PRIMARY INJURY PREVENTION AND MORTALITY FROM MOTOR VEHICLE CRASHES AMONG CHILDREN AND ADOLESCENTS IN THE USA: FROM SAFETY BEHAVIOURS TO HEALTHY ENVIRONMENTS

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Every year, over 1800 children die and more than 200 000 are injured in motor-vehicle crashes in the USA, increasing the economic burden associated with medical care/rehabilitation and years of potential life lost. The majority of deaths and injuries are preventable and involve improper use of restraint devices and alcohol, high speeds and built environments that promote vehicle performance. Studies evaluating the impact of environmental modifications on childhood fatal motor vehicle injuries have not been executed in the USA at the national level. The objective of this research is to evaluate the effects that primary prevention policies have had on reducing mortality from motor-vehicle crashes among children and adolescents in the USA.

This is a retrospective study based on 1997–2005 data from the FARS, the IIHS, the US Census, US Presidential elections and US Labour Statistics using negative binomial regression with fixed-effects. I expect to find significant reductions in the proportion of deaths among states with primary enforcement of restraint laws, driver education programs and checkpoints compared with states with secondary/inexistent laws. I also expect to find mortality reductions among states with speed reduction and traffic calming measures compared with states without such measures.

This study evaluates the effects of primary injury prevention policies on fatal injuries from motor vehicle crashes among children and adolescents at the national level using a longitudinal perspective. Results may be useful to policy-makers and public health practitioners involved in injury prevention and public health.