

Exposure to common toxic substances could increase asthma symptoms

September 1 2012

Vienna, Austria: Children who are exposed to polychlorinated biphenyls (PCBs), which