

# Quad Bike Safety: Tips on how to stay safe



## Keeping safe on a quad bike



*Quad bikes are one of the most widely used motor vehicles on New Zealand farms, and many farmers consider them essential to their farming operations.*

### It's easy to see why

Quad bikes have pretty much replaced the horse. They go faster than a horse. They carry more than a horse. And they easily go places that most four-wheeled vehicles can't go.

Those are the good points of quad bikes. They're also the things that make them dangerous.

If you're going to get killed on the farm, there's a good chance that a quad bike is likely to be involved.

If you're going to get a sore back – and 60% of farmers suffer from this – it's very likely it will be caused (or at least made worse) by the amount of time spent riding a quad bike.

And while we're on the 60% figure, some researchers have found out that 60.8% of quad bike riding farmers will experience a loss of control event sometime in their working life. That means that they're going to come off their bike. They worked out that, on average, about 35 New Zealand farmers come off their quad bikes every day.

Now some of those will suffer nothing more than a loss of pride; maybe a bit of bruising and the odd scratch. 6% will be hurt enough that they will need medical help and most will be hurt seriously enough that they will need time off work. If you can't work, you can't farm. And if you can't farm, that's serious.

So what do you do? You're not going to get rid of your quad bike; it's too useful for that. There are ways of using it that are safe and there are ways that are not safe.

**Safety tip:** When riding a quad, concentrate on the riding. Look where you're going, not on the stock.

## Understanding quad bikes

Firstly, forget about the term ATV. It's a quad bike. An ATV (All Terrain Vehicle) suggests that you can go places that you probably can't or shouldn't.

Quad bikes are deceptive beasts. They look solid, reliable and stable. They look like the sort of machine that pretty much anyone can get on without too much trouble and start riding. Which is how a lot of people treat them.

Right, here's the news. Quad bikes are inherently unstable. They have a narrow wheel-base and a high centre of gravity. They have a type of tyre designed to grip on soft ground but on the road they can grip suddenly and tip over before you have time to react. And remember they need quite a bit of skill to ride them properly and safely. Many people are injured the very first time they ride a quad bike.

### Here are some tips on how to stay safe on your quad bike

#### Basic rules of quad bike safety.

1. **When you're riding a quad, concentrate on the riding,** like you would on a two wheeler. Look where you're going, not where the stock are going.
2. **Wear a helmet.** Other protective gear, such as goggles and gloves, are good depending on the type of work you're doing, but a helmet is a must. Don't worry if your neighbour doesn't wear a helmet. That's their concern. Your concern is to stay alive.
3. **Learn to ride a quad bike properly.** Take a quad bike skills course. At the very least make sure new workers take a riding course. Yes, riding a quad bike looks easy. But it's easy to have an accident too.
4. **Avoid rushes of blood to the head, particularly when you're mustering.** Yes, you can zoom off fast to head off some straying stock but that's how accidents happen. If it's the dog's job, use the dog.
5. **Think, think, think.** Think about what you're carrying. Think about where you're going. Think about the angle of the slope that you're about to tackle.
6. **Remember the 4x2 rule.** If you have the slightest doubt about what you're doing, take four steps back and think about it for a couple of minutes.
7. **Let people know where you're going and when you think you'll be back.** Carry a cellphone if you've got coverage.

**Safety tip:** Even if you've been riding for years, doing a course is a good way to hone your skills - and find out all the things you didn't know you should be doing!

## Know your bike

- All quad bikes are different. Make yourself familiar with the bike, particularly if you've just got a new one and it's a different make or model from the old one. Know where the cut-off switch is. Know where the brakes are. Know how to get it in and out of reverse – before you need to.
- Read the manual and follow the manufacturer's recommendations. The manual will tell you how to ride safely and what loads the bike can carry. Take them seriously – they don't write these things just for the hell of it.
- Check your bike regularly. Check the brakes and tyres, check the steering, check the throttle control. Are they working properly? If they're not, get them seen to.
- Fit full footplates. Putting your foot down and having the back wheel run over it is not a good look.
- The big seat is not big so that you can carry passengers. It's there because you need to be able to move about on the bike to control it. If you've got somebody sitting behind you or in front of you, you can't move and you can't control the bike properly.

## Know what the bike's good for (and what it's not good for)

- Quad bikes are fast and they're versatile and they tend to be the easiest thing to jump on when you're heading out on a job. That doesn't mean that they're always right for the job.
- Think about the load that you're carrying and the country you're carrying it over. Would you be better using a ute or a tractor?
- Be extra careful with spray tanks. Each litre of liquid weighs a kilo and when liquid sloshes about when you're cornering, going up or down hills or across a slope, that's a fair amount of weight moving about that you have to correct for. Consider putting baffles in your tanks. Remember quad bikes are not designed to be used in this way.
- Just because you've got carriers doesn't mean that you should overload them. Remember, these bikes have a high centre of gravity. The more weight that there is above the centre of gravity, the more unstable they are.
- If you're towing a trailer, remember you have a lot more weight to control, especially going downhill. Balance the trailer and keep the centre of gravity as low as you can. Try to make sure that about 10% of the total weight is on the drawbar.

