



Australian Government

Comcare

ASSESSING AND MANAGING QUAD BIKE RISK

This information sheet provides an overview for persons conducting a business or undertaking (PCBU) and workers on how to identify, assess and manage risks associated with quad bikes in the workplace. Under the *Work Health and Safety Act 2011* (WHS Act) both PCBUs and workers have a duty to ensure health and safety at all times while at work.

WHAT IS THE PROBLEM?

Death and serious injuries caused by quad bike incidents are preventable. Safety events regarding quad bikes normally involve rollovers, collisions with obstacles and/or ejection from the vehicle.

WHAT ARE THE RISKS?

Serious injuries or death may result from a quad bike rollover or collision, even at low speeds. The risk of an incident occurring is increased significantly if the quad bike is traversing slopes, travelling at high speeds, towing an attachment, carrying a heavy or unstable load (such as chemicals for spraying), or has tyres that are incorrectly inflated.

RISK MANAGEMENT PROCESS—WHAT DO I NEED TO CONSIDER?

PCBUs and workers need to make informed choices about the safest and most appropriate vehicle for particular tasks in their workplace. In many cases this will not be a quad bike. Knowledge of the sources of risks relating to serious injury and death, plus an understanding of how to avoid or minimise risk can help with the effective assessment and management of quad bike use.

Any assessment and management of the risks associated with quad bike use should be based on the hierarchy of control¹:

1) Eliminate the hazard

Where possible, quad bike hazards should be eliminated or removed from the workplace. This is the most effective way to manage health and safety risks and to prevent serious injury or death. An example of a hazards being eliminated includes using an alternative vehicle to perform a particular job (see the *Suitable vehicle risk decision tool and Choosing the right vehicle for the job attached*).

¹ Regulations 34–36, Work Health and Safety Regulations 2011



2) Isolate the hazard

If the hazard cannot be eliminated or substituted from the workplace then it should be isolated. Examples of quad bike hazards being isolated include:

- > physically blocking off access to particularly hazardous areas at the workplace such as unstable ground or sudden drop-offs
- > making sure the keys are not left in the quad bike when it is not in use so that people can't ride it without the PCBU's knowledge.

3) Engineering controls

If the hazard cannot be eliminated or isolated from the workplace then it should be minimised through engineering controls. Safe design provides increased protection from harm for quad bike users.

Examples include:

- > fitting crush protection devices (CPDs) or rollover devices to prevent serious injury or death in the event of an incident
- > fitting speed limiting devices.

4) Administrative controls

Safe systems of work and training should be used in combination to improve safety in the workplace. Examples of administrative controls include:

- > providing training that is specific to the job roles/tasks being undertaken
- > developing safe systems of work/safe operating procedures in consultation with workers
- > working in pairs using a 'buddy system' in case there is an overturn event
- > reducing exposure by undertaking workplace route management to identify different terrains and no-go zones across the work environment.

5) Personal protective equipment (PPE)

Suitable personal protective equipment (PPE) must be used. This includes equipment such as eye protection to reduce the chance or severity of an injury occurring, appropriate footwear, clothing, gloves and UV protection.

In the Commonwealth jurisdiction, it is mandatory to wear a helmet when using a quad bike.

6) Monitor and review

Unless the hazard can be eliminated, ongoing monitoring and review is required. PCBUs should strive for continuous improvement in safety systems. Examples of ongoing hazard monitoring and review include:

- > ensuring all quads are in excellent mechanical condition with CPDs fitted
- > regularly monitoring rider behaviour and ensuring rider competence through appropriate refresher training
- > continuously promoting quad bike safety and talking to workers regularly to ensure they understand and comply with correct workplace procedures.

