

To: Transport & Health Policy Makers, & Practitioners
From: Prof Adrian Davis, TRI, Edinburgh Napier University
Date: December 21st 2023
Subject: Essential Evidence 4 Scotland No.78 Close passes:
Drivers overtaking cyclists

Top line: The level of liability apportioned to the cyclists in relation to close passes by drivers was higher from drivers who were not cyclists themselves, compared with those who did cycle.

Encouraging travel by bicycle forms an important part of many local and national government transport strategies due to the wider societal benefits such as reduced congestion, cleaner air, improved public health and reduced demand on health services. The perceived and actual dangers to cyclists posed by motor traffic are a barrier to many people undertaking travel by bicycle and aggressive driver behaviours are an important factor in this perception. Driver appraisal of on-road situations involving cyclists can result in increased driver frustration and decreases in safe behaviours around cyclists. Negative attitudes towards cyclists have been linked to a lower level of road rule knowledge. A study by Rissel¹ et al tested drivers' general rule knowledge against broad attitudes to cyclists. Christmas et al² found that perceived social pressure from other drivers following behind was a factor in driver decisions to overtake cyclists.

Close passes are the most common type of on-road incident experienced by cyclists where a motor vehicle is involved and are also associated with collisions resulting in deaths and serious injuries. A recent study builds on existing research investigating the underlying causes of close passes by examining responses from a sample of drivers to videos of close passes that were submitted by cyclists as driving complaints to an English county Police force.³ The study extends previous work to examine attitudes to unique identifiable incidents, and drivers' knowledge of on-road practice specific to cycling. The method involved an online survey to record the opinions of UK drivers (n = 293) on the behaviour of the cyclist and driver featured in each of 8 video clips of close passes. The survey recorded participants' road use habits including the range of driving purposes engaged in, their self-defined identity on a driver-cyclist spectrum, and their knowledge of recommended practice for bicycle road positioning. It also included the 'Driving Anger eXpression' (DAX) scale, which scores tendencies towards different forms of anger expression while driving, including use of vehicle manoeuvres to express anger.

These findings support a hypothesis that drivers who also ride a pedal cycle frequently or identify as cyclists will apportion less responsibility to a cyclist reporting a close pass, than drivers who do not cycle themselves. In addition, the results indicate that for people who participate in a wider variety of driving purposes, there is a tendency to attribute greater liability to the cyclists shown in the close pass clips. Thus, drivers who do not also ride a pedal cycle will apportion more liability to a cyclist reporting a close pass, than drivers who also cycle themselves. It also shows that drivers with a stronger tendency for expressing anger through vehicle manoeuvres will view close pass incidents as being of lower risk and attribute more liability to the cyclist, compared to the views of other drivers. Finally, it was shown that better knowledge of recommended cyclist road positioning is a mediating factor that reduces the level of liability apportioned by drivers to cyclists who experience a close pass.

¹ Rissel, C., Campbell, F., Ashley, B., & Jackson, L. 2002 Driver road rule knowledge and attitudes towards cyclists. *Australian Journal of Primary Health*, 8(2), 66–69.

² Christmas, S., Helman, S., Buttress, S., Newman, C., & Hutchins, R. 2010 Cycling, safety and sharing the road: Qualitative research with cyclists and other road users. *Road Safety Web*. Publication, 17.

³ Cubbin, W. et al, 2024 Close passes caught on camera – How knowledge and behavioural norms relate to perceptions of liability when cars overtake cyclists, *Transportation Research Part F: Traffic Psychology & Behaviour*, 100: 308-322.