## Learn how to handle your quad safely

The thing with quads is that they look so simple to use. It's not as though you can fall off it and get up again the way you could with a motorbike. If it tips over and lands straight on top of you, the chances of lifting it off on your own are very slim, no matter how strong you think you are – and assuming you're not injured.

Riding a quad is a particular skill. In many instances you have to do quite the opposite to what you would do on a two-wheel bike. It's counter-intuitive and it takes learning.

- If you do nothing else, take a quad bike riding course. There have been people who have been riding quads for years, they've done a course and they've realised how much they didn't know. Do a course.
- Know your capabilities. Learn how to judge when the slope or terrain is not suitable for the quad. Don't push it. It's better to walk away than risk not walking again.
- Going round corners. The rule of thumb is that when you're cornering at slower speeds, you have to move your weight to the outside of the turn. At higher speeds, you move your weight to the inside of the turn.
- Riding across slopes, keep your weight on the uphill side. Avoid bumps and hollows as these can cause your weight to shift downhill.
- Going straight up slopes, move your body weight forward. Select a low gear and use a steady throttle. If you change gear, you instinctively blip the throttle as you resume acceleration, this takes weight off the front wheel and can cause you to flip. Not good.
- Going downhill, shift your weight to the back. Use a low gear and travel steadily. Don't use the front brake suddenly as this can cause the bike to flip over forwards.
- Did we mention doing a course?



## Rider safety

This is all the stuff that you don't want us to tell you but you know we're going to tell you anyway.

- Wear a quad bike or motorcycle helmet. Who cares if you look like a dork? Put it this way, it doesn't matter how you come off your bike, whether it's flipping it or skidding into a tree, a helmet can be the difference between a headache or concussion and serious brain injury. It's a bit of a no-brainer really. Wear a helmet.
- Wear the right gear for the job. Solid boots. Long sleeved tops and trousers. Gloves if it's cold. And goggles if it's raining or dusty.
- Be aware of what you're putting your body through when you're riding a quad. It vibrates and gets shaken about. It's called Whole Body Vibration and can cause low back, shoulder and neck pain. Slower is probably better.
- Riding a quad bike takes a fair amount of muscular strength what with constantly shifting your body and turning corners. Watch for fatigue. It's when you're tired that you stop thinking. And that's when the bike will bite you on the bum.

## Children and quad bikes

Quad bikes look exciting to kids. And as they get older they're probably the first vehicle that they'll be legally allowed to use.

- Rule of thumb. Abide by the manufacturer's recommendations for the particular bike concerned and currently for adult sized quad bikes this is 16 years of age. Kids under this age shouldn't be within cooee of being allowed to ride an adult sized farm quad bike. It's just too risky.

When your kids are riding quads that are designed specifically for them:

- Make sure your kids are trained before you let them on a quad bike. Ideally, get them to do a riding course.
- Make them wear helmets and boots (clothes are also good) at all times.
- Don't let them carry passengers – younger kids, their mates – ever.
- Don't let them carry loads – anything that might affect their ability to handle the bike.
- Place limits on them. Give them a speed restriction (young boys in particular love to hoon) and place limits on where they can go and the type of terrain.
- Instil good habits. Learn bad habits early and they're hard to break.

## It happens, just like that.

In 2001, Bob\* was on his quad bike out the back of his hill country property in the Wairarapa mustering cattle for Tb testing. He was walking them home along a track when he backed the quad over to the edge of the track to let cattle past. When some animals wandered off the track, Bob got off the quad. He put the handbrake on but left it in gear. What happened next was a series of small incidents which, put together, culminated in near disaster.

When Bob got back on the bike, he put his hands on the handlebars and swung his right leg over. His knee accidentally hit the throttle which sent him over the handle bars. At this time, the rear wheels of the bike were almost over the edge. He got himself back on and immediately slammed on the rear footbrake. This caused a weight displacement which tipped the quad over backwards with Bob underneath. The 300kg bike landed on his chest and bent the handlebars.

Bob, fortunately was able to get out from under the bike. It took him two and a half hours to get home. He ended up being flown by helicopter to Intensive Care in Wellington with heart damage, spinal damage, broken ribs and multiple bruises. He was a week in hospital and several weeks off work. Happily, he's since made pretty much a full recovery.

The accident prompted him to do several things. He's installed a beeper on the quad that tells when the bike is in reverse gear. He always makes sure that the handbrake is on when it's parked. And he's looking at installing roll over protection and putting in walkie-talkies to make up for the lack of cellphone coverage. His advice to other farmers; "You get to know where you can go and where you can't go," he says. "If in doubt, back off."

\* Names have been changed to protect privacy.

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