Safe use of two-wheeled motorbikes on farms

JUNE 2014
The purpose of these guidelines is to help reduce the risk of injuries and fatalities by providing practical guidance on how to manage various two-wheeled motorbike hazards.

ACKNOWLEDGEMENTS

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> Accident Compensation Corporation (ACC)
> Beef and Lamb New Zealand
> DairyNZ
> Dairy Women’s Network
> FarmSafe
> Federated Farmers of New Zealand Inc
> Horticulture New Zealand
> Landcorp Farming Ltd
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> New Zealand Council of Trade Unions (NZCTU)
> New Zealand Dairy Workers Union
> New Zealand Transport Agency (NZTA)
> Primary Industry Training Organisation
> Rural Contractors New Zealand
> Rural Women New Zealand
> University of Auckland
> University of Otago.

The guide has been largely adapted from an existing ACC publication: *Riding Farm Bikes for the Farmer.*

WorkSafe New Zealand also acknowledges the following organisations for providing information used to develop this guide:

> FarmSafe Australia
> WorkSafe, Department of Commerce, Western Australia
> Workplace Health and Safety Queensland

Some information has been reproduced courtesy of WorkSafe, Department of Commerce, Western Australia (www.worksafe.wa.gov.au).
TWO-WHEELED MOTORBIKES: KEY POINTS

Riders must be trained/experienced enough to do the job

Choose the right vehicle for the job

Always wear a helmet

Don’t allow children to ride adult-sized farm bikes
# TABLE OF CONTENTS

## 01 INTRODUCTION

<table>
<thead>
<tr>
<th>1.1</th>
<th>Purpose</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Scope</td>
<td>5</td>
</tr>
<tr>
<td>1.3</td>
<td>Development</td>
<td>5</td>
</tr>
</tbody>
</table>

## 02 HAZARDS AND CONTROLS

| 2.1 | Is a two-wheeled bike the right vehicle for the job? | 7 |
| 2.2 | Unfamiliarity with the bike | 7 |
| 2.3 | Loss of control (causing a crash or fall) | 9 |
| 2.4 | Carrying passengers | 11 |
| 2.5 | Multi-tasking | 11 |
| 2.6 | Carrying loads | 11 |
| 2.7 | Towing | 12 |
| 2.8 | Working alone and in isolation | 12 |
| 2.9 | Personal factors | 13 |
| 2.10 | Unauthorised access to the bike | 13 |
| 2.11 | Riding on the road | 13 |

## 03 MAINTENANCE

| 3.1 | Maintenance | 15 |

## 04 TRAINING REQUIREMENTS

| 4.1 | General requirements | 17 |
| 4.2 | Learning to ride | 17 |
| 4.3 | Children | 17 |
| 4.4 | Training for health and safety representatives | 17 |
| 4.5 | Choosing the right vehicle for the job | 18 |

## 05 REFERENCES

| 5.1 | Glossary | 20 |
| 5.2 | Bibliography | 21 |
## FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-ride inspection</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Fluorescent tape</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Front and rear carriers</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Panniers</td>
<td>12</td>
</tr>
</tbody>
</table>
IN THIS SECTION:
1.1 Purpose
1.2 Scope
1.3 Development
This publication identifies potential hazards of riding a two-wheeled motorbike and gives practical advice on how to reduce and prevent accidents on farms.

1.1 PURPOSE

WorkSafe NZ accepts the recommendations in this guide as current industry good practice. They will help you comply with the Health and Safety in Employment Act 1992 (the HSE Act).

A lot of on-farm injuries involve two-wheeled bikes. The common causes are:

> not riding to the conditions
> not paying attention to the terrain
> inexperience.

1.2 SCOPE

This guide applies to farmers, farm employers, farm employees, contractors (and those who hire them - principals), health and safety advisers, representatives and consultants - anyone riding a two-wheeled motorbike on a farm.

1.3 DEVELOPMENT

Industry experts helped WorkSafe NZ develop this guide. WorkSafe NZ also conducted a thorough review of accident statistics and published academic literature, and looked at how overseas health and safety regulators manage the same issues.