SUMMARY

The following safety steps should be considered by PCBUs, workers or other persons prior to and during the use of quad bikes in the workplace:

- > Decide whether a quad bike is the right vehicle for the job—in most cases a safer alternative will be available.
- > If a quad bike is to be used, fit a CPD.
- > Check the operating condition of the quad bike before riding and ensure it is maintained in a safe condition.
- > Avoid load carriage or towing. Substitute an alternate vehicle better suited to this task.
- > Recognise dangerous areas in the work environment by establishing 'no-go zones'.
- > Prohibit unauthorised access to the quad bike.
- > Ensure users are appropriately trained/experienced to match the nature of the task.
- > Check the agility and capacity of all operators to use 'active riding'² techniques.
- > Do not allow users to carry passengers.
- > Do not allow persons under 16 years to ride quad bikes.
- > Preferably work in pairs with a 'buddy system', but if working alone, maintain a trip plan and call-in schedule.
- > Prohibit quad bike use if a worker is fatigued, or when under the influence of medication or alcohol.
- > Ensure users always wear a helmet and other necessary PPE.

MORE INFORMATION

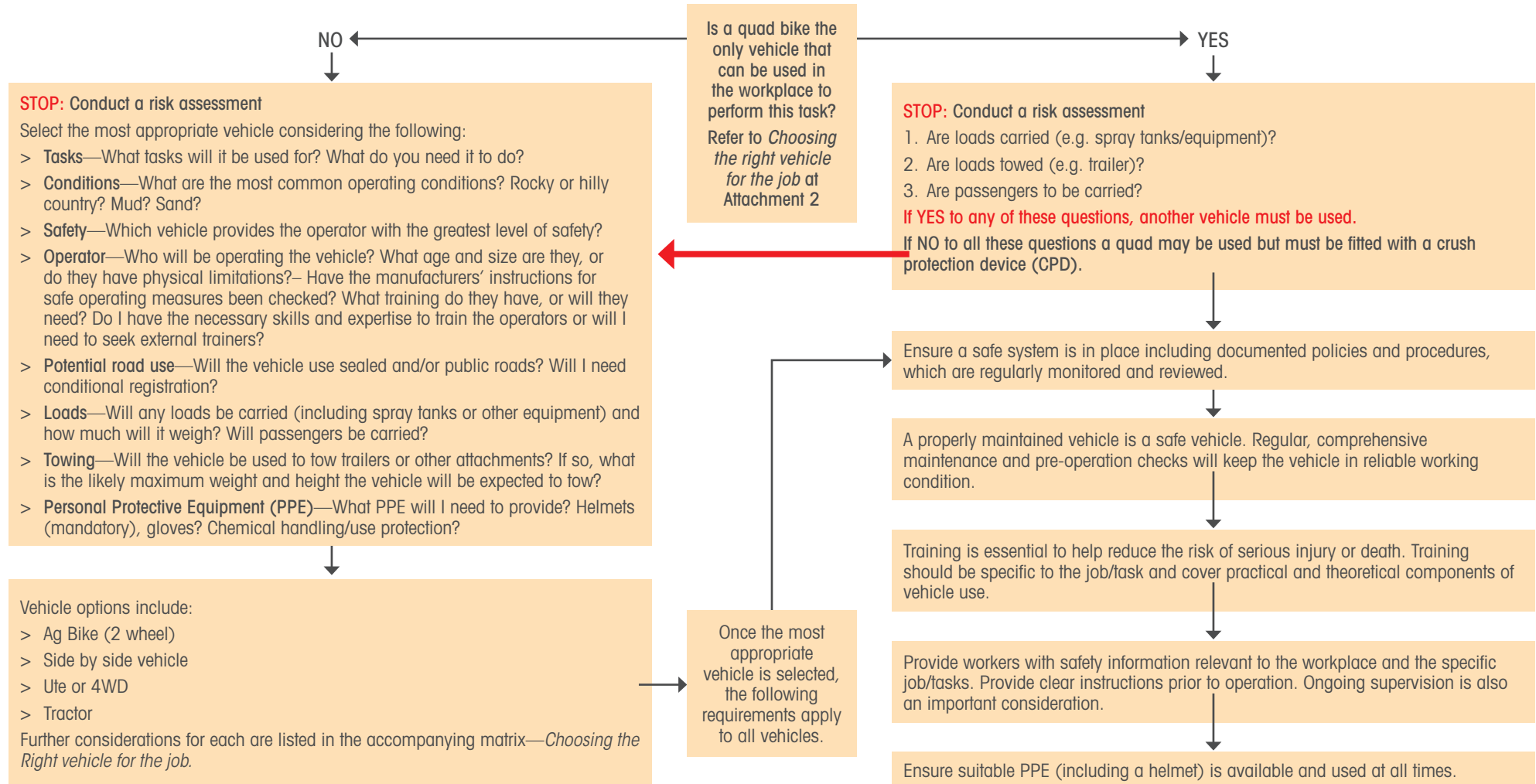
- > Quad Bike portal under Safety & Prevention > Health & safety topics at www.comcare.gov.au
- > Telephone: 1300 366 979
- > Email: WHS.help@comcare.gov.au

