Statewide Plan for Improving Quad Bike Safety in Queensland

2016 – 2019







Foreword

Serious incidents resulting from the use of quad bikes for work and recreational activities is becoming an increasingly prevalent issue for the Queensland community.

Over the past 15 years, 69 people have been killed in quad bike incidents in Queensland and many more injured. This is unacceptable and the emotional and financial costs to families and the community are immense.

The Queensland Government is committed to reducing incidents involving quad bikes and supports a coordinated whole-of-government approach to improving quad bike safety.

The Statewide Plan for Improving Quad Bike Safety in Queensland 2016 – 2019 (the plan) is a key initiative to raise awareness of the risks associated with quad bike use and enhance operator skill and safety. The plan focuses on three key priorities:

- **1.** Community education and awareness about quad bike safety risks.
- **2.** Improving quad bike operator skill and safety.
- **3.** Government leadership in promoting quad bike safety.

Quad bike safety is an issue that affects communities across the state and requires urgent action to improve safety outcomes. We must treat this issue as a priority and ensure safe behaviour is entrenched in the community and that safety is in the forefront of all quad bike users' minds. Quad bikes and side by side vehicles



Quad bikes are defined as: any motorised vehicle designed to travel on four low pressure tyres, having a seat designed to be straddled by the operator and handlebars for steering control and generally intended for use by a single operator.¹



Side-by-side vehicles are defined as: a two to six person vehicle based on a quad bike, but with a side-by-side bucket seating arrangement, steering wheel, seat belts and a roll over protection system.²

Introduction

Quad bikes are becoming an increasingly popular vehicle for recreational and work use due to their perceived versatility and ease of operation. There are approximately 380 000 quad bikes in operation in Australia, with availability and use likely to increase.³

Quad bike use is also becoming increasingly diversified. In particular, they are being used for recreational activities on private properties and adventure tours, and in competitive racing. Their use on farms is also expanding to activities such as mustering, spraying and towing.

This increased quad bike use poses a significant safety issue for the Queensland community as it is associated with a growing number of injuries and fatalities. In particular, quad bike use is the leading cause of injuries and fatalities on Australian farms and has resulted in over 230 fatalities⁴ across Australia over the past 15 years and approximately 7900 hospitalisations⁵ between 2003 and 2011, with the majority occurring on private property. Queensland accounts for approximately one-quarter of these injuries and fatalities which is the highest percentage across all jurisdictions.⁶

The high rate of quad bike-related injuries and fatalities for children under the age of 16 also highlights child safety as a key issue requiring attention.

Despite some regulatory oversight, injuries and fatalities from quad bike use continue to occur. Preventative efforts to reduce the rate of incidents require a range of solutions to encourage safety and provide safer conditions for quad bike users.

Aim

The aim of this plan is to increase awareness of the risks associated with quad bikes and implement initiatives to mitigate these risks to reduce the rate and severity of incidents involving quad bikes across Queensland.

In particular, there is a need to create a culture of safety around quad bike use and develop strategies to influence behavioural and attitudinal change in both recreational and work settings. Greater coordination and consistency of management of quad bike safety across government is also necessary.

In August 2015, the Queensland Deputy State Coroner released findings of an inquest into the quad bike-related deaths of nine Queenslanders that occurred in a cross section of work and recreational activities.

The Coroner made 15 recommendations including:

- mandating training, helmets, age restrictions for children and passenger prohibitions
- launching an ongoing public awareness campaign regarding the importance of training, wearing helmets, dangers of allowing children to ride adult-sized vehicles and only carrying passengers on quad bikes that are designed to do so.

The Coroner's findings also relate to the use of side-by-side vehicles. Subsequently, the initiatives in this plan focus on both quad bikes and side-by-side vehicles to ensure the risks associated with both vehicles are properly mitigated.



Quad bike risk profile

Quad bikes are a popular vehicle used by farmers, producers, local and state governments, search and rescue teams, recreation clubs and adventure tourism. In recent years, quad bikes have been increasingly used for recreational and work purposes due to their adaptability, ease of operation and low running costs, however their use is associated with a growing number of injuries and fatalities.