WorkSafe NZ has taken every effort to make sure the guide’s recommended hazard controls reflect current good practice.
IN THIS SECTION:

2.1 Is a two-wheeled bike the right vehicle for the job?
2.2 Unfamiliarity with the bike
2.3 Loss of control (causing a crash or fall)
2.4 Carrying passengers
2.5 Multi-tasking
2.6 Carrying loads
2.7 Towing
2.8 Working alone and in isolation
2.9 Personal factors
2.10 Unauthorised access to the bike
2.11 Riding on the road
The most common hazards faced by two-wheeled motorbike users on farms are set out on the following pages. Guidance is provided about ways to effectively control these hazards.

### 2.1 IS A TWO-WHEELED BIKE THE RIGHT VEHICLE FOR THE JOB?

You can manage farm bike hazards by making sure you’re using the right vehicle for the job. For example, a side-by-side is better for carrying loads, and a ute is better for taking passengers around the farm.

When you’re looking to buy a new vehicle, the supplier can help with advice on the best one to meet your needs.

Picking the right vehicle for the job doesn’t mean buying a fleet of expensive vehicles. But it’s important to look at each farm task as it needs to be done, and think carefully about whether the bike is the right tool before heading off.

Refer to the ‘Choosing the right vehicle for the job’ chart on page 18 for more information.

### 2.2 UNFAMILIARITY WITH THE BIKE

When you are familiar with a bike, you know when something is wrong and how to fix it.

It is important you know how your bike works before you ride it. Not all bikes are the same and it can take time to get a “feel” for a bike you haven’t ridden before. If you haven’t ridden a bike for a while, its condition may have changed since you last rode it. Ensure that the bike used for the job is suitable for the rider. Take into account the size and the power of the vehicle.

**MANAGING THE HAZARD:**

Read the owner’s manual and know the controls, especially when riding new or different bikes. Check the bike before riding – especially if you weren’t the last person to use it or you haven’t used it in some time.
Before starting the bike, check the following (refer to Figure 1):

A. Check the cables for kinks or broken strands. Lubricate the cables.

B. Make sure your tyres are in good condition. Check the following features:
   > Air pressure: the bike won’t handle properly if the air pressure is too low or too high. This affects braking and steering. Check your owner’s manual for the correct tyre pressure – incorrect tyre pressure contributes to bike crashes.
   > Worn or uneven tread: this affects the bike’s handling and makes it harder to control on slippery or uneven surfaces.
   > Cuts, nails stuck in the tread and cracks in the sidewalls. A tyre blowout is extremely dangerous.

C. Check all light bulbs are working and the lenses are clean.

D. Check the drive chain or belt for lubrication, wear and adjustment. Your owner’s manual will explain how to correctly adjust these.

E. If your bike has mirrors:
   > Clean and adjust them before you start. It’s dangerous to ride with one hand while adjusting a mirror.
   > Adjust them outward to see around your own body. When riding on the road, you should see about half of the lane behind and as much as possible of the lane next to you.

F. Check your bike’s owner’s manual for the right types of fuel and oil. Make sure they are at the correct levels before you start riding – your engine will seize without oil. This could lock up your rear wheel and make you lose control.

Figure 1: Pre-ride inspection
After you’ve started the bike, check the following (refer to Figure 1):

G. Try the front and rear brakes one at a time. Make sure each brake, when applied, holds the bike.

H. Make sure clutch and throttle controls work smoothly.

I. Make sure you can operate hand and foot controls when you sit comfortably on the bike.

J. Try your dip switch to make sure both high and low beams work.

K. If your bike has a hazard light switch, check that it works.

L. Try each brake control and make sure each one flashes your brake light.

M. Check that your horn works.

N. Running out of petrol can be dangerous, especially if you can’t get off the road quickly. Know the fuel tap’s position and operation. Don’t ride long distances with the fuel tap on ‘reserve’. Only use the reserve tank to go back and refuel.

Riders must know about the best routes to take, no-go zones, when to use the bike for farm tasks and when to use other vehicles.

2.3 LOSS OF CONTROL (CAUSING A CRASH OR FALL)

Many farms around New Zealand use two-wheeled bikes, often where the terrain is difficult. Very steep, rough, slippery or loose ground can be inaccessible for two-wheeled bikes unless there are well-formed tracks. Riders can lose control and crash in poor ground conditions.

Race tape, wire, irrigation pipes and other stationary objects are also hazardous. Riders can hit them and come off the bike; hitting the ground, another object or the bike itself.

