vehicles
- Loading and transportation of the machine
- Riding over obstacles
- Impact of fatigue, alcohol and other drugs

### *What safety information will be found in the Operator's Manual?*

The Operator's Manual should include important information that describes:

- The purpose for which the machine is designed
- Identified safety risks associated with operation of the machine including rollover
- Measures to be taken to manage these risks, including:
  - Selection of the most relevant and safest vehicle for the tasks to be completed
  - Fitting of suitably tested crush protection device
  - Passenger restrictions
  - Operator age and skill requirements
  - Personal Protective Equipment requirements
  - Pre-operation checks
  - Maintenance requirements
  - Loading and towing specifications for side-by-side vehicles (no loads/ towing on quads)
  - Operation on high risk terrains

### *What about training to ride AND do a specific job?*

Where specialised farm work, such as spraying and mustering is being undertaken using a side-by-side vehicle, then the skill levels for operation need to be higher. The operator must have the necessary skills to do that particular job. Quads are not suitable for these tasks regardless of the terrain as Australian quads deaths data indicates that spraying and mustering are among the highest risk activities.

### *What is safety induction for quads /side-by-side vehicles?*

It is not enough that a rider has operation skills that have been developed in another work environment. An operator must be aware of the safety instructions in the Operator's Manual and be *inducted* to safe operation of the machine in the specific farm environment. Safety rules will include:

- Routes to be used to get to worksites
- "No-Go" areas and rules
- Speeds at which the machines will be operated
- No passenger rules
- No children rules
- Helmet use and other PPE
- Machine maintenance
- Communication systems
- Emergency procedures



Make sure you keep a record of the safety induction for safe operation of quads or side-by-side vehicles.

Ensuring that operators are trained and are given induction to safe operation of the machine on the farm (including reading of the Operator's Manual) are important parts of *"providing the necessary instruction, information and supervision to ensure safety"*



## ***Supervision of safe operation***

Farmers who are employers must provide supervision *"to the extent necessary to minimize the risks to health and safety"*. To do this, the first requirement is to have established the rules and communicated these to operators.

Constant, direct supervision of operators of plant and machinery on farms (including quads and side-by-side vehicles) is mostly not practical. Sometimes it is possible e.g. where mustering stock is done together. On the other hand, periodic checks can be carried out to see that the operator is handling the machine or vehicle according to the farm rules - in terms of speed of operation, work being done, operation in the specified areas of the farm, wearing of helmet, maintaining a "no-passenger" rule.

These checks should be more frequent in the early stage of operation of the machine, but should not be ignored later. *Of course, if the rules have not been established and communicated to the worker, supervision is impossible!*

## ***Vehicle Maintenance***

Regular routine maintenance is important for the safety of all farm vehicles and machines, quads and side-by-side vehicles are no different. The Operator's Manual will provide guidance as to the maintenance requirements. Correct tyre pressure is important for quads /side-by-side vehicle safety. Tyres should be at the pressure advised by manufacturers in the Operator's Manual. A low-pressure tyre gauge should be readily available to the operator.

## ***Helmets***

Head injuries contribute to around one-third of quad related deaths in Australia. For this reason it is important that quad riders wear an approved helmet. For on-farm use, this can include helmets designed for equestrian, bicycling and mountaineering purposes (this also applies in Europe). New Zealand also has a specific quad helmet *Standard NZS 8600: 2002: All-Terrain Vehicle helmets*. From a WHS perspective, helmets of a reputable Standard will contribute to meeting your obligation for providing a safe on-farm work place.

Helmets that meet the *Australian New Zealand Standard AS/NZS 1698: 2006 Protective helmets for vehicle users*, are often used on farms for work purposes and are recommended for all recreational use. Additionally, an *AS/NZS 1698 - 2006* helmet is required under conditional registration of quads and side-by-side vehicles for use on public roads (e.g. crossing between paddocks).

For side-by-side vehicles, a risk assessment must be conducted to determine if a helmet should be worn. If there is any potential for "aggressive" use of the vehicle e.g. mustering stock /spraying/ high speed transport, a suitable helmet must be worn.

