

# Risks associated with secondhand smoke in cars carrying children

January 10 2011

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While the evidence is incomplete there is enough available to support legislation against letting people smoke in cars with children, states an article in *CMAJ (Canadian Medical Association Journal)*.

This analysis was conducted to settle the matter of risk to children when in a car with second-hand smoke. The authors also wanted to show that although smoking in cars is not 23 times more toxic in a car than in a home it can still be very harmful to children.

"We hope to show that, though the relevant data are rich and complex, a simple conclusion is possible," writes Dr. Ray Pawson, School of Sociology and Social Policy, University of Leeds, United Kingdom with coauthors. "The evidence does not show an absolute risk threshold because a range of environmental, biological and [social factors](#) contribute to the risk equation. The evidence does, however, show conditional truths, and the careful enunciation of each contributory condition is the task of public health science."

While trying to determine the risks involved, the authors first looked at the mixture of chemicals that make up second-hand smoke and its concentration in cars under different conditions such as volume, speed and ventilation. Second, they looked at how long a person would be in the car. Third, they observed how long a person would be exposed to the second-hand smoke. Fourth, the extent of difference between how second-hand smoke affects children compared to adults was added to the risk equation and finally, the authors looked at the [health impact](#), which

is hard to determine because of all the different chemicals and toxins a person is exposed to in their lifetime.

"Policy based on science and evidence has to exist amid uncertainty and this is managed by acknowledging the contingencies," write the authors. "Thus, i) because of the confirmed cabin space, and ii) under the worst ventilation conditions, and iii) in terms of peak contamination, the evidence permits us to say that smoking in cars generates fine particulate concentrations that are, iv) very rarely experienced in the realm of air-quality studies, and that will thus constitute a significant health risk because, v) exposure to smoking in cars is still commonplace , and vi) children are particularly susceptible and vii) are open to further contamination if their parents are smokers."

The authors conclude that there is enough evidence to make a valid decision to legislate against smoking in cars with [children](#).

Provided by Canadian Medical Association Journal

Citation: Risks associated with secondhand smoke in cars carrying children (2011, January 10) retrieved 27 April 2024 from

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