2.3 LOSS OF CONTROL (CAUSING A CRASH OR FALL)

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MANAGING THE HAZARD:

Use good riding techniques, including active riding.

GOOD RIDING TECHNIQUES

Smooth clutch operation, gear changing and braking are the keys to skilful riding. Avoid sudden braking or steering.

> Place feet firmly on the footrests when moving. Only put them down when you stop.

> Keep your feet horizontal on the footrests with toes pointed straight to avoid hitting the ground.

> Keep elbows away from the body for strength, and keep arms bent to act as shock absorbers.

> To help balance the bike, press your knees against the petrol tank.

Active riding uses balance and body position to influence stability and performance when cornering and riding on a slope.

Keep your feet horizontal on the footrests to keep the bike stable. Taking one foot off the footrest will unbalance the bike. This can make the bike slide or fall. Balancing on the footrests improves all parts of riding and is an essential part of good riding technique.

When riding on steep or rough ground you must move and use your bodyweight to stabilise the bike. Do this while standing with your knees bent and your weight on the footrests.

When riding uphill:

> Pick the best line on the terrain.

> Select the gear before beginning the climb – a low gear is probably better.

> Stand on the footrests, bend your legs and put some weight on the handlebars with your arms. This helps with better tyre grip and balance. The steeper the slope,
when you have to lean forward onto the handlebars.

- Control the throttle to minimise wheel spin. Avoid sudden acceleration – it can make the bike rear up or flip over.

- If you have to stop when going uphill, put down your left foot, pull in the clutch and apply the rear brake.

**When riding downhill:**

- Choose second or third gear – never first. This stops the rear wheel from locking up and sliding.

- Stand on the footrests and move your body backwards so your weight helps keep the bike stable and allows for better braking.

- Apply enough front brake to hold the bike at a constant safe speed. Apply the back brake to stop the rear wheel moving out of line.

- If the rear wheel begins to slide, briefly release the rear brake to bring the slide under control. If the slide continues, briefly open the throttle to regain control.

- If you can’t control the slide, firmly apply the rear brake and slide the bike to the ground against the hillside.

- If you need to stop or slow down, use the front brake more than the rear if traction allows.

**When riding across a slope:**

- Lean the bike towards the slope and press hard on the outside (downhill) footrest. This keeps the weight on top of the tyre tread for better traction.

**When riding on slippery ground:**

- Always ride smoothly, avoiding hard braking or acceleration.

- A steady, open throttle in gear keeps the bike in more control.

> Make turns as wide as possible to keep momentum.

> When braking, use both brakes smoothly and a bit at a time, with more emphasis on the front brake.

> Brake before cornering to avoid loss of control.

When riding on rough ground:

- Stand with your knees slightly bent and balance on the footrests.

Look out for wires, race tapes, irrigation pipes and other objects that you could run into and knock you off the bike.

Where necessary, use fluorescent tape or flags to make them easier to see for riders. Also note these hazards on farm maps.

**Figure 2: Fluorescent tape**

Always wear a helmet while riding a two-wheeled bike.

If you don’t wear a helmet, you significantly increase the chances of having a head injury.

The helmet must be well-fitting, securely fastened and kept in good condition (follow the manufacturer’s care and maintenance instructions).

Riders can wear quad bike helmets if the bike is used at speeds under 30km/h. The helmet
must meet NZS 8600. However, if the bike is used at speeds over 30km/h the helmet must meet NZS 5430 or AS 1698.

You should always wear boots while riding a motorbike. Depending on the conditions, you should also consider wearing the following: clothing that covers arms and legs (to protect your skin if you fall off and slide), gloves and eye protection (goggles). You may need to wear high-visibility gear sometimes.

See the New Zealand Transport Agency’s (NZTA) recommendations for riding a motorbike on the road: [www.nzta.govt.nz/resources/roadcode/motorcycle-road-code/you-and-your-motorcycle/wearing-the-right-gear.html](http://www.nzta.govt.nz/resources/roadcode/motorcycle-road-code/you-and-your-motorcycle/wearing-the-right-gear.html)

### 2.4 CARRYING PASSENGERS

Bikes become unbalanced and harder to control when a passenger’s weight is added. It raises the bike’s centre of gravity and makes it harder to use active riding techniques because the rider and passenger have to work together.