Fatalities

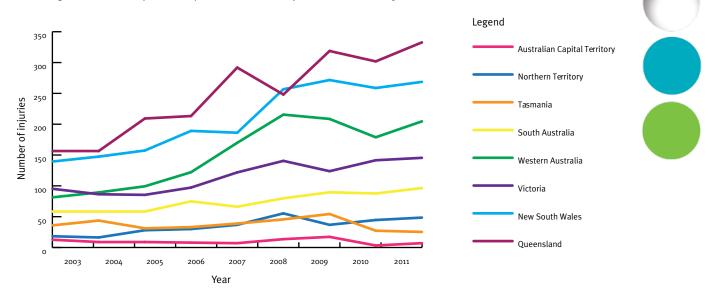
Since January 2001, there have been more than 230 quad bike-related fatalities⁷ in Australia, which is approximately 15 deaths a year. Of these, 69 occurred in Queensland (approximately 30 per cent)⁸, which is the highest fatality rate across all Australian jurisdictions.

Of the 69 Queensland fatalities, 42 were recreational incidents, for example, an operator falling off a quad bike while on a hunting expedition. The remaining 27 incidents were work-related, for example, an operator losing control of a quad bike while mustering. Approximately 20 per cent of the fatalities were children under the age of 1611.

Serious injuries

More than 7900 people have been admitted to hospitals across Australia between 2003 and 2011¹². This is approximately 1000 hospitalisations a year or three hospitalisations every day—a trend which appears to be increasing in correlation with quad bike sales data¹³. Queensland consistently has the highest number of annual hospital admissions compared to other states as shown in Figure 1.¹⁴

Figure 1: Number of quad bike injuries admitted to hospital in each state 2003–2011



Quad bike risk profile

A breakdown of recent Queensland data for the five year period from 2009 to 2013 indicates there were approximately 1500 quad bike-related hospitalisations. This is the highest figure for all Australian jurisdictions. In addition, there were approximately 3000 quad bike-related emergency department presentations and over 1000 ambulance attendances. Despite some overlap, these figures indicate that injury resulting from quad bike use is an issue for the Queensland community, with approximately one-quarter of hospitalisation cases classed as serious.

Around three-quarters of the hospital and ambulance cases can be attributed to recreational use¹⁷, with approximately 70 per cent being males. The most common age was between 10 and 24 years.¹⁸

The age profile for people injured in a work or farm context is much older, with the majority aged between 55 and 69 years. Additionally, mid-year and end of year periods are peak months for quad bike-related injuries in children, which suggests a correlation between quad bike use and school holidays.¹⁹

Types of incidents

The most common types of quad bike-related incidents are rollovers, hitting stationary objects and falling from the quad bike.²⁰ The key precipitating factors for these types of incidents are uneven terrain (such as driving on a slope), turning and speed.²¹ These factors are consistent across all age groups and all types of use with the majority of incidents occurring on private property.

Types of injuries

In most cases, injuries and fatalities from quad bike use are caused by a blunt force injury, with a body part crushed between the quad bike and the ground or other surface. Alternatively there is contact with a rock, tree or other surface after the operator has been flung from the quad bike.

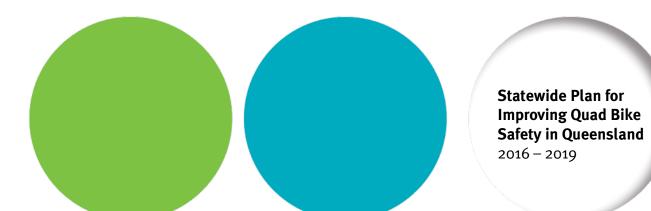
The body parts most commonly associated with quad bike-related injuries and fatalities are the torso, head and cervical spine (neck), with death commonly resulting from crush injuries and asphyxia.²² Common, non-fatal quad bike-related injuries include fractures in the upper and lower extremities, traumatic brain injuries, head contusions/open wounds and fractures of the vertebral column/thorax region.²³

Key risk factors

Despite the perceived versatility of quad bikes, there are a number of significant risk factors that can result in injuries and fatalities from their use, in particular:

- inappropriate use of quad bikes (i.e. children under the age of 16 operating adult-sized quad bikes and carriage of passengers on single seat quad bikes)
- operating quad bikes in remote locations without access to adequate methods of communication or use of personal locator beacons
- operating quad bikes on uneven terrain
- factors such as stability, overloading and inappropriate fitting of attachments.

Human and behavioural risk factors such as operator attitudes to safety control measures (including training, helmets and fit-for-purpose use) also play a significant role in contributing to quad bike-related incidents.



