ACCESS TO VEHICLE AND RISK OF CRASH IN NOVICE DRIVERS: RESULTS FROM THE DRIVE STUDY

doi:10.1136/injuryprev-2012-040590t.2

1 NY Chen, 1 P Palamara, 2 T Senserrick, 3 M Stevenson, 4 RQ Ivers. 1 C-MARC, Curtin University, Australia; 2 Transport and Road Safety (TARS) Research, The University of NSW, Australia; 3 Accident Research Centre, Monash Injury Research Institute, Monash University, Australia; 4 The George Institute for Global Health, The University of Sydney, Australia

Background Young drivers who drive their own vehicle are at an increased risk of crash, which is hypothesised to be explained by more driving exposure or risky driving. Purpose This study examined this hypothesis among a young driver cohort in Australia. Methods The DRIVE Study collected information on crash risk factors from 20,822 newly licensed drivers aged 17–24 years in New South Wales between 2003 and 2004, and prospectively linked responses to police-recorded crashes, licensing details, and traffic offences. Based on self report, young driver access to a vehicle was categorised as: family vehicle, own vehicle, other vehicle, and no access. Poisson regression was used to model crash risk (average follow-up = 2 years) by type of vehicle access, controlling for confounders including driving exposure and risky driving behaviours. Results/Outcomes Drivers with their own vehicle were more likely to report high weekly driving hours, more risky driving behaviours and hazardous drinking. After controlling for demographics and confounders including risky driving behaviours, they had a 30% higher crash risk (RR 1.3, 95% CI 1.2 to 1.5) compared with those with access to a family vehicle, and dropping to 20% (RR 1.2, 95% CI 1.1 to 1.4) when further controlling for driving exposure. Significance/Contribution to the Field This study affirms that, compared with those who have access to a shared family vehicle, young drivers with access to their own vehicle have an increased crash risk, regardless of their longer driving exposure and frequent risky driving behaviours. Further research is required to understand whether restricting car ownership is an effective intervention to reduce young driver crashes.