**MANAGING THE HAZARD:**

Always refer to the manufacturer’s specifications when deciding whether to carry passengers.

- Make sure there are proper pillion passenger footrests attached to the bike and they are in good condition.
- The passenger should hold onto the rider’s waist and sit close to the rider.
- The passenger should lean with the rider when cornering to keep balance.
- The rider should allow for the passenger’s extra weight, ie stopping distances increase with extra weight.
- The pillion passenger must wear a helmet.

### 2.5 MULTI-TASKING

Riding a farm bike while doing something else at the same time (eg mustering or doing a lambing beat) poses hazards. This is because the rider’s attention is divided; focusing on the livestock rather than the ground they are riding over. The rider may not be aware of unexpected surface changes until it’s too late and they have lost control of the bike. Falls from the bike, particularly at speed, can cause serious injuries or death.

**MANAGING THE HAZARD:**

If possible, stop the bike and get off before doing something else. If it is not possible, keep a slow speed and look at the terrain where you can see hazards or obstructions.

If multi-tasking is necessary, it might be better to use another vehicle. Two-wheeled bikes need your full attention to balance and control. When mustering, work out the route before you start. Open the gates and work out where you should be on guard – places where stock are likely to break away or there are obstacles.

### 2.6 CARRYING LOADS

Carrying loads on two-wheeled bikes is risky because they change the bike’s width and make it hard to lean when cornering. The extra weight alters the centre of gravity, making it harder to control and making braking distances longer.

**MANAGING THE HAZARD:**

Don’t carry loads across your knees. Use the front and rear carriers, if provided.

If you must carry gear, another vehicle would be better for the job. Think about using a side-by-side or ute instead.
If you have to carry gear on a two-wheeler:
> Use the front and rear carriers, if provided (refer to Figure 3).
> Secure the load well.
> Allow for the load’s extra width.
> Don’t exceed the load-carrying capacity – follow the manufacturer’s recommendations.

If you are thinking about adding panniers to the bike (refer to Figure 4), check the manufacturer’s recommendations first.

2.7 TOWING

Towing a trailer affects the bike’s handling, braking and stability. You could lose control of the bike if you jack-knife, lose traction or fall over.

MANAGING THE HAZARD:

Do not tow trailers with a two-wheeled bike unless the bike and trailer are specifically designed to work together.

Consult the manufacturer’s recommendations for both the bike and trailer to see if they are safe and designed to be used together.

If you need to tow a trailer, consider using a more suitable vehicle instead.

2.8 WORKING ALONE AND IN ISOLATION

Working alone is a common hazard in farm work, and isn’t just restricted to bike use.

If a farmer has an accident while working alone in a remote part of the farm, it could take a long time for help to arrive. Sometimes, people die because medical help did not arrive in time.

MANAGING THE HAZARD:

Tell someone where you are working and when you plan to return. Carry a mobile phone or two-way radio if possible. Have regular check-in times. This will speed up a response if you do not return.

It is important to have a way of raising the alarm if you are hurt, like a mobile phone or emergency beacon. Some mobile phones have built-in GPS and they can communicate your location. You can even download applications (apps) to smart phones so you can track several phones at once, in real time.

Work out an emergency plan with workers and family members so they know what to do if something goes wrong.
2.9 PERSONAL FACTORS

Sometimes stress, fatigue or a driver’s attitude (eg over-confidence or recklessness), drugs or alcohol can impair riders. These can cause poor judgement, reduced balance, co-ordination and reaction times – greatly increasing the risk of injury or death.

MANAGING THE HAZARD:

Never ride a bike under the influence of drugs or alcohol.

> As a rider, be responsible and let someone know if you’re not up to the job for any reason.
> As an employer, make sure riders know about bike hazards and how their own behaviour and attitudes influence them.
> Reassess tasks and work out alternatives if stress and fatigue are an issue.

2.10 UNAUTHORISED ACCESS TO THE BIKE

It can be hazardous if someone rides the bike without the owner knowing or giving permission.

Unattended bikes might tempt untrained riders or people not used to bikes or the farm – whether they are visitors, children or workers.

MANAGING THE HAZARD:

Take the keys out of the bike to make sure the bike is only used when the farmer or owner gives permission.

