

## Shock findings in Scotland's first smoking in cars study

January 20 2011

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(PhysOrg.com) -- Smoking in a car exposes a child passenger to dangerous levels of poisonous particles ... and even opening a window doesn't protect them.

These are the stark findings of a study commissioned by leading NHS Greater Glasgow and Clyde (NHSGGC) health experts, in collaboration with researchers from the University of Aberdeen.

The findings are so stark that NHSGGC has launched a high profile campaign to persuade the thousands of Scots motorists who continue to smoke and endanger non-smoking passengers to make their cars "smoke free".

The study involved a child sized doll child being fitted in a car seat with the very latest smoke monitoring equipment attached at the doll's mouth so that precise measurements could be taken. The particles of tobacco poison were so high that they compared with the levels you would expect after being exposed to [secondhand smoke](#) in a busy smoke filled pub before the smoking ban.

Brenda Friel, NHSGGC Senior Health Improvement Officer, said: "No one would think twice about the dangers of taking a child into a smoke filled environment yet many drivers don't realise the harm that can be done. Worryingly 15% of UK smokers smoke in the car with children."

Dr. James Y Paton, a Reader in Paediatric Respiratory Medicine, University of Glasgow, said: "This report about the exposure of children to small particles resulting from smoking in cars makes salutary reading and its message is very clear. Do not smoke in cars when your children are present. Do not allow them to travel in a car with anyone who will smoke in the car. It is potentially damaging to their respiratory health."

NHSGGC is giving away 15,000 car stickers bearing the slogan "Our car is smokefree" in an attempt to get the message across that smoking in cars is dangerous not only for people who smoke and their adult passengers but most importantly for children who have no choice but to be in these cars.

Dr James Cant, Head of the British Lung Foundation, Scotland and Northern Ireland, said: "This is a powerful piece of research and it's great to see Greater Glasgow and Clyde leading the way in this vital area of public health. It also ties in closely with the British Lung Foundation's ongoing "Children's' Charter". Children's lungs are so easily damaged by exposure to second-hand smoke. For some of them the impact will be seen all too soon and results in emergency admissions to hospital. For others the damage emerges over time with higher levels of adult

respiratory diseases. We know that people want to look after their children and give them the best start in life. Studies like this are vital because they provide people with hard evidence of how their behaviour impacts directly on their loved ones."

The study also proved that the common misconception of opening the window while you smoke in the car doesn't actually help. Opening the window will only reduce harmful air levels slightly and crucially it still doesn't bring it down to a safe level.

Brenda Friel added: "We know that secondhand smoke is very harmful but we wanted to understand in more detail the levels of risk attached to secondhand in smoke in cars with particular emphasis on children. The study has revealed some shocking facts.

"On the back of our findings we believe it is imperative that we raise awareness of the damaging effects of secondhand smoke, especially on children. We are asking people to consider where they smoke and as far as possible take their smoking outside and of course ideally we would encourage them to seek help to give up completely.

"I am sure that there are many people who smoke in a car in which a child is travelling believe that opening the window is enough to protect them from any harmful effects. Our tests prove that this is not the case. I hope very much that through sharing the findings of our study we will help people understand just how damaging secondhand smoke in cars can be."

Children are particularly vulnerable to the effects for a number of reasons including the fact that they breathe faster than adults and therefore inhale more toxins, their respiratory organs are still developing, they have immature immune systems and crucially they cannot remove themselves from the source of the exposure.

The study was carried out on behalf of NHSGGC by the Scottish Centre for Indoor Air, a research collaboration between the University of Aberdeen and the Institute of Occupational Medicine. The study was led by Dr Sean Semple.

Dr Semple said: "The air quality during smoking car journeys is much worse than normal outdoor air pollution levels. The concentration of fine particulate that children would breathe in during these journeys sometimes reaches levels that are similar to those measured in smoky bars prior to Scottish smoke-free legislation. Particulate levels inside these smokers' cars are also comparable to breathing in air in a large industrial city during a major smog event."

ASH Scotland Chief Executive Sheila Duffy said, "I very much welcome this campaign which will raise awareness of the harmful impact of secondhand smoke which increases the risks of developing a variety of health problems. I am delighted that NHSGGC is highlighting the issue, and carrying out a positive campaign to encourage adults not to smoke when children are present. ASH Scotland wants the public to engage in debating how people, particularly children, can best be protected from the harm caused by secondhand smoke wherever they are, and this campaign will help do just that."

## **The dangers of secondhand smoke:**

Secondhand smoke is smoke that is either breathed out by a smoker or comes from the burning end of a cigarette/cigar/pipe.

It contains over 4,000 chemicals, many of which have been confirmed as causing cancer.

There is no safe level of exposure

**Every year in the UK because of exposure to**

## **secondhand smoke:**

10,000 children are admitted to hospital

300,000 visits to their doctors surgery

Can result in 25,000 children under the age of 16 years starting to smoke

The costs to the health service are significant

## **Children are at greater risk of:**

Cot death

Breathing problems: asthma, pneumonia, bronchitis, lower respiratory infection

Glue ear: can cause deafness

## **Tips for a smokefree car:**

Try to always take [smoking](#) outside

Try to make your car a smokefree car at all times for everyone

Have a cigarette before and after your journey

On long car journeys, stop, have a break and smoke outside the car

Remove car cigarette lighters

Clear out car ash trays

Provided by University of Aberdeen

Citation: Shock findings in Scotland's first smoking in cars study (2011, January 20) retrieved 25 April 2024 from <https://medicalxpress.com/news/2011-01-scotland-cars.html>

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