Existing regulatory environment

There is limited specific regulation in place for quad bikes in Queensland, however their use is captured under several broader legislative frameworks, including:

- work health and safety laws administered by the Office of Industrial Relations
- the Conditional Registration Scheme administered by the Department of Transport and Main Roads
- laws for managing vehicle use in protected areas and state forests under the jurisdiction of the Department of National Parks, Sport and Racing.

The ability to regulate the supply of quad bikes is the responsibility of the Australian Competition and Consumer Commission (ACCC). This legislation is jointly enforced by the Queensland Office of Fair Trading and the ACCC through the Australian Consumer Law (QLD).

It should be noted however, that much of the current regulatory frameworks listed above do not apply to recreational users on private property.

Work health and safety

The Office of Industrial Relations administers the *Work Health and Safety Act 2011* (WHS Act) and the Work Health and Safety Regulation 2011 (WHS Regulation).

The WHS Act places a general duty on persons conducting a business or undertaking to ensure, so far as is reasonably practicable, the health and safety of workers and others while at work.²⁴ This includes the provision and maintenance of safe plant such as quad bikes and the provision of necessary information, training, instruction and supervision.

Additionally, the WHS Act imposes duties on designers, manufacturers, importers and suppliers to ensure that plant such as quad bikes are, so far as is reasonably practicable, without risk to health and safety.²⁵

The WHS Regulation also requires persons with management or control of plant at a workplace to manage risks to health and safety. This includes managing risks associated with the plant over turning, things falling on the operator, the operator being ejected from the plant and the plant colliding with any person or thing. A person with management or control of plant is also required to ensure maintenance, inspection and testing is carried out by a competent person.





Existing regulatory environment

Additionally, the *Rural Plant Code of Practice 2004* provides guidance when purchasing a quad bike, when assessing the risk of using a quad bike and when selecting risk control measures. This includes advice on appropriate personal protective equipment such as helmets and advice on training operators to safely operate and maintain plant.

Conditional Registration Scheme

The Department of Transport and Main Roads (DTMR) is responsible for the management and administration of the Queensland road network and the vehicles that travel it.

DTMR administers the *Transport Operations (Road Use Management) Act 1995* and associated regulations and manages the use of Queensland's roads including performance standards for drivers, rules for on-road behaviour, vehicle safety standards and registration.

The *Transport Operations (Road Use Management) Act* 1995 provides for the Conditional Registration Scheme (the scheme) and allows for legal limited road access for non-standard vehicles that do not comply with the safety standards, but have a genuine need for limited access to the road network. The scheme:

- gives limited access to Queensland roads, with greater access available provided authorisation is obtained
- gives the protection of compulsory third party insurance in the event of a crash occurring on a road causing personal injury
- establishes the conditions for operation of the vehicle while on a road.

Quad bike users wanting to access Queensland roads are required to register their bikes under the scheme. The vehicle's operation is limited to the designated area referenced in the scheme guideline.

Queensland Police Service and land and road owner authorisation is required for operation outside the designated areas.

The requirement for authorisation from both the owner of the road and the Queensland Police Service ensures that authorities with local knowledge have assessed the proposed area of operation before permitting use of these vehicles. Riders must be suitably licensed to operate a vehicle on the road, which restricts age to a minimum of 16 years.

From 1 November 2015, riders and passengers of quad bikes and utility off-road vehicles must wear an approved motorcycle helmet as part of the conditional registration scheme.*

Managing vehicle use in protected areas and state forests

The Department of National Parks, Sport and Racing has a comprehensive legislative framework for managing the public use of the land it is responsible for. This framework ensures that public access and use is managed consistently with the purposes for which the land has been set aside, and to enable competing uses of the land to be balanced.

Roads in Queensland's protected areas and state forests are mostly public roads and the same road rules apply as on any other public road in Queensland. All vehicles used on these roads, except those exempted by law, must be registered and operated by a licensed driver.

Consistent with the requirements of the Conditional Registration Scheme administered by DTMR, approval must be granted by a land owner and the Queensland Police Service before use of quad bikes may occur in protected areas and state forests.

^{*} Some exemptions apply, refer to the *Guideline for Conditionally Registered Vehicles in Queensland*, version 3.4, November 2015.



Existing regulatory environment

The Nature Conservation (Protected Areas Management) Regulation 2006 and the Forestry Regulation 2015 provide for limited approvals for the use of conditionally registered vehicles on Queensland Parks and Wildlife Service managed lands. Approval is limited to activities such as emergency search and rescue, law enforcement, forest and land management, service provision, allowing land owners or occupiers to traverse lands adjacent where appropriate, assisting someone who is mobility impaired, commercial tours and organised events.* General individual recreation use can not be approved.