By law, employers and other workers have to do everything practical to prevent unsafe driving practices on the farm. If this doesn’t happen, the employer or employee could go to court and get fined for letting dangerous work happen.

2.11 RIDING ON THE ROAD

Riding on the road means dealing with other fast moving vehicles. When riding on the road you’re also generally moving at higher speed, making it more dangerous should you have a fall.

MANAGING THE HAZARD:

Anyone riding a two-wheeled motorbike on the road must have a motorcycle licence (ie a Class 6 driver licence) and follow the road rules.

NZTA recommends the following steps to stay safe on roads:

> Ride with your light on at all times. Since 1 November 2009, this is a legal requirement.
> Always wear protective clothing.
> Always wear a helmet.
> Ride defensively.
> Be conspicuous.
> Keep a safe bike.
> Attend a riding school.
> Ride to the conditions and never exceed speed limits.
> Avoid alcohol and drugs.
> Avoid driver fatigue.
03/

MAINTENANCE

IN THIS SECTION:

3.1 Maintenance
Maintenance is important to keep the bike working properly.

3.1 MAINTENANCE

Poor maintenance can create hazards, like brake failures or broken foot pegs.

Basic maintenance requirements:

> Follow the regular maintenance programme from the operator’s manual, especially for brakes, footrests and controls.

> Make sure foot pegs do not bend, sag or lose their grip.

> Check the brakes after riding through water.

> Wash the bike regularly. When cleaning your bike, don’t direct high-pressure hoses at the bearings – this causes mechanical problems.
IN THIS SECTION:

4.1 General requirements
4.2 Learning to ride
4.3 Children
4.4 Training for health and safety representatives
4.5 Choosing the right vehicle for the job
Riders must be trained and/or experienced enough to do the job.

4.1 GENERAL REQUIREMENTS

Only let people with the right training and experience ride a two-wheeled bike.

Bike riders must have appropriate riding skills. To check a rider’s skills, talk about safe farm bike riding with them and get them to show their skills under direct supervision.

Riders must know about the best routes to take, no-go zones and what jobs can be done by bike compared to other vehicles.

4.2 LEARNING TO RIDE

When learning to ride, choose an area of flat ground without obstacles and hazards. Make sure the rider knows the bike’s controls.

Only use low gears to start with. The rider should take time to get used to the bike’s controls, particularly the throttle, brakes and clutch. The rider should practice gear changes, because changing gears smoothly is a big part of safe bike riding.

> Follow the instructions in the owner’s manual.
> Learn how to stop in an emergency using both brakes.
> Seek good advice and instruction, preferably from a qualified instructor.

4.3 CHILDREN

Children should not ride adult-sized farm bikes.

Often children don’t have the judgment, skills and strength to safely ride a full-sized farm bike. Manufacturers make smaller models for children, but the same riding techniques – under adult supervision – are needed.

Always follow the manufacturer’s recommended age limits.

4.4 TRAINING FOR HEALTH AND SAFETY REPRESENTATIVES

The Health and Safety in Employment Act 1992 gives employees the right to be involved in workplace health and safety matters.

One way this can be achieved is by electing a health and safety representative. This is someone employees can go to when they have any concerns or suggestions about workplace health and safety. The representative will work with the employer in good faith to find a solution.

This representative is allowed to take two days paid leave per year to undergo approved health and safety training.
### 4.5 CHOOSING THE RIGHT VEHICLE FOR THE JOB

When you’re looking to purchase a new vehicle, speak to vehicle dealers about your own farming situation and read the vehicle manufacturer’s recommendations.

<table>
<thead>
<tr>
<th>VEHICLE USE</th>
<th>TWO-WHEELED FARM BIKE</th>
<th>QUAD BIKE</th>
<th>SIDE-BY-SIDE UTILITY VEHICLE</th>
<th>UTE OR FOUR WHEEL DRIVE</th>
<th>SMALL TRUCK</th>
<th>SMALL FARM TRACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working on farm:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspecting farm and stock</td>
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<td>Mustering of stock</td>
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<td>Spraying</td>
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<td>Maintenance work</td>
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<td>Carriage of goods:</td>
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<tr>
<td>Light tools, equipment and dogs</td>
<td></td>
<td></td>
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<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bulky loads and stock</td>
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<td>Light, low or secured loads</td>
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<td>Heavy, high or unsecured loads</td>
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<td>Passengers</td>
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<td>Ground conditions:</td>
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<td>Sealed roads</td>
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<td>Steep uneven terrain</td>
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<td>Flat or gentle sloping terrain</td>
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<td>Hard surfaces</td>
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<td>Soft or muddy</td>
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<td>Rider capability:</td>
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<tr>
<td>Inexperienced/untrained on farm</td>
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<tr>
<td>Towing:</td>
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<tr>
<td>Narrow or small trailer</td>
<td></td>
<td>3</td>
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<tr>
<td>Wide or heavy trailer</td>
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- **Vehicle is appropriate for this task/circumstances if used safely**
- **Vehicle could be used but an alternative vehicle could perform better or be safer**
- **Caution – Vehicle may not be the safest vehicle for the task or in these circumstances**

