



Quad Bike Position Paper

Background

Over the period 2001 to 2016 quad bikes have resulted in over 225 deaths across Australia, with the majority of these (n=155) occurring on farms.¹ In 2015, 22 fatalities were reported; 68% of cases occurred on farms and 14% involved children under 16.²

Quads have been the leading cause of fatality on Australian farms for the past five years.³ Approximately 75% of incidents occur on-farm, with the dominant injury mechanism being rollover followed by being pinned by the vehicle resulting in crush injury and/or mechanical asphyxia. Around 70% of fatally injured persons were pinned under the quad.⁴ While data on morbidity is less well documented, there are over 1,000 hospital admissions per year across Australia, 25% of whom are children.⁵ A proportion of cases involve lifelong and debilitating spinal and head injuries.

These findings clearly indicate that quads pose a significant risk to riders and that steps must be taken to reduce the potential for death and serious injury in the event of a rollover. They also highlight major concerns regarding the use of these vehicles by children.

Quad manufacturers' do not support a proposed star rating safety system for their products nor the fitting of operator protection devices (OPD).⁶ However, work continues on a star rating system in New South Wales and Worksafe Victoria has now publicly recognized OPDs as a suitable means to control risk as part of a number of strategies.⁷ Safework NSW has also launched a rebate scheme to encourage farmers to move to other safer vehicles, fit OPD's, purchase helmets and undertake training.⁸ This position paper outlines and evaluates the best available evidence regarding factors contributing to injury and puts forward recommendations for action.

The Australian Injury Prevention Network recognises that:

- Quads are widely used in Australian primary production.
- Children are at particular risk when using quads regardless of the vehicles size.⁹
- There are a range of strategies that may reduce quad fatalities and injuries.
- Reducing the risk of death and serious injury from rollover through an engineering solution is feasible.
- Farmers and other riders of quads have the right to reduced risk of preventable injury.

The Australian Injury Prevention Network acknowledges:

- Around 15 Australians are now killed each year as a result of quad-related incidents, including 2-3 children annually.¹
- Rollover is the dominant mechanism.
- There is a growing interest in the risks associated with quad use from primary producers, researchers, practitioners, local councils, government and other agencies.

The Australian Injury Prevention Network recommends:

In view of the immense emotional, personal and financial costs to families, communities and society from quad-related incidents in Australia, the AIPN supports the direction of the 2015 recommendations from the New South Wales and Queensland Coroners. In particular, the AIPN advocates for:

- The use of alternative, safer fit-for-purpose vehicles and further exploration of engineering solutions to increase the safety of quads;
- Development and implementation of a safety rating system for quads and related vehicles;
- Banning children under the age of 16 from riding quads of any size;
- Continued public awareness campaigns to raise awareness of the risks associated with quads, particularly in relation to children and vehicle selection;
- Promoting the importance of using a suitable helmet and the acquisition of relevant knowledge and skills to enhance safety;
- Funding of data collection and research into the effectiveness of solutions to provide an evidence base for policy decision making.

References

1. Lower T. (2016). National Farm Injury Data Centre Register of Quad Bike Deaths (unpublished data as of July 6 2016). Australian Centre for Agricultural Health and Safety. Moree NSW.
2. Lower T, Munro T. (2016). Quad related deaths and injuries in Australia 2015 - Media Monitors Report. Australian Centre for Agricultural Health and Safety, Moree NSW. [http://sydney.edu.au/medicine/aghealth/uploaded/Research%20Reports/Quad Related Deaths and Injuries Report 2015.pdf](http://sydney.edu.au/medicine/aghealth/uploaded/Research%20Reports/Quad%20Related%20Deaths%20and%20Injuries%20Report%202015.pdf).
3. Lower T, Monaghan N, Rolfe M. Quads, Farmers 50+ Years of Age, and Safety in Australia. *Safety*. 2016;2(2):12 doi:10.3390.
4. Grzebieta R, Rechnitzer G, McIntosh A, Mitchell R, Patton D, Simmons K. (2015). Supplemental Report - Investigation and analysis of Quad Bike and Side By Side Vehicle (SSV) fatalities and injuries. Available at: [http://www.tars.unsw.edu.au/research/Current/Quad-Bike Safety/Reports/Supplemental Report Exam&Analysis Fatal&Injuries Jan-2015.pdf](http://www.tars.unsw.edu.au/research/Current/Quad-Bike%20Safety/Reports/Supplemental%20Report%20Exam&Analysis%20Fatal&Injuries%20Jan-2015.pdf). Accessed Feb 25, 2016.
5. Vallmuur K, Watson A, Catchpole J. (2015). Recreational Quad Bike-Related Injuries in Australia: Patterns and Contributory Factors. The Centre for Accident Research & Road Safety - Queensland
6. Federal Chamber of Automotive Industries (2015). <http://www.fc.ai.com.au/Safety/ATV-safety>
7. WorkSafe Victoria. Revised approach to quad bike safety - 2016. Available at: <http://www.worksafe.vic.gov.au/safety-and-prevention/your-industry/farming/quad-bikes>. Accessed May 9, 2016.
8. Dominello V (2016). NSW Budget: \$2 Million Quad Bike Safety Package <https://www.finance.nsw.gov.au/about-us/media-releases/nsw-budget-2-million-quad-bike-safety-package-0>
9. Royal Australasian College of Surgeons (2016). Submission to Inquest Into the Death of 7 Riders of Quad Bikes in Tasmania. https://www.surgeons.org/media/24102200/2016-03-09_sbm_tas-quad_bike_inquest_final.pdf

Other useful references and resources:

- Safe use of quad bikes and side-by-side vehicles on Australian farms. Australian Centre for Agricultural Health and Safety. http://www.aghealth.org.au/tiny/mce_fm/uploaded/fs_docs/guidance/Quad_bikes_and_Side_by_Side.pdf
- Q CARRS Quad Bike Safety Fact Sheet http://www.carrsq.qut.edu.au/publications/corporate/quad_bike_safety_fs.pdf
- UNSW Quad Bike Performance Project http://www.tars.unsw.edu.au/research/Current/Quad-Bike_Safety/Performance_Project.html