When approvals are provided, quad bike users must wear an approved motorbike helmet and not carry a passenger unless on a seat designed for that purpose. Approvals can also contain additional conditions, for example limitations on speed.

The Department of Agriculture and Fisheries has similar recourse under the Forestry Regulation 2015 to approve the use of quad bikes on harvesting sale areas by log timber permittees and their contractors. Approval is contingent on the quad bike being conditionally registered, the operator being licensed, an approved motorbike helmet being worn by the operator and passengers not being carried unless on a seat designed for that purpose.

Fair Trading and the Australian Consumer Law

The Queensland Office of Fair Trading (OFT) administers the Fair Trading Act 1989 (FTA) and the Australian Consumer Law (ACL) (QLD).

Under these laws the OFT has a statutory function to take action to promote and ensure safety in the supply of goods and services such as quad bikes. The ultimate goal of the product safety program is to minimise the risk of product related injury to consumers.

The OFT fulfils this function by administering the ACL (QLD) which requires certain goods to comply with prescribed national safety and information standards and through the FTA 1989, which requires certain services to comply with prescribed safety standards.

The purpose of a mandatory standard is to make particular safety or information features on consumer products compulsory for legal supply of the product into the Australian market.

The ACL (QLD) also aims to protect consumers and to ensure fair trading in Queensland by legislating consumer guarantees. Consumer guarantees provide consumers with a comprehensive set of rights for the goods and services they acquire.

Suppliers and manufacturers automatically provide guarantees about certain goods they sell, hire or lease, and services they provide to consumers. These rights exist regardless of any warranty provided by the supplier or manufacturer. Importantly for product safety, one of the tests for acceptable quality is that a good or service is safe, durable and free from defects. If a good or service fails to meet a guarantee, consumers have rights against the supplier and, in some cases, the manufacturer.

^{*} Refer to section 115 of the Nature Conservation (Protected Areas Management) Regulation 2006 and section 27 of the Forestry Regulation 2015.



Creating a quad bike safety culture

Efforts to reduce the rate of quad bike-related injuries and fatalities will require a range of solutions to better educate users of the risks of operating quad bikes and encourage adoption of strategies to reduce the risk of incidents and the severity of injuries.

One of the main barriers to improving quad bike safety in Queensland is safety culture which is currently hindered by acceptance of the risks associated with quad bike use. This is particularly an issue for vulnerable groups such as children, inexperienced riders and older workers.²⁹

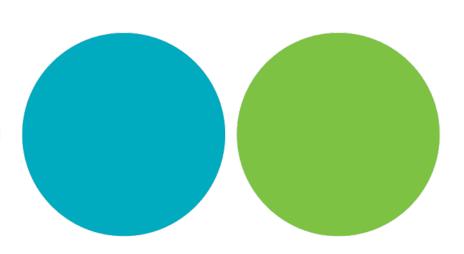
For this plan to be successful, key safety messages must reach individual users and parents/guardians to ensure they are aware of the risks of using quad bikes and strategies to mitigate these risks.

Although further regulatory intervention will be considered, the plan addresses safety culture as the immediate first step to improving safety outcomes for quad bike users. Consequently, education and awareness initiatives will focus on helmets, training and the dangers of carrying passengers and children riding adult-sized quad bikes.

Selecting the most appropriate vehicle for the task/activity, operating within the capabilities of the quad bike and within an appropriate environment, operator safety, risk management and maintenance will also be addressed.

Key industry bodies, industry leaders and the Queensland Government will also have a role to play in creating greater coordination and consistency of management of quad bike safety and in influencing positive behavioural change.





Implementing the plan

The plan was developed by the Quad Bike Interagency Group (interagency group) to ensure a coordinated approach to improving quad bike safety across government.

The interagency group consists of senior representatives from the following agencies that have an interest in quad bike safety and use:

- Department of Agriculture and Fisheries (DAF)
- Department of Education and Training (DET)
- Department of National Parks, Sport and Racing (DNPSR)
- Department of the Premier and Cabinet (DPC)
- Department of Tourism, Major Events, Small Business and the Commonwealth Games (DTESB)
- Department of Transport and Main Roads (DTMR)
- Local Government Association of Queensland (LGAQ)
- Office of Fair Trading (OFT), Department of Justice and Attorney-General
- Office of Industrial Relations (OIR), Queensland Treasury
- Queensland Police Service (QPS).

