Common statements about Quad Bikes

Myth, excuse or fact?

Has 4 wheels so must be stable
It is when you get on and off compared to a 2-wheeler. Only dangerous when someone gets on it. (Another common statement to point the finger at the operator.)

Much safer than three-wheeler
Three-wheeler was prone to back flipping under throttle due to light front end. Relied on operator training, was marketed heavily at children, would buck you off when hitting small objects. Manufacturing ceased under pressure from researchers, government and from law suits by those injured or related to those killed. Outcry as 600 people killed in America.

We have never had an accident on a Quad
This may be the case but how many near misses have you had. Health and safety is also about potential and an evidence base. The potential for an accident is high and the statistics regarding fatalities and injuries point us in the direction of inevitability.

Statistics:
› Australia 2001–2015, 220 fatalities on quads Av 15/ year. Source NCIS ACAHS.
› USA, 669 fatalities on quads in 2011, 11 million households have quads, 90,000 emergency department presentations annually.

They are fun to ride
The marketing of Quads, especially in America focuses on recreational use and sometimes on racing and trick riding to both adults and children. Sports type Quads and SXS are also marketed in Australia of sizes for adults and children.

They are ATVs that is all-terrain vehicles
Clearly the Quad bike is not capable for all terrains particularly steep country. In Victoria, Coroner John Olle, made the following comments in 2009: “Quad bikes must not be described or marketed as all-terrain vehicles or ATVs. So, described, a false impression is created, which warnings are unable to erase. A Quad bike is not an all-terrain vehicle. To describe a Quad bike as an all-terrain vehicle is a serious overstatement of its capabilities.”

Quads can be multi-purpose.
They can transport people, be tractor like, carry loads, tow trailers and implements and can be modified for heavy work
There is no doubt that they are a handy vehicle but they are often used beyond what they were intended for. Most manufacturers do not recommend or make attachments, this is a separate industry. There are clear load ratings in terms of total carrying capacity, front and rear cargo rack capacities and towing capacity. Loads above this will affect stability.

The versatility of other vehicles and plant should be considered when purchasing or selecting a vehicle for the job.
Most injuries and deaths are from head injuries
Certainly, the risk of head injury is high, fatalities are often a result of asphyxiation due to the rider quite often trapped underneath an overturned or back flipped heavy Quad. Being unable to crawl from beneath or push the bike off, the rider is unable to draw breath. ACAHS \(^1\) This can also apply to children on smaller Quads.

Can not do without the Quad
This could be the case and you may have to limit its use to the tasks that no other safer vehicle could do and if that is the case you need to consider what can be done to increase the safety of the operator.

Consider capacity, CPDs, training and instruction and PPE (Helmet).

We only ever use them on flat ground
This may be the case but if you turn sharply, especially on hard surfaces the combination of a high centre of gravity and grippy tyres can lead to a tip over.

If I tip it over I will be thrown clear
Being thrown clear may occur in a collision but is less likely in a tip or rollover where the Quad will end up on top of the rider. This is the substantial difference between 2 wheelers and Quads – A 2-wheeler will generally throw you clear, a Quad rider will most often remain on the seat.

Inexperienced riders are the problem.
This may be the case, obviously not the only problem. The important message is for employers to provide training and instruction on the model of Quad, develop rules of operation(SOPs), establish tasks matched to rider experience, provide supervision and ensure that protection devices are in place (CPDs, helmet, maintenance, clothing and other relevant PPE) and provide a communications system so rider whereabouts are known and a call for assistance can be made if required.

If you hoon around you are more likely to have an accident
Very much so, hence the need for established rules of operation, speed limits and consequences.

I need a bigger and more powerful Quad to do all the tasks on the farm
This comes back to selecting the most suitable vehicle for the job/task and matching the person to the Quad, considering age, ability and experience.

Bigger and more powerful means more acceleration, velocity, momentum and weight – meaning the chances of more serious accidents are increased significantly.

The large seat is made for a passenger
Not the case as clearly indicated by the manufacturer, the larger seat is made for active riding shifting weight forwards and backwards.

Children can ride them
Adult size quads are not manufactured for children under sixteen, due to required strength, weight, and cognitive ability.

It is the rider that makes them dangerous
This may be the case with respect to some of the above e.g. inexperience, hooning and age, (old and young).

If they are not dangerous why do manufacturers emphasize active riding techniques to prevent tipping. Victorian Coroner Olle, in his findings wrote that, “Roll overs occur when ridden by safety conscious operators who are not being stupid. The most alarming lesson from these inquests, is that careful, safety conscious individuals lost their lives whilst performing innocuous farming tasks on familiar terrain”

Manufacturers do not recommend Roll Over or Crush Protection Devices CPDs
This is the case as it would be an admission that the Quad is unsafe and this admission may implicate manufacturers in any action taken against them, particularly in the US. However, they manufacturers strongly recommend the ROPS on side by sides.

So, called ROPS or CPD will injure you
Possible, but more likely to save your life. With over 10,000 CPDs fitted in Australia and NZ none have been implicated in a fatality or serious injury. The Lifeguard CPD is flexible even if it lands on you.

Quads do not come with Rollover Protection built-in
Most, however Polaris (Ace) do have a quad with a ROPS, seat belt and steering wheel.