ATTACHMENTS

1. *Suitable vehicle risk decision tool*
2. *Choosing the right vehicle for the job*

2 A technique in which the rider shifts and uses their body weight to actively control the bike while it is in motion.

SUITABLE VEHICLE RISK DECISION TOOL



CHOOSING THE RIGHT VEHICLE FOR THE JOB¹

The safest vehicle is the one best suited to the job. The information in this table may be helpful when deciding which of the vehicles available to your organisation is the most suitable for different work tasks or conditions encountered. This table is intended as a general guide only and does not substitute for a risk assessment.

When looking at choosing the right vehicle for the job, you should assess the risk and read the manufacturer's operator manual.

VEHICLE USE	TWO-WHEELED AG BIKE	QUAD BIKE	SIDE BY SIDE VEHICLE	UTE OR 4WD	TRACTOR
GENERAL TASKS					
Inspecting and patrolling	Green	Yellow	Green	Green	Yellow
Mustering of stock	Green	Yellow	Green	Green	Yellow
Spraying	Red	Red	Yellow	Green	Green
Maintenance work (1)	Yellow	Yellow	Green	Green	Green
CARRYING GOODS					
Light tools, equipment and dogs	Yellow	Yellow	Green	Green	Green
Bulky loads and stock	Red	Red	Yellow	Green	Yellow
Light, low or secured loads (2)	Yellow	Yellow	Green	Green	Green
Heavy, high or unsecured loads (2)	Red	Red	Yellow	Yellow	Green
Passengers	Yellow	Red	Green	Green	Red
GROUND CONDITIONS					
Sealed roads	Green	Red	Red	Green	Yellow
Gravel or dirt roads	Green	Green	Green	Green	Green
Steep uneven terrain	Yellow	Red	Red	4WD	Red
Flat or gentle sloping terrain	Green	Green	Green	Green	Green
Soft or muddy	Green	Green	Green	4WD	Green
RIDER CAPABILITY					
Inexperienced/untrained	Red	Red	Red	Red	Red
Physical limitations (size, strength, agility)	Yellow	Red	Green	Green	Green
TOWING					
Narrow or small trailer (3)	Red	Red	Green	Green	Green
Wide or heavy trailer (3)	Red	Red	Yellow	Green	Green

Green	Vehicle is appropriate for this task/circumstances if used in accordance with a task-based risk assessment
Yellow	Vehicle could be used but an alternative vehicle could perform better or be safer
Red	CAUTION—do not use. Vehicle is not the safest vehicle for the task in these circumstances

Notes:

1. In all cases this will depend on what equipment needs to be carried to complete maintenance.
2. Do not exceed manufacturer's carrier limits.
3. Do not exceed manufacturer's towing limits.

¹ Adapted from the primary source 'Guidelines for the safe use of quad bikes', New Zealand Ministry of Business Innovation and Employment, 2010, www.dol.govt.nz/