works to reduce them. As there is good evidence that reducing the speed and volume of traffic reduces casualty rates, some have suggested that implementing traffic calming, and doing so particularly in areas where there are high rates of deprivation, might reduce not only overall casualty rates, but also area level inequalities in casualties. However, there have been few studies that have tested this suggestion empirically. 20 mph zones are a type of area wide traffic calming that use engineering measures to physically reduce traffic speeds. Recent research has shown these zones to be very effective in reducing injuries. We examined the impact that 20 mph zones have had on socio-economic injury differentials in London. Over the last two decades, London has implemented 400 20 mph zones, including 235 targeted at areas of high deprivation. Using 20 years of road injury data, we estimate that the implementation of 20 mph zones has reduced the relative difference in the number of casualties between the most deprived and least deprived areas of London by 15%. However the potential of 20 mph zones to contribute to future reductions in injury inequalities is limited. Extending 20 mph schemes to all areas where it is cost-effective to implement them would reduce differentials by a further 1%.

0890 THE IMPACT OF 20 MPH SPEED ZONES ON SOCIO-ECONOMIC INEQUALITIES IN ROAD CASUALTIES IN LONDON

R Steinbach*, C Grundy, P Edwards, P Wilkinson, B Armstrong, J Green Correspondence: London School of Hygiene and Tropical Medicine, 15–17 Tavistock Place, WC1H 9SH, UK

10.1136/ip.2010.029215.890

While socio-economic inequalities in road casualty risk are well documented, there is little evidence available on what