CPDs will get caught up in branches
This is a possibility, as it was when ROPS were fitted to older tractors.

Again, this could be part of the no go zones and/or getting used to the height of the CPD.

The height of the CPD is usually level or lower than the height of an adult rider’s head. Getting a CPD caught in branches indicates that the area under the tree was not a suitable area for using quads.

Fitting of CPDs will void the manufacturer’s warranty
If this is stated get it in writing. No one to date has.
Common statements about Quad Bikes

Myth, excuse or fact?

**Cannot have a CPD or ROPS without a seat belt**
As stated you tend not to be thrown clear in a tip over, the CPD enables a space between you and the Quad so you can crawl out. Even with a CPD fitted, active riding techniques will need to be applied, so you cannot be strapped in.

SXSs require use of a seat belt, doors and grab handles to assist the riders to remain within the protection zone of the ROPS.

**If I fit a CPD I cannot carry my dogs or my load**
Choose the CPD that best fits your job.
Both available CPDs allow for different amounts of useable storage space on the bike. Remember the load limits of the rack.

**CPDs are noisy**
The Quad bar can be if not fitted correctly and maintained, talk to the manufacturer if this is a problem.

**CPDs will not fit my Quad**
When ordering the CPD be specific about your Quad make and model.

**My Quad bike supplier does not stock them and will not fit them**
Contact the CPD manufacturer direct and ensure you get the correct CPD and with instructions to fit it yourself.

**Side by sides are no good for mustering**
Speak to those that are using them, you may have to compromise performance for safety.

**Side by sides are too expensive and you must wear seat belts**
The seat belt is part of the operator protection as in any other vehicle, it stops you from being thrown out.

The cost of the SXS can be offset by the greater versatility and improved safety. Ask anyone who uses one. A good link for comparing prices is at www.quadsales.com.au.

**You do not have to wear a helmet in a paddock**
Manufacturers recommend helmets for Quads and some side by sides. State regulators may enforce this.

**I make sure the workers wear helmets**
Yes, this should be part of the agreement when workers are authorized to operate Quads. Remember also to lead by example.

**We make the helmet available to workers and they choose not to wear it**
This is not sufficient as this is a lawful request under WHS legislation – Consider issue warnings and terminate employment if required.

**Workers sign a form saying they choose not to wear a helmet and this removes our liability**
You cannot waver either your responsibility or theirs unless there is a medical certificate, if this is the case do not authorize their use.

**Workers do not want to share a helmet, or they are too big or too small**
Supply individual helmets. This is good practice, even for hygiene reasons.

Helmets are too heavy, too hot and cannot hear, ears get cold.

**Helmet straps are difficult to do up**
Look for clip type. Remember a helmet not done up will come off and even move around causing a distraction.

**Pump up the tyres to prevent punctures**
This will make the quad more difficult to handle.
Inflate to recommended pressures. If a tyre is repaired the tyre may be over inflated so the bead engages the rim, reduce the pressure to that recommended.

**We need eye protection against insects and dust but also need UV protection**
This could be part of the helmet choice.

**Fit car wheels to Quads**
Again, this will impact on handling and would increase liability should an accident occur.

**It is my own personal Quad and I do not use it for work**
How do you differentiate when it is on the farm you work on?

**What do I do if contractors or share farmers do not wear helmets or have CPDs fitted to their Quads?**
This should be part of your agreement before you engage a contractor.

**I only travel on the side of the road, so I do not register my bike**
The verge of a gazette road is considered the road.

**My worker has a motor bike licence and uses the Quad to cross the road**
Not likely but check each state requirements for licence and registration requirements.
Remember police may not be that well informed on licence and registration requirements.
1. **Quad bike Fatalities and Injuries in Australia for the period 2000-2012.**

Rollover and being pinned were the most frequent injury mechanisms for Quad bike related fatalities on farms.

**Summary**

1. 141 fatalities were identified from the Australian National Coronal Information System (NCIS) dataset. Approximately 10 to 15 fatalities per annum.

2. 109 fatal cases were relevant, the other 32 cases involved public road crashes or other vehicle types.

3. The 109 cases constituted 106 Quad bikes, and 2 SSVs and one six-wheel bike.

4. 86% of deaths were male.

5. Approximately 50% of the 109 fatalities were related to workplace activity (n=54; 53 farms and 1 forestry) and 50% (n=55) to recreational activity. Most cases involved riders on their own and remote from immediate help.

6. Approximately 75% of the 109 fatalities occurred on Farms.

7. Rollover occurred in 71% of the 109 cases. Of the 109 cases 85% of the work related fatal cases involved a rollover compared to 56% of recreational cases.

8. Loss of control on a slope and/or driving over an object was a factor in 58% of the farm cases and 33% of recreational cases.

9. In work related fatal cases, a higher percentage of these were older riders, namely: 78% were 50 years or older; 50% were 60 years or older; 42% were 65 years or older; and 33% were 70 years or older. In comparison, for all fatal cases, 43% were 50 years or older, and only 9% of recreational riders killed were 50 years or older.

10. The main cause of death for farm workers was chest injury (59%) compared to head injury for recreational riders (49%).

11. Around 13% of farm workers died because of head injury. A helmet was found to be worn in 22% of the 109 cases.) TARS report.