



# 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
- a growing number of jurisdictions have smoke-free car laws.

## 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.<sup>1</sup> Exposure to SHS in childhood is associated with a range of illnesses including middle ear disease, lower respiratory tract infection, wheeze and asthma, and appears to increase the risk of bacterial meningitis.<sup>2</sup> SHS exposure is a cause of Sudden Infant Death Syndrome (SIDS).<sup>3 4</sup> 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.<sup>5</sup>

## 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.<sup>6</sup> Studies have shown that levels of particulate matter in cars where people were smoking were similar to those in a smoky pub.<sup>7 8</sup>

Similarly, a recent study carried out on behalf of NHS Greater Glasgow and Clyde by the Scottish Centre for Indoor Air found that the concentration of fine particulate in cars where smoking took place was high and exceeded levels deemed to be unhealthy in outdoor air.<sup>9</sup> As a result of these findings NHS Greater Glasgow and Clyde launched a high profile campaign to raise awareness of the harmful impact of second-hand smoke and to encourage smokers to make their cars smoke-free.<sup>10</sup>

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.<sup>11</sup> However, research conducted in New Zealand found that smoking in cars occurred at a higher rate in deprived populations and so may contribute to health inequalities.<sup>12</sup>

## Public support for smoke-free car laws

An international 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 were high levels of public support for laws banning smoking in cars carrying children, with 90% or more support in four of the studies.<sup>13</sup>

## 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 and similar measures are presently being considered in other jurisdictions. The child 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

Place	Details	Date enacted
South Australia <sup>14</sup>	Smoking prohibited in motor vehicles if a child under the age of 16 is present	31 May 2007
Tasmania <sup>15</sup>	Smoking is not permitted in a vehicle if a child under the age of 18 is present	1 January 2008
New South Wales <sup>16</sup>	Smoking prohibited in vehicles if there is a person under the age of 16 present	1 July 2009
Victoria <sup>17</sup>	Smoking is not permitted in a motor vehicle if a child under the age of 18 is present	1 January 2010
Queensland <sup>18</sup>	Smoking in cars carrying children under the age of 16 years is banned	1 January 2010
Western Australia <sup>19</sup>	Ban on smoking in cars with children under 17 years present	23 September 2010

### Canada

Place	Details	Date enacted
Nova Scotia <sup>20</sup>	Smoking prohibited in any vehicle carrying anyone under the age of 19	1 April 2008
Yukon <sup>21</sup>	Smoking is not permitted in a vehicle in which occupants are under the age of 18 years	15 May 2008
Ontario <sup>22</sup>	It is illegal to smoke in vehicles carrying passengers under age 16	21 January 2009
British Columbia <sup>23</sup>	Smoking not permitted in motor vehicles carrying children under age of 16	7 April 2009
Prince Edward Island <sup>24</sup>	Prohibits smoking in vehicles with persons under the age of 19 present	15 September 2009
New Brunswick <sup>25</sup>	Prohibits smoking in a motor vehicle when a person younger than 16 is present	1 January 2010

Manitoba <sup>26</sup>	Smoking in cars when children under 16 are present is prohibited	15 July 2010
Saskatchewan <sup>27</sup>	Prohibits smoking in vehicles when children under the age of 16 are present	1 October 2010
Newfoundland and Labrador <sup>28</sup>	Prohibits smoking in vehicles while persons under 16 years of age are present	1 July 2011

### USA states and territories

Place	Details	Date enacted
Arkansas <sup>29</sup>	Smoking not permitted in any motor vehicle in which a child under the age of 14 is a passenger	27 July 2011 <sup>30</sup>
Louisiana <sup>31</sup>	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 <sup>32</sup>	Smoking is not permitted in a vehicle carrying youths under the age of 18	1 January 2008
Maine <sup>33</sup>	Smoking is not permitted in cars carrying those under the age of 16	1 September 2008
Puerto Rico <sup>34</sup>	Smoking prohibited in private cars carrying children under the age of 13	2 March 2007

Cyprus<sup>35</sup>, Mauritius, South Africa and Bahrain have also enacted similar laws.<sup>36</sup>

### 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.<sup>37</sup> 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.<sup>38</sup>

At Westminster in June 2011 Alex Cunningham, MP for Stockton North tabled the Smoking in Private Vehicles Bill 2010-11<sup>39</sup> under the Ten Minute Rule Bill proposing that smoking be banned in private vehicles when children present. A second reading debate on the Bill is expected to take place in November 2011.

First Minister of Wales Carwyn Jones announced in July 2011 that that legislation to ban smoking in cars carrying children could be considered if children's exposure to second-hand smoke does not start to fall within the next three years.<sup>40</sup>

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