The interagency group will oversee the implementation of this plan.

Priority areas for action

Three priority areas have been identified to reduce the rate and severity of quad bike incidents:

1. Community education and awareness about quad bike safety risks

This priority ensures there is accurate, clear and consistent information for the community about quad bike safety risks and how to overcome them. This will be achieved by the interagency group working with a range of community and industry groups to target improvements in education and awareness about quad bike safety, particularly in sectors where quad bike use is common.

2. Improving quad bike operator skills and safety

This priority area will target improvements in operator protections, investigate the feasibility of introducing a regulatory framework to support quad bike safety measures and make robust and consistent training available to quad bike users.

Actions will also ensure that quad bike safety policy is informed by robust evidence of safety hazards, the effectiveness of risk control measures and attitudes towards safety. This will allow users to make improved risk assessments and consider suitable risk mitigation strategies.

3. Government leadership in promoting safety

This priority requires the Queensland Government to use its influence and investment and purchasing power to drive improvements in quad bike safety to secure better quad bike safety outcomes. It also ensures the Queensland Government is a leader in influencing quad bike safety as part of the national agenda.



Community educ	ation a	nd awareness about quad b	ike safety risks	
Goal	Number	Initiative	Responsibility	Timeframe
Improved public awareness of quad bike safety risks and solutions.	1.1	Develop a whole-of-government public awareness campaign for quad bike and side-by-side vehicle user safety including key messages and awareness campaigns about the: importance of quad bike and side-by-side vehicle training importance of wearing helmets on quad bikes and side-by-side vehicles dangers of parents and guardians allowing children to ride adult-sized vehicles importance of only carrying passengers on quad bikes and side-by-side vehicles that are designed to carry passengers. Key messages should also address: selecting the right tool for the job suitability of after-market attachments use of personal locator beacons and/or other controls for operating quad bikes in remote or isolated areas risk assessments and management safe loading and unloading procedures.	Interagency group — OIR to lead with support from DTMR.	June 2016
	1.2	Leverage key community bodies, primary industry bodies, tourism bodies, local councils, health professionals and quad bike manufacturers and suppliers to identify ways to increase awareness of quad bike safety issues and ensure key safety messages penetrate industry, high risk sectors and the broader community.	OIR LGAQ DTESB DNPSR DAF	Ongoing
	1.3	Review and promote existing materials and develop further simple quad bike safety guidance material based on research findings (for example guidance for workplaces to assist them in conducting more informed risk assessments). Promote compliance with manufacturers' instructions in all quad bike safety messages where relevant.	Interagency group – OIR to lead.	Ongoing



Community educ	Community education and awareness about quad bike safety risks			
Goal	Number	Initiative	Responsibility	Timeframe
	1.4	Following satisfactory outcomes of safety testing, promote innovation and enhancements of the design of quad bike equipment, attachments and personal protection equipment that will enhance operator safety.	Interagency group – OFT to lead.	Ongoing
	1.5	Seek out entities managing quad bike safety well and encourage them to share their stories through media campaigns and case studies.	Interagency group	Ongoing
Improved community access to information.	1.6	Provide information about quad bike safety to local councils, key industry bodies and relevant government agencies to ensure their websites have accurate, consistent and comprehensive information.	Interagency group	Ongoing
	1.7	Investigate options for raising awareness about quad bike safety targeted at schools.	DET	June 2016



Goal	Number	Initiative	Responsibility	Timeframe
Ensure robust and consistent training is available to quad bike users.	2.1	Review current quad bike training packages and work with key bodies to develop an improved standardised training package for quad bikes and side-by-side vehicles.	Interagency group – OIR to lead.	December 2016
	2.2	Work with the farming community, training providers and dealer networks to promote and encourage rider training and investigate mechanisms for increased uptake of quad bike and side-by-side vehicle training packages.	Interagency group – relevant agencies to work with their key stakeholders.	Ongoing
Improved accessibility to quad bike safety advice for recreational users.	2.3	Work with recreational quad bike activity providers and tourism operators to develop minimum standards for quad bike safety training where undertaking formal quad bike training is impractical.	Interagency group with support from DNPSR and DTESB.	December 2016
2	2.4	Develop and disseminate accessible guidance for recreational users.	DTESB DNPSR	September 2016
	2.5	Work with key stakeholders to develop options for improving operator safety while using quad bikes on private land.	Interagency group	September 2016
Improved operator protection.	2.6	Investigate the feasibility of developing a regulatory framework for quad bike use regarding: mandatory training mandatory wearing of standard compliant helmets prohibitions for children prohibitions for the carriage of passengers.	Interagency group with DPC oversight.	December 2016



