Surveys show exposure to smoking in cars among Year 10 children is not decreasing: time for the Government to act

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The health effects of secondhand smoke (SHS) for children include increased risk of Sudden Infant Death, respiratory tract infections, exacerbations of asthma and ‘glue ear’.1 Levels of SHS in cars are very high, making SHS exposure in cars a particularly severe health hazard.2 Many countries, including the UK and states and provinces in Australia, Canada and America, have introduced legislation to prohibit smoking in cars where children are present.

In 2010, the Māori Affairs Select Committee (MASC) recommended the Government should investigate legislation to ban smoking in cars carrying children.3 In response, the Government acknowledged the heightened degree of risk to children from SHS exposure in cars and agreed to consider options (with an emphasis on non-legislative options) for extending smokefree restrictions to vehicles.4 In October 2015 a petition presented to Parliament by Patu Puauahi Tai Tokerau/Smokefree Northland prompted a Health Select Committee investigation and subsequent recommendation that the Government introduce legislation or other measures to ban smoking in cars carrying children under the age of 18 years.5

The Government’s response on 2 March 20176 acknowledged the serious health risks of SHS and stated that “present initiatives are sufficient to deter smoking in cars carrying children under the age of 18 years”.

However, the only sustained national non-legislative intervention was a mass media campaign that ran from 2006–2008. Since the MASC report there has been intermittent implementation of the previous campaign in 2012 and 2013, and occasional local or regional initiatives supported by community partnership grants. Previous research found that 14–15 year-old students continued to be heavily exposed to SHS in cars in 2012, with 23% reporting exposure in the last week, and higher among priority groups students.7 There is no published evidence we are aware of that demonstrates exposure of children to smoking in cars has declined subsequently, and hence no evidence to support the Government’s claim that current initiatives are ‘sufficient’. In order to help provide the required evidence, we report an analysis of recent trends in SHS exposure in cars incorporating updated (2013–2015) data from the ASH Year 10 surveys.

Methods and results

The surveys between 2006 and 2015 included between 19,000 and 29,500 students who were asked whether, in the past week, others had smoked around them in a car or van (except in 2011–see footnote Figure 1). Figure 1 shows trends in the proportion of students reporting exposure in the last week for all students and stratified by ethnicity.
Exposure among all students declined from 30.0% in 2006 to 24.0% in 2011, and to 18.5% in 2013. The decrease was less in 2014, and by 2015 had increased slightly to 19.8%. An increase between 2014 and 2015 occurred in all ethnic groups. There was a marked increase in exposure from 11.0% in 2013 to 15.3% in 2015 among Asian students. Compared to European students, exposure was consistently greater among Māori and Pacific students, and least common among Asian students, except in 2015. In 2015, 32.3% of Māori and 26.0% of Pacific students reported exposure smoking in cars in the last week. If the exposure reported in 2015 in the survey applied to all Year 10 students, then we estimate that 11,787 14–15 year-olds were exposed to smoking in cars each week in that year.

Data were available on frequency of exposure from the 2011 survey. A previous analysis demonstrated that among Year 10 students reporting any exposure to smoking in cars in the last week, 56% reported in-vehicle exposure on three or more occasions. This figure was higher for Māori students (63%) and students from lower decile schools (61%).

No data are collected on exposure among younger children so numbers exposed must be estimated using assumptions. Statistics New Zealand estimates the 0–14 year-old population was 915,300 as at June 2015, so even if the average prevalence of exposure across the full age range were only half that reported by Year 10 students in 2015, over 90,000 children are exposed to smoking in cars each week.
Policy implications

These findings suggest that exposure to SHS through smoking in cars continues to be a significant health hazard for many thousands of school students and children in New Zealand, particularly for Māori and Pacific children, who bear a disproportionate burden of SHS-related illness.

Because the recent decline in exposure halted between 2014 and 2015, and our findings suggest may even have increased, the Government's assertion that current initiatives are sufficient to protect children is clearly incorrect.

We encourage the Government to reconsider its decision and introduce a smokefree cars legislation in order to protect children from the adverse health effects of SHS exposure and help reduce inequalities in health among children. To maximise the impact of a new legislation, the Government should also re-instigate health promotion campaigns to educate the public, particularly people who smoke, about the importance of not smoking in cars, and to inform about and set out the rationale for the new legislation. This approach will ensure that the legislation is well understood, reduce the need for enforcement and, most importantly, maximise compliance and protection of children from secondhand smoke.

Competing interests:
Nil.

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