

Road Safety Research Briefing 1:

Children and Traffic: Those in deprived areas still at disproportionate risk

O'Toole, S., & Christie, N. (2018). Deprivation and Road Traffic Injury Comparisons for 4 to 10 and 11 to 15 year-olds. *Journal of Transport and Health*. doi:10.1016/j.jth.2018.08.003
<https://www.sciencedirect.com/science/article/pii/S2214140518300756?via%3Dihub>

What we did:

The proportion of children killed or seriously injured (KSI) in road traffic collisions in England during 2016 were compared across 4–10 years-olds and 11–15 years-olds, deprivation level (IMD quintiles), mode of transport, and gender. Children's exposure in the traffic environment was also taken into account. This project was funded by the Road Safety Trust.

What we found:

- Decades after initial work highlighted the increased risk of road traffic injury for individuals from deprived backgrounds, this socio-economic inequality, although reduced, remains, especially for pedestrians.
- Younger and older children, particularly males, in the most deprived areas were at the greatest risk of road traffic injury across all modes of transport.
- Children in the most deprived neighbourhoods were nearly three times more likely to be KSI as a pedestrian.
- Although the rate of children KSI was smaller for cyclists and car occupants, young children in the most deprived quintile were over six times more likely to be KSI as a cyclist than children and older children residing in the most deprived area were over four times more likely to be KSI as a car occupant and nearly two times more likely to be KSI as cyclists compared to their peers in the least deprived neighbourhoods.

Policy implications:

- Current monitoring of road casualties (STATS 19) does not routinely collect deprivation data and focuses on variables that result in understanding collisions in terms of active human errors, such as the child failing to properly look before crossing. Little attention has been given to latent environmental conditions, like lack of safe play areas, which represent significant risks in deprived areas.
- Identifying those most at risk means that more targeted intervention work can be carried out in order to reach those that are most vulnerable.
- A public health perspective is needed to understand the social, economic, and environmental factors that give rise to inequalities.
- There are co-benefits of integrating road safety and public health, such as encouraging active travel (walking and cycling) and improving health and well-being.