Notes:
1. Provided the spray unit is purpose built for use on a quad bike, and preferably with baffles in tank. Do not exceed quad bike manufacturer’s carrier limits, including unit total weight and fluid.
2. Appropriate to carry up to two dogs only.
3. Only use small trailer purpose built for use with a quad bike with low pressure quad bike type tyres fitted. Do not exceed quad bike manufacturer’s towing limits.
IN THIS SECTION:
5.1 Glossary
5.2 Bibliography
## 5.1 GLOSSARY

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Practicable Steps</td>
<td>Section 2A Health and Safety in Employment Act 1992: ‘The steps taken to achieve the result that it is reasonably practicable to take in the circumstances, having regard to: 1. the nature and severity of harm that may be suffered if the result is not achieved; and 2. the current state of knowledge about the likelihood and severity of harm that will be suffered if the result is not achieved; and 3. the current state of knowledge about harm of that nature; and 4. the current state of knowledge about the means available to achieve the results and about the likely effectiveness of each of those means; and 5. the availability and cost of each of those means. ‘To avoid doubt, a person required by the Health and Safety in Employment Act 1992 to take all practicable steps is required to take those steps only in respect of circumstances that the person knows or ought reasonably to know about.’</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System. A space-based satellite navigation system that gives location and time information, in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites. The system gives information to military, civil and commercial users around the world.</td>
</tr>
<tr>
<td>Panniers</td>
<td>Baskets, bags, boxes or similar containers; carried in pairs; attached to the sides of a motorcycle.</td>
</tr>
<tr>
<td>Pillion Passenger</td>
<td>Pillion is the name of a secondary pad, cushion or seat behind the main seat or saddle on a horse, bike, bicycle or moped. Someone using this seat is ‘riding pillion’, they can also be called the ‘pillion’ or ‘pillion passenger’.</td>
</tr>
</tbody>
</table>
5.2 BIBLIOGRAPHY

Reducing Risk of Injury Associated with Farm Bikes on Farms in Australia, T Schalk & L Fragar. Australian Agricultural Health Unit, 1999

Vehicle Injury Associated with Australian Agriculture: The Facts 2008, C Morton, L Fragar & K Pollock. Australian Centre for Agricultural Health and Safety, 2008 (Facts and Figures on Farm Health and Safety Series No 14) Chapter 4 On-farm injury deaths, 4.3.2 2-wheeled bikes

NEW ZEALAND GUIDANCE

Riding Farm Bikes for the Farmer, ACC 2002


GUIDANCE FROM OTHER JURISDICTIONS

Agricultural Bike Safety, Farm Safe WA, 2005
farmsafewa.org/media/1276/Agricultural%20Bike%20Safety.pdf

Farm Bikes, Vic Roads
www.vicroads.vic.gov.au/Home/Registration/WhatHasToBeRegistered/OtherVehiclesvesselsAndRegistrationIssues/FarmBikes.htm

Farm Vehicles, 2 and 4 Wheeled Motorbikes, The Australian Centre for Agricultural Health and Safety, 2008

Quadbike and Vehicle Safety, Farmsafe Australia
www.farmsafe.org.au/content/quadbike-and-vehicle-safety

www.nff.org/get/submissions/3632.pdf

Rural Plant: Code of Practice 2004, Section 8.4 All terrain vehicles

Use of Helmets When Operating Quad Bikes (ATVs), Workplace Health and Safety Queensland, 2012 (Information guide; no. 33)
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BEST PRACTICE GUIDELINES
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