Improving quad	bike op	erator skills and safety		
Goal	Number	Initiative	Responsibility	Timeframe
	2.7	Assist with the development of Australian Standards for: • quad bike specific helmets to meet the needs of the agricultural community and consider road use • the design, manufacture, import and supply of quad bikes and side-by-side vehicles to Australia • crush protection devices for sit-astride quad bikes in workplaces following a review of their effectiveness.	OIR	Subject to national timelines.
	2.8	Contribute to the development of a quad bike and side-by-side vehicle star rating program following a review of the programs feasibility.	OIR	Subject to national timelines.
	2.9	Review the Rural Plant Code of Practice 2004 and the Forest Harvesting Code of Practice 2007 to ensure mechanisms to improve safety on quad bikes such as helmet use and passenger restrictions are included and explicit.	OIR DAF	December 2016
	2.10	Investigate options for targeted and coordinated compliance campaigns across all sectors where quad bikes are used.	Interagency group – OIR to lead.	December 2016
Ensure quad bike safety policy is informed by robust evidence of quad bike safety hazards, the effectiveness of risk control measures and attitudes towards safety.	2.11	Undertake benchmark research to determine attitudes and behaviours towards quad bike safety (including seeking feedback on the best way to influence attitudes and decisions relating to purchasing and operating quad bikes). This research will serve as a pre-campaign market analysis. Key stakeholders will be periodically surveyed to measure improvements and identify key areas for further work.	Interagency group – OIR to lead.	Initial research by March 2016.
	2.12	Work with Queensland Ambulance Service, Royal Flying Doctor Service, Queensland Injury Surveillance Unit, Emergency Department Information System and trauma units to set up regular reporting on quad bike related incidents and injuries.	Interagency group	June 2016



ioal	Number	Initiative	Responsibility	Timeframe
2.13	2.13	Work with key health data custodians (Queensland Ambulance Service, Royal Flying Doctor Service, Queensland Injury Surveillance Unit, Emergency Department Information System and trauma units) to investigate opportunities for training of clinical personnel recording data and opportunities for improvements to the data to increase detection and capture of quad bike cases and circumstances.	Interagency group	June 2016
	Review the standardised investigation form for quad bike and side-by-side vehicle related fatalities to determine the appropriate data needed to be captured and to investigate ways to increase uptake and inter-jurisdictional use of the form.	OIR QPS DNPSR	June 2016	
	2.15	Improve investigator training to cover specific issues arising in relation to quad bike and side-by-side vehicle fatalities.	OIR QPS	September 2016





Goal	Number	Initiative	Responsibility	Timeframe
Governments use their investment and purchasing power to lead by example.	3.1	Incorporate quad bike and side- by-side vehicle safe design requirements into state and local government fleet investment procurement arrangements and contracts to influence suppliers to improve quad bike safety.	QPS DNPSR DAF LGAQ	June 2016
	3.2	Where practicable, transition state and local government owned fleets from quad bikes to side—by-side vehicles.	QPS DNPSR DAF LGAQ	June 2018
secure better quad bike safety outcomes.	3.3	Provide examples of good quad bike safety procedure and practice undertaken by state and local governments as employers, to be disseminated to industry and the community.	QPS DNPSR DAF LGAQ	Ongoing
	3.4	Support education and awareness strategies that promote quad bike safety.	Interagency group	Ongoing
Continue to influence quad bike safety on the national agenda.	3.5	Be responsive to national quad bike safety initiatives, messages, research and innovation.	Interagency group	Ongoing
	3.6	Seek improvements in quad bike safety throughout the supply chain such as influencing national quad bike design standards.	OIR OFT	Ongoing



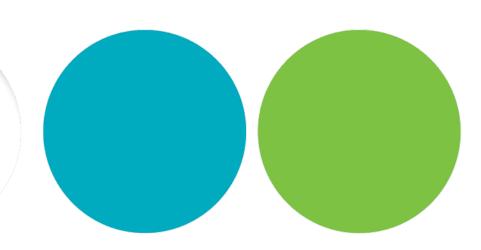
Reporting and evaluation

The initiatives in this plan seek to change the attitudes and behaviours of Queenslanders towards quad bike safety and improve safety outcomes. To determine their success, ongoing and robust monitoring and evaluation is essential.

