

Drivers Who Don't Comply With A Minimum Passing Distance Rule

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Keywords: cyclist safety, minimum passing distance, one metre rule, three foot rule.

1 INTRODUCTION

Drivers passing cyclists too close can 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 [1] and in some European countries. In the State of Queensland, Australia, observations show that 88% of drivers comply with the requirement to give at least one meter distance in low speed zones (60 km/h or lower), and 79% comply with the 1.5 meter requirement in higher speed zones (>60 km/h) [2]. These results are similar to the 84% compliance rate with the "three-foot" (90 cm) passing distance law in Baltimore, Maryland observed by researchers [3]. However, researchers in Spain found that only 64% of drivers comply with the Spanish 1.5 meter rule on rural roads [4].

Previous research has shown that passing distances are greater when there are more lanes [5] and wider lanes or bicycle lanes present [3, 5], when cars rather than vans or trucks are passing [6, 7 but not in 3], and when speed limits are higher [8 but not in 7]. In contrast, passing distances are smaller when there is oncoming traffic [5, 9]. There are mixed findings regarding the influence of cyclist characteristics [6, 10-12], and little is known about the influence of driver characteristics. There is some evidence that drivers who are not cyclists are more frustrated by having to wait behind cyclists [13], but it is unclear whether this frustration translates into more often passing cyclists too closely. 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.

2 METHOD

As part of 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 MPD road rule. Members were 18 years of age or over, and had driven a motor vehicle but had not ridden a bicycle on Queensland public roads in the previous 12 months. Drivers who reported they "sometimes", "most of the time" or "almost always" left



less than one meter when passing a cyclist in low speed zones were classified as "non-compliant". Drivers who responded they "almost never" or "rarely" did so were classified as "compliant". The same classification was used to examine compliance with leaving at least 1.5 meters in high speed zones. Multiple variable logistic regression modeling was used to examine whether demographic, driving 'exposure' and attitudinal variables were associated with noncompliance among RACQ members who were aware of the rule.

3 RESULTS

Only 4.6% of drivers reported they were not aware of the rule. Of those who were aware, 47.6% were non-compliant in low speed zones and 45.9% in high speed zones. In both low and high speed zones, 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 meter (or 1.5 meters), and disagreement that "it has made it safer for cyclists". At higher speed zones only, drivers aged 18-44 years and those who agreed that "it annoys me that cyclists must be given this much clearance" were also more likely to be non-compliant. Compliance was not associated with other demographic characteristics (gender, education, place of residence), driving 'exposure' (frequency of driving, km driven per year or type of vehicle most commonly driven) or agreement that police were enforcing the rule.

4 CONCLUSIONS

Many drivers report non-compliance with the MPD road rule. Ways of helping drivers to judge passing distance and improving their understanding of the importance for cyclist safety of leaving a meter in lower speed zones and 1.5 meters in higher speed zones should be investigated.

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