

Motorcycling is an affordable, enjoyable and convenient transport mode and a popular pastime for a growing number of Western Australians. The rate of serious crashes involving motorcyclists is also steadily increasing and supporting initiatives that will keep motorcyclists safe on our roads will reduce the impact of road trauma while providing Western Australians with the freedom to choose from a range of transport options.

In 2016, although accounting for only approximately 6 per cent of the State's registered vehicles¹, 20 per cent of people killed² and 21 per cent of people seriously injured³ in traffic crashes in Western Australia (WA) were riding motorcycles.

In June 2017, RAC conducted a survey of both motorcyclists and drivers. The online survey was completed by 2,741

respondents (2,317 motorcyclists and 424 drivers) aged over 18 years from across WA (83 per cent from the Perth metropolitan area and 17 per cent from regional WA). The survey was largely exploratory in nature with an overall aim of better understanding motorcycle usage, riding behaviour, and attitudes and perceptions of WA road users about motorcycling.

Respondents who identified as being both a driver and a motorcyclist were classified as motorcyclists and age, gender and location sampling quotas were applied. The margin of error at the total WA population level for motorcyclists is ±2 per cent and for drivers is ±4 per cent.

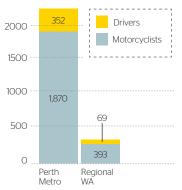


Figure 1 » Respondents by Region⁴

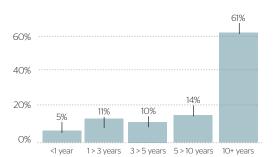


Figure 2 » Years of motorcycling experience⁵

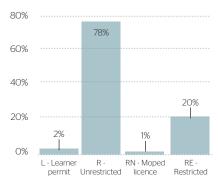


Figure 3 » Motorcycling licences held6



ABS (2017), "Motor Vehicle Census, Australia, 31 Jan 2017", CAT No. 9309.0 http://www.abs.gov.au/ausstats/abs@.nsf/mf/9309.0

²Bureau of Infrastructure, Transport, and Regional Economics (2017), "Australian Road Deaths Database." https://bitre.gov.au/statistics/safety/fatal_road_crash_database.asp.

3Data provided to RAC by the WA Road Safety Commission

Values differ from total number of respondents, as those who did not specify a region of residence were excluded from this graph

Values do not add to 100 due to rounding Values do not add to 100 due to rounding

Motorcycling in WA

Understanding the demographic of WA motorcyclists, their frequency and purpose for riding, and which motorcycles they choose to ride provides insight into why certain groups appear to be exposed to different and varying types of risk while motorcycling.

The survey has revealed that there are differences between riders of different ages, categories of motorcycle, and frequency and purpose for riding. Males (84 per cent), those aged 35 to 54 years (53 per cent) and living in the Perth Metropolitan area (83 per cent) are the most likely to ride motorcycles, and most WA motorcyclists are experienced riders with unrestricted (R) licences (78 per cent) and more than ten years of riding experience (61 per cent).

Riders younger than 35 years are the most likely to ride high performance sports bikes or naked street fighter motorcycles (71 per cent), while motorcyclists over 55 years tend to ride cruisers or touring style motorcycles (48 per cent).

Almost three in four riders use their motorcycle as a primary means of transport. Significantly more riders in the 18 to 34 year age group commute using their motorcycle more than five days per week (34 per cent) compared to riders aged 35 to 54 years (25 per cent) or riders aged 55 years or more (22 per cent).

Around one in five riders in the 18 to 34 and 35 to 54 years age range ride for any purpose as infrequently as once per fortnight (18 per cent and 22 per cent respectively). As well as resulting in less overall riding experience, riding infrequently can result in depreciated riding skills over time, particularly if returning to riding following an extended break, or riding powerful modern motorcycles without having undertaken additional training8.

The survey showed that riders aged 35 to 54 years are significantly more likely to have already completed post-licence training (33 per cent) than younger riders or riders aged 55 years or more. However riders aged 35 to 54 years and those aged 55 years or more are also significantly more likely to state that they wouldn't consider undertaking postlicence training in the future (21 per cent and 22 per cent respectively), usually citing their existing level of skill and years of experience as the reason.

"I have had my licence for over 35 years and have ridden many different motorcycles. I consider myself extremely experienced."

14%

100%

9%

100%

15%

19%

- Motorcyclist

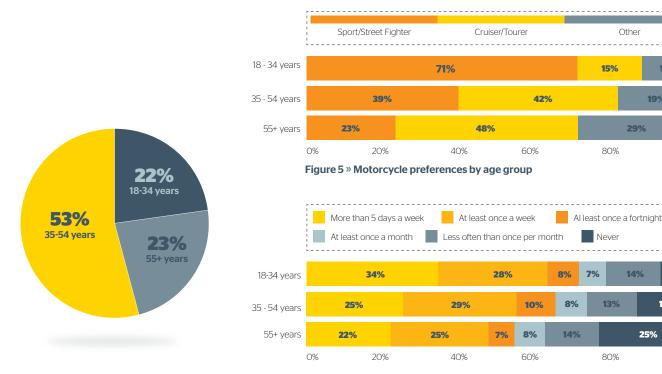


Figure 4 » Motorcyclists by age-range9

Figure 6 » Frequency of motorcycle use for regular commuting by age¹⁰

Bureau of Infrastructure, Transport, and Regional Economics (2017), "Australian Road Deaths Database." https://bitre.gov.au/statistics/safety/fatal road crash database.aspx. Data is for the five years to 2016 au/Your-Safety/Safety-Topics/Motorcyclists/Motorcycle-Safety-Review

[&]quot;Road Safety Commission (2015). "Motorcycle Safety Review". https://www.rsc.wa.gov.au/Your-Safe "Values do not add to 100, as those who did not specify their age were excluded from this graph ™Values do not add to 100 due to rounding

Safe Motorcycling

Due to the nature of the vehicle they ride, motorcyclists are inherently more vulnerable to injury. Understanding the actions they take to protect themselves while riding can indicate whether adequate training, safety gear, and safety related technology is currently available to WA riders.

WA motorcyclists almost always wear helmets (99 per cent) and more than 90 per cent of riders report wearing gloves or a motorcycle specific jacket most of the time. Just under half (44 per cent) frequently wear full safety gear (helmet, motorcycling specific jacket, gloves, trousers and shoes), with riders of cruiser style motorbikes (35 per cent) and mopeds (15 per cent) the least likely to do so.

Motorcyclists who wear high visibility gear are likely to be riders of motorised scooters (32 per cent) or sports bikes (23 per cent). Cruiser riders are the least likely to wear these items, with 44 per cent never or rarely wearing motorcycle specific trousers when riding and only 63 per cent frequently wearing motorcycle specific shoes.

Motorcycles with safety features that can prevent crashes from occurring are becoming increasingly available, and the proportion of riders who use motorcycles with such safety features fitted may be a determinant of casualty rates¹¹.

The survey found that automatic headlights and Anti-lock Braking Systems (ABS) are the two most common safety features fitted to motorcycles, 58 and 43 per cent, respectively.

Drivers and motorcyclists are equally concerned about the visibility of motorcyclists to drivers, and 56 per cent and 44 per cent respectively considered this to be the greatest threat to the safety of motorcyclists, with drivers being particularly concerned about safely merging and overtaking around motorcyclists (44 per cent).

"I went to change lanes and had not seen the motorcycle. Another road user beeped and I saw the rider out of the corner of my eye. Went back into my own lane and avoided impacting the rider."

- Driver

"I was approaching a stop sign when driver of vehicle (sic) behind me drove into the rear of my motorcycle."

- Motorcyclist

Approximately 6 per cent of surveyed motorcyclists reported having been involved in at least one crash and more than half (55 per cent) reported having had at least one near miss in the previous 12 months.

Of those motorcyclists that were involved in a crash, 64 per cent reported that losing control of their motorcycle when braking or cornering was a precipitating factor, with 32 per cent of these respondents stating that they had been attempting to navigate a bend or a corner at the time of the crash, and almost one quarter (24 per cent) reporting that a wet, unfinished or gravelly road surface had been the main cause of the crash.

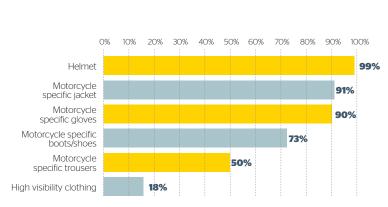


Figure 7 » Protective clothing worn by motorcycle riders

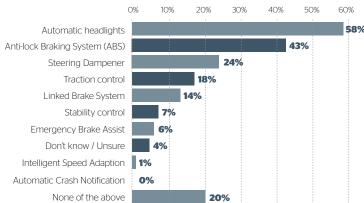


Figure 8 » The proportion of motorcycles fitted with safety features

Looking forward

A greater exposure to risk including the potential for direct impact with the road, the surrounding road infrastructure and with other vehicles is at times compounded by the limited visibility of motorcyclists to other road users12. The survey has revealed a number of factors which could improve the overall safety of motorcyclists in WA.

- Clarification of the legislation relating to lane splitting and lane filtering was identified by both motorcyclists (72 per cent) and drivers (63 per cent) as an important initiative in improving the safety of motorcyclists. This clarification would assist and reinforce with motorcyclists and drivers the dangers posed by certain manoeuvrers and encourage safe riding behaviours.
- The introduction of a star rating system for motorcycle helmets and protective clothing would provide motorcyclists with consistent and comparable information on the levels of protection and comfort offered by safety gear that is available to purchase.
- Consideration of motorcyclists during road and intersection design, and in planning processes related to road maintenance and roadside infrastructure management can mitigate some of the risk of motorcyclist crashes occurring in the first place, and may also reduce their impact in situations where they do occur¹³.
- Evidence suggests that riding unfamiliar motorcycles is a significant risk factor for serious motorcycle crashes and the WA Road Safety Commission reports that one in three motorcyclists who were fatally injured between 2013 and 2014 were riding borrowed motorcycles¹⁴. Safety and bike-handling focussed post licence motorcycling training

- courses may be useful to a large number of riders.
- Improving the safety of the WA motorcycle fleet itself, through the mandatory introduction of safety technology like ABS, is likely to result in significant reductions in WA's motorcyclist casualty rate.

WA has the unenviable position of having one of the the poorest road safety performance of all Australian States and Territories. Motorcyclists make up a disproportionate percentage of people killed and seriously injured on our roads. A collective effort by Government and the community, both motorcycle riders and drivers, is required to provide a safe road environment for all road users.

What is Lane Filtering/Splitting?

Lane Splitting: When a rider moves past/between vehicles that are moving greater than 30 km/h. Lane Filtering: When a rider moves past/between vehicles that have stopped or are moving less than 30 km/h.

Is Lane Filtering/Splitting legal?

While not banned in WA, lane splitting/filtering is a practice which may contravene the road rules if the rider does not signal before a lane change, rides with the wheels on the lane line, crosses continuous lane lines, overtakes on the left and so on.



⁹Road Safety Commission (2015), "Motorcycle Safety Review". https://www.rsc.wa.gov.au/Your-Safety/Safety-Topics/Motorcyclists/Motorcycle-Safety-Review

¹⁹Austroads (2016). "Infrastructure improvements to reduce motorcycle casualties". Research Report AP-R515-16

¹⁴Road Safety Commission (2015), "Motorcycle Safety Review". https://www.rsc.wa.gov.au/Your-Safety/Safety-Topics/Motorcyclists/Motorcycle-Safety-Review