The plan will be reviewed annually by the interagency group to ensure the priorities remain relevant. Quad bike safety activities undertaken in other jurisdictions or by key industry bodies will also be monitored by the interagency group.

The interagency group will report to the Minister for Employment and Industrial Relations, Minister for Racing and Minister for Multicultural Affairs annually on progress under the plan and review quad bike injury and fatality data in three years to determine any improvements in quad bike safety outcomes.

Annual progress reports will be made publicly available.



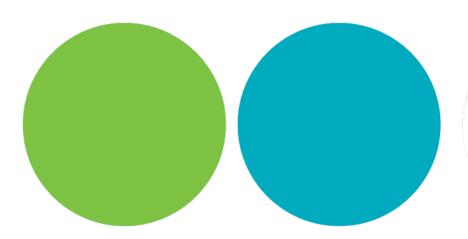
References

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- WorkSafe Victoria, 2009, A handbook for workplaces: Quad bikes on farms
- Findings of Mr John Lock, Deputy State Coroner, August 2015, Inquest into nine deaths caused by quad bike accidents - www.courts.qld. gov.au/courts/coroners-court/findings#2015.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, Po.
- Safe Work Australia, September 2015, QuadWatch www.safeworkaustralia.gov.au/sites/swa/whs-information/ agriculture/quad-watch/pages/quad-watch and the National Coronial Information System, July 2015.
- 5. Vallmuur K, Watson A and Catchpoole C, 2015, *Quad Bike-Related Injuries in Queensland: Final Report*, The Centre for Accident Research and Road Safety Queensland University of Technology, P21
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology.
- Safe Work Australia, September 2015, QuadWatch www.safeworkaustralia.gov.au/sites/swa/whs-information/ agriculture/quad-watch/pages/quad-watch and the National Coronial Information System, July 2015.
- 8. Safe Work Australia, September 2015, *QuadWatch* www.safeworkaustralia.gov.au/sites/swa/whs-information/agriculture/quad-watch/pages/quad-watch and the National Coronial Information System, July 2015.
- Safe Work Australia, September 2015, QuadWatch www.safeworkaustralia.gov.au/sites/swa/whs-information/ agriculture/quad-watch/pages/quad-watch and the National Coronial Information System, July 2015.
- Safe Work Australia, September 2015, QuadWatch www.safeworkaustralia.gov.au/sites/swa/whs-information/ agriculture/quad-watch/pages/quad-watch and the National Coronial Information System, July 2015.
- Safe Work Australia, September 2015, QuadWatch www.safeworkaustralia.gov.au/sites/swa/whs-information/ agriculture/quad-watch/pages/quad-watch and the National Coronial Information System, July 2015.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P21.

- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P21
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P21.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P75.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P76.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology.
- 18. Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety Queensland University of Technology, P76. (Note however that there are data limitations in the recording of work/ farming/recreational activity and when taking into consideration the location of the incident, work/farm-related incidents could account for up to half of the cases, potentially reducing recreational cases to approximately half).
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P75.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P32.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P32
- 22. WorkSafe Victoria, 2009, A handbook for workplaces: Quad bikes on farms.
- Vallmuur K, Watson A and Catchpoole C, 2015, Quad Bike-Related Injuries in Queensland: Final Report, The Centre for Accident Research and Road Safety – Queensland University of Technology, P75.



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References

- 24. Workplace Health and Safety Queensland, Section 19, Work Health and Safety Act 2011.
- 25. Workplace Health and Safety Queensland, Part 2, Division 3, Work Health and Safety Act 2011.
- 26. Workplace Health and Safety Queensland, Section 203, Work Health and Safety Regulation 2011.
- 27. Workplace Health and Safety Queensland, Section 214, Work Health and Safety Regulation 2011.
- 28. Workplace Health and Safety Queensland, Section 213, Work Health and Safety Regulation 2011.
- 29. McBain-Rigg K.E, Franklin R.C, McDonald G.C and Knight S.M, 2014, 'Why Quad Bike Safety is a Wicked Problem: An Exploratory Study of Attitudes, Perceptions, and Occupational Use of Quad Bikes in Northern Queensland, Australia.' *Journal of Agricultural Safety and Health*, P33–50.

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