



ASH Scotland Second-hand smoke in cars

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Key points:

- second-hand smoke (SHS) exposure is associated with a number of serious health risks
- children are particularly vulnerable to the effects of SHS
- SHS can reach high levels in cars
- currently twelve jurisdictions have smoke-free car laws to protect children.

Health risks associated with second-hand smoke exposure

There is clear evidence that SHS causes lung cancer and ischaemic heart disease as well as a strong link to adverse effects in children.¹ Exposure to SHS in childhood is associated with reduced lung function, middle ear disease, an increased risk of a range of respiratory symptoms and a higher incidence of respiratory tract infections.² SHS exposure is a cause of Sudden Infant Death Syndrome.³ Children are more vulnerable to the effects of second-hand smoke than adults because of their smaller size, less developed immune systems and faster breathing rates.⁴

Second-hand smoke exposure in cars

There is emerging evidence on the levels of second-hand smoke present in cars and of the serious health hazard this represents for both adults and children.⁵ Ontario Medical Association research shows that SHS levels in cars can be 23 times greater than those in a house.⁶ Other studies have shown that levels of particulate matter in cars where smokers were smoking were similar to those in a smoky pub.^{7 8}

A Scottish study looking at smoking in the home after the smoke-free public places legislation had come into force found that respondents had more robust restrictions on smoking in their cars than in their homes.⁹ However, smoking in cars occurs at a higher rate in deprived populations so may contribute to health inequalities.¹⁰

Public support for smoke-free car laws

A review of studies into public attitudes found high levels of public support for smoke-free car laws designed to protect children. The researchers found that in six surveys carried out since 2005 there was high levels of public support for laws banning smoking in cars carrying children, with 90% or more support in four of the studies.¹¹

Overview of smoke-free car laws

Over recent years a number of states, provinces and territories have adopted laws banning smoking in vehicles carrying children. The age at which smoke-free car laws apply differs between jurisdictions. As yet there is no available evidence on the enforcement of smoke-free car laws or levels of compliance.

Australia

Laws requiring cars to be smoke-free when children are present have already been adopted in South Australia, Tasmania and most recently New South Wales. The governments of Queensland, Victoria and Australian Capital Territory are considering introducing similar legislation.

Place	Details	Date enacted
South Australia ¹²	Smoking prohibited in motor vehicles if a child under the age of 16 is present	31 May 2007
Tasmania ¹³	Smoking is not permitted in a vehicle if a child under the age of 18 is present	1 January 2008
New South Wales ¹⁴	Smoking prohibited in vehicles if there is a person under the age of 16 present	1 July 2009

Canada

Currently four of Canada's thirteen provinces and territories have laws in force which prohibit smoking in vehicles carrying children. Similar measures are presently being considered in Manitoba, New Brunswick, Quebec and Prince Edward Island.

Place	Details	Date enacted
Nova Scotia ¹⁵	Smoking prohibited in any vehicle carrying anyone under the age of 19	1 April 2008
Yukon ¹⁶	Smoking is not permitted in a vehicle in which occupants are under the age of 18 years	15 May 2008
Ontario ¹⁷	It is illegal to smoke in vehicles carrying passengers under age 16	21 January 2009
British Columbia ¹⁸	Smoking not permitted in motor vehicles carrying children under age of 16	7 April 2009

USA states and territories

Four states have laws requiring vehicles carrying children to be smoke-free and bills are currently before several other U.S. state legislatures.

Place	Details	Date enacted
Arkansas ¹⁹	Smoking not permitted in vehicles that require child car seats. A car seat is required when a child is less than 6 years of age and weighs less than 60lbs	21 July 2006
Louisiana ²⁰	Smoking is prohibited in motor vehicles carrying children who are required to be restrained in a child safety seat, booster seat or seat belt, which applies to all children under the age of 13	15 August 2006
California ²¹	Smoking is not permitted in a vehicle carrying youths under the age of 18	1 January 2008
Maine ²²	Smoking is not permitted in cars carrying those under the age of 16	1 September 2008

Puerto Rico ²³	Smoking prohibited in private cars carrying children under the age of 13	2 March 2007
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United Kingdom

Reducing exposure to SHS in cars has been raised as an issue for future tobacco control strategy in the United Kingdom. In 2008 the Department of Health asked for views on whether the Government should do more to reduce exposure to second-hand smoke within private dwellings or vehicles.²⁴ Around two thirds of respondents said the government should take no further legislative action although fifty-three respondents supported smoking being made illegal in moving cars and several respondents suggested there should be no smoking in cars carrying children.²⁵

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¹ Scientific Committee on Tobacco and Health (SCOTH). *Secondhand smoke: review of the evidence since 1998. Update of evidence on health effects of secondhand smoke.* [online] London: Department of Health, 2004. Available from:

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² Ibid

³ Ibid

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¹³ Department of Health and Human Services Tasmania. *Smoke free areas* [online] Hobart: Department of Health and Human Services. Available from: http://www.dhhs.tas.gov.au/about_the_department/structure/groups/chief_health_officer/population_h

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¹⁹ *The Arkansas Protection from Secondhand Smoke for Children Act 2006* [online] Available from: <http://www.arkleg.state.ar.us/ftproot/acts/2006S1/public/act13.pdf> [accessed 14 April 2009]

²⁰ *Act 838 2006* [online] Available from: <http://www.latobaccocontrol.com/documents/pdf/Act%20838%20Law.pdf> [accessed 24 April 2009]

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