

# QUAD BIKES IN RURAL WORKPLACES

## INFORMATION SHEET

Quad bikes, sometimes referred to as all-terrain vehicles (ATVs), are four-wheeled vehicles with a saddle seat. They are not safe for use in all terrains. Quad bikes are an economical single person vehicle for off-road use, however will not always be suitable for your needs. Small on-road vehicles, motorcycles or side-by-side vehicles (SSVs) may be a better choice for many tasks.

Quad bikes are a major cause of death and serious injury each year on farms. Many incidents are associated with rollovers.

The risk of rollover is increased if the quad bike is crossing slopes, travelling at high speed, towing an attachment, travelling over rocky or uneven ground or carrying a heavy or unstable load, for example chemicals for spraying.

This information sheet provides advice on managing the risks of using quad bikes.



### Work Health and Safety Duties

A person conducting a business or undertaking must ensure workers and other people at the workplace are not exposed to health and safety risks, so far as is reasonably practicable. The risks associated with using a quad bike must be managed in accordance with the hierarchy of control. This means that you should first try to eliminate risks and, if this is not practicable, minimise risks as much as you can.



### Managing the Risks – Hierarchy of Control

#### Eliminate the Hazard – is a quad bike a suitable farm vehicle for your needs?

Where possible, quad bike hazards should be eliminated or removed from the workplace. You should carefully consider the safest and most

appropriate vehicle for your purposes. In many cases this will not be a quad bike.

#### Identify your needs

Before selecting a vehicle, you should identify your needs and relevant operator safety issues.

- **Operator** – The operator must be able to safely operate the vehicle. Quad bikes require an active riding technique that may be physically demanding over long periods, particularly for older riders.
- **Loads and Towing** – Check the vehicle manufacturer’s specifications for weight and towing. Towing attachments or carrying loads on the front or rear racks of a quad bike is convenient but will affect stability and handling. Liquid loads, like spray tanks, are particularly unstable as contents shift when cornering or traversing slopes. Always attach loads securely and at the lowest possible height.
- **Conditions** – Consider what terrain the vehicle will be used in. Rocky, steep, uneven, sandy or muddy terrain will greatly increase the risk of quad bike rollover.
- **Passengers** – Consider whether you need a vehicle that can carry a passenger. Most quad bikes are designed for one rider. Never carry a passenger on a single person quad bike.
- **Safety** – Choose a vehicle that is fit for purpose and provides the operator and any passengers the greatest level of safety for each task.

#### Compare vehicle options to your needs

Information to help you choose the best vehicle for your needs can be obtained from the internet, trade publications and by talking to suppliers and current vehicle owners and operators.

SSVs may be more suitable for use in rural workplaces because the operator remains seated, and they generally have rollover protection structures (ROPs) and operator restraints like seat belts to protect operators and passengers if there is a rollover (see Figure 1).

#### Substitute the Hazard

Consider whether an SSV would be a safer alternative for your workplace.

Two wheeled motorcycles may also be suitable for some specific tasks given their mobility and light weight.

Remember the carrying capacity of a quad bike will be reduced by your own weight, the weight of attachments and the load carried in those attachments.

Allowing working dogs to ride on the quad bike will add an additional load that could affect stability, especially when dogs are jumping on and off at times when critical manoeuvres are being performed.

Figure 1 Typical light utility (SSV).



### Isolate the Hazard

If a quad bike is the most suitable vehicle for your needs, you should isolate the quad bike hazards in your workplace. This may include blocking off access to particularly hazardous areas like unstable ground or steep slopes and removing keys from the quad bike when it is not in use so unauthorised people cannot ride it.

### Engineering Controls – crush protection devices

If the hazard cannot be eliminated or isolated from the workplace it should be minimised through engineering controls.

The design characteristics of quad bikes that require applying active riding techniques (shifting your body weight) generally prevent the fitting of traditional ROPs and seat belts. However operator protective devices including crush protection devices are available and may protect the rider in the event of a rollover (see example Figure 2). These devices should only be fitted where a risk assessment shows the device will minimise the risk.

**Figure 2** Quad bikes can be fitted with a crush protection device which may lower the risk of injury in the event of rollover.



### Administrative Controls – safe operation

Administrative controls to improve operators' safety should be used to further minimise the hazards of quad bikes in the workplace.

#### Training

Before using a quad bike for farm work you must provide anyone who will operate it with the information, training, instruction or supervision necessary to protect them and others from associated risks.

Quad bike training helps operators understand the risks associated with using quad bikes and attached equipment and can help with active riding techniques. Training can be workplace or task specific and may include general training provided by a supplier, manufacturer or industry training provider.

#### Communication

If an operator will be working remotely and alone, they should tell someone where they will be working and have a communication plan with regular check-in times.

#### Children and quad bikes

One in five fatal quad bike incidents involve children. Children under 16 should never ride adult sized quad bikes. Not only is it dangerous to allow children to ride adult sized quad bikes, it may also expose you to significant criminal penalties under Work Health and Safety laws.

You should never carry children as passengers on single rider quad bikes. Carrying children or other passengers adversely affects quad bike stability and increases the risk of rollover.

#### Farm safety plan

Conduct a risk assessment and produce a set of rules for quad bike operation on your property. These rules should be based on the manufacturer's specifications and safety warnings. At a minimum, your farm safety plan should include:

- any no-go areas for a quad bike on the property
- what speed the quad bike is to be ridden
- what conditions the quad bike cannot be used in
- information prohibiting carrying passengers, and
- any attachments that can be safely used.

#### Maintenance

Quad bikes should be well maintained. Check the manufacturer's instructions for maintenance information.

### Personal Protective Equipment

Always wear an appropriate and properly fitting helmet. When riding on a public road you must wear a helmet that complies with AS/NZS 1698:2006: *Protective helmets for vehicle users*. You should also wear suitable boots, sun protection, eye protection and gloves.



#### Further information

For further information see the [Guide for managing the risks of machinery in rural workplaces](#) or see the Safe Work Australia website [www.swa.gov.au](http://www.swa.gov.au).