IMPACT OF SMOKE-FREE VEHICLE LEGISLATION ON
CHILDHOOD HOSPITALISATIONS FOR ASTHMA:
SCOTLAND-WIDE STUDY OF 32,342 HOSPITALISATIONS
OVER 19 YEARS

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Background In Scotland, childhood asthma hospitalisations fell in March 2006 following legislation to prohibit smoking in public places, and again in March 2014 following a mass-media campaign (Take It Right Outside TIRO). In December 2016, new Scottish legislation banned smoking in vehicles. It is unknown if this produced additional benefit.

Objectives To use interrupted time series analysis to determine the presence of a change in trend for asthma admissions to hospital in Scotland after the ‘car ban’ smoking legislation was introduced.

Methods Data were obtained on all asthma emergency hospitalisations in Scotland between 2000 and 2018 for individuals aged <16 years. Interrupted time series analyses studied changes in monthly incidence following the introduction of smoke-free vehicle legislation, taking account of TiRO (2014) and the smoke free public spaces legislation (2006). Sub-group analyses were undertaken by age and area-deprivation, and the analyses repeated for a control condition, gastroenteritis.

Results Analyses repeated for a control condition, gastroenteritis. Analyses were undertaken by age and area-deprivation, and the smoke free public spaces legislation (2006). Sub-group analyses in March 2006 following legislation to prohibit smoking in public places, and again in March 2014 following a mass-media campaign (Take It Right Outside TIRO). In December 2016, new Scottish legislation banned smoking in vehicles. It is unknown if this produced additional benefit.

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