Asthma health centre

Traffic pollution 'causes asthma in children'

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22nd March 2013 - New research has confirmed what parents in congested towns and cities have thought: poor quality air along busy roads can cause asthma in children.

A study of 10 European cities suggests that around 14% of chronic asthma cases in children are due to traffic pollution. Researchers say the results put exhaust fumes on a par with passive smoking as a trigger for asthma, with the World Health Organisation estimating that between 4% and 18% of asthma cases in children are linked to breathing in second-hand smoke.

The findings mark a departure from accepted wisdom that traffic pollution is a trigger for asthma symptoms and not a cause of the disease.

Air pollution concerns

The findings are published online in the European Respiratory Journal.

There are 5.4 million people with asthma in the UK, which means asthma affects one in five households. According to Asthma UK, two thirds of people (66%) say that traffic fumes make their asthma worse. Also:

- 42% find that traffic fumes discourage them from walking or shopping in congested areas
- Nearly a third (29%) of people with asthma say that a reduction in air pollution is the single thing that would make the most difference to their quality of life
- 85% of people with asthma say they are concerned about the effect that increasing vehicle fumes will have on their and their family's health in the future

The study, led by Swiss and Spanish researchers, used data from across Europe, although the UK was not included.

Lead author Laura Perez from the Swiss Tropical and Public Health Institute, says in a statement: "Air pollution has previously been seen to trigger symptoms but this is the first time we have estimated the percentage of cases that might not have occurred if Europeans had not been exposed to road traffic pollution."

Urban planning

The authors say their findings should be included in future planning of busy roads and residential areas. "In light of all the existing epidemiological studies showing that road-traffic contributes to the

onset of the disease in children, we must consider these results to improve policy making and urban planning," Laura Perez says.

Emily Humphreys, head of policy and public affairs at Asthma UK says in an emailed statement: "This latest study adds to the weight of evidence to suggest that traffic pollution is a cause of asthma rather than just a trigger.

"Traffic pollution is a major source of air pollutants and two thirds of people with asthma tell us that fumes from traffic aggravate their condition. Additionally, 85% of people with asthma tell us they are concerned about the effect that increasing vehicle fumes will have on their and their family's health in the future.

"If traffic pollution is left unchecked in London and other major cities all over the country, it could have a serious impact on the health of the 5.4 million people with asthma in the UK."

http://www.webmd.boots.com/asthma/news/20130322/traffic-fumes-child-asthma