## ***Emergency communication***

As quads and side-by-side vehicles are often operated at some distance from the farm base, it is very important that you have an effective communication system between the operator and base (e.g. UHF radio or mobile phone where coverage is present); that the location of where workers are going and the expected time to return is known.

EPIRBs (Emergency Position Indicating Radio Beacons) are in use in some larger enterprises. These alert an emergency and signal the position of a person in distress for emergency services.

## ***A helpful checklist***

<b>What are the farm jobs that we do that need a small vehicle?</b>	<b>Job 1:</b> .....	<b>Job 2:</b> .....	<b>Job 3:</b> .....	<b>Job 4:</b> .....	<b>Job 5:</b> .....
Who does this job?					
What vehicle or machine would be suitable for this work? (List, e.g. quad, side-by-side vehicle, Ute, tractor, motorbike)					
What is the safest and most useful option for this farm?					
Have we defined the areas of the farm and terrains that are safe for operation of this vehicle or machine?					
For quads is a crush protective device fitted to limit death or serious injury in the event of a rollover?					
What attachments or modifications have been made for the machine? Are they safe?					
Have we a clear rule relating to no passengers and children on quads?					
Have we defined the load and tow limits and arrangements for side-by-side vehicles to ensure safety?					
Have operators had a safety induction for using this machine to do this job?					
Have operators undergone suitable training to ensure safe operation?					
Is there regular maintenance for the machine?					
How do we supervise safe operation of the machine?					

## *Contacts*

### *Your State Health and Safety Authority*

Australian Capital Territory - WorkSafe ACT

Email: [worksafe@act.gov.au](mailto:worksafe@act.gov.au)

Ph: 02 6207 3000

[www.worksafe.act.gov.au](http://www.worksafe.act.gov.au)

New South Wales - SafeWork NSW

Email: [contact@workcover.nsw.gov.au](mailto:contact@workcover.nsw.gov.au)

Phone: 13 10 50

[www.safework.nsw.gov.au](http://www.safework.nsw.gov.au)

Northern Territory - NT WorkSafe

Email: [ntworksafe@nt.gov.au](mailto:ntworksafe@nt.gov.au)

Phone: 1800 019 115

[www.worksafe.nt.gov.au](http://www.worksafe.nt.gov.au)

Queensland - WorkCover Queensland

Ph: 1300 362 128

[www.worksafe.qld.gov.au](http://www.worksafe.qld.gov.au)

South Australia - SafeWork SA

Email: [help@safework.sa.gov.au](mailto:help@safework.sa.gov.au)

Phone: 1300 365 255

[www.safework.sa.gov.au](http://www.safework.sa.gov.au)

Tasmania - WorkSafe Tasmania

Email: [wstinfo@justice.tas.gov.au](mailto:wstinfo@justice.tas.gov.au)

Ph: 1300 366 322

[www.worksafe.tas.gov.au](http://www.worksafe.tas.gov.au)

Victoria - WorkSafe Victoria

Email: [info@worksafe.vic.gov.au](mailto:info@worksafe.vic.gov.au)

Ph: 1800 136 089

[www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au)

Western Australia - WorkSafe WA

Email: [safety@commerce.wa.gov.au](mailto:safety@commerce.wa.gov.au)

Phone: 08 9327 8777

[www.commerce.wa.gov.au/WorkSafe](http://www.commerce.wa.gov.au/WorkSafe)

### *Training organizations*

Check with your local TAFE

Registered Training Organisations can provide accredited quad training in compliance with AHCHMOM212A.

Participants who are assessed successfully will achieve the nationally accredited unit of competency.

[RTO Quad Training Providers](#)

### *Other Agencies*

Farmsafe Australia Inc

[www.farmsafe.org.au](http://www.farmsafe.org.au)

Phone: 02 6752 8218

Australian Centre for Agricultural Health and Safety

Ph: 02 6752 8210

[www.aghealth.org.au](http://www.aghealth.org.au)

