0663 REGIONAL DIFFERENCES IN PEDAL CYCLIST INJURIES IN NEW ZEALAND: RISK IN SCARCITY?

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Aim To assess regional differences in the risks of traffic injuries to pedal cyclists that resulted in death or hospital inpatient treatment in relation to time spent cycling and time spent travelling in a car

Methods Cycling injuries were identified from the Mortality Collection and the National Minimum Dataset. Time spent cycling and time spent travelling in a car/van/Ute/SUV as driver or passenger was computed from National Household Travel Surveys. There are sixteen census regions in New Zealand, some of which were combined for this analysis to ensure an adequate sample size, resulting in eight regional groups. Analyses were undertaken for 1996–1999 and 2003–2007.

Results The risk of injuries per million hours spent cycling varied widely across regions (ranging from 11 to 33 injuries during 1996–1999 and from 12 to 78 injuries during 2003–2007). The expected number of cycling injuries increased with increasing annual total time spent cycling but at a decreasing rate after adjusting for total time spent travelling in a car. The risk of cycling injuries decreased with increasing annual per capita time spent cycling. However, the risk increased with increasing annual per capita time spent travelling in a car. There was an inverse association between the injury risk and the ratio of time spent cycling to time spent travelling in a car.

Conclusion The findings indicate the 'risk in scarcity' effect for New Zealand cyclists, that is, the risk profiles of cyclists will worsen if less people use a bicycle and more use a car.