

Drivers Who Pass Cyclists Too Close

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Abstract

Minimum passing distance laws have been introduced in many Australian jurisdictions to prevent crashes occurring when motorists overtake cyclists. This study aimed to understand the factors underlying noncompliance, to increase the benefits of these laws. Findings showed that the 47.6% of drivers who self-reported that they did not comply were more likely to disagree with the rule being introduced, agree that it makes passing more difficult, disagree that it makes the roads safer for cyclists, and be uncertain about their ability to judge whether they have left a metre. These findings suggest messaging to drivers is critical for increasing compliance.

Background

Drivers passing cyclists too close contribute to rear-end and sideswipe crashes (and arguably falls) as well as intimidation, which may discourage cycling. In response, minimum passing distance (MPD) laws have been introduced on a permanent or trial basis in many Australian jurisdictions, in 26 US states (National Conference of State Legislators, 2016) and in some European countries. Queensland observations show that 88% of drivers comply with the requirement to give at least one metre distance in 60 km/h or lower speed zones, and 79% comply with the 1.5 metre requirement in higher speed zones (Schramm, Haworth, Heesch, Watson, & Debnath, 2016).

Previous research shows greater passing distances when there are more (Mehta, Mehran, & Hellinga, 2015) and wider or bicycle lanes (Love et al., 2012; Mehta et al, 2015), when cars rather than vans or trucks are passing (Walker, 2007; Parkin & Meyers, 2010), and in higher speed zones (Chapman & Noyce, 2012 but not Parkin & Meyers, 2010). Findings regarding the influence of cyclist characteristics are mixed (BASFORD, Reid, Lester, Thomson, & Tolmie, 2002; Olivier & Walter, 2013; Walker, 2007; Walker, Garrard, & Jowitt, 2014) and little is known about the influence of driver characteristics. This paper compares the characteristics of drivers who self-reported complying with the Queensland MPD rule to those who did not to inform future educational and other approaches to improving compliance.

Method

For the evaluation of the Queensland MPD trial (which began on 7 April, 2014), 3,759 members of the Royal Automobile Club of Queensland (RACQ) completed an online survey between April and July, 2015. They were asked about their compliance with, knowledge of, and attitudes towards the rule. Members were aged 18 years or over, and had driven a car but not ridden a bicycle on Queensland public roads in the previous year. Drivers who reported they “sometimes”, “most of the time” or “almost always” left less than one metre when passing a cyclist on roads with a speed limit of 60 km/h or less were classified as “non-compliant”. Drivers who responded they “almost never” or “rarely” did so were classified as “compliant”. Multiple variable logistic regression modeling examined whether demographic, driving “exposure” and attitudinal variables were associated with noncompliance among RACQ members who were aware of the rule.

Results

Only 4.6% of drivers reported they were not aware of the rule. Of those who were aware, 47.6% were non-compliant. Non-compliance was associated with disagreement with the rule being introduced, agreement that the rule “makes it more difficult to pass a cyclist,” uncertainty that, as a driver, they could judge if they were leaving at least one metre, and disagreement that “it has made it safer for cyclists”. Compliance was not associated with demographic characteristics, driving “exposure” or agreement that police were enforcing the rule.

Conclusions

Ways of helping drivers to judge passing distance and to improve their understanding of the importance for cyclist safety of leaving a metre should be investigated. It is unclear whether the results would be similar for drivers who were also cyclists (not asked in this study). The relationship between actual and self-reported non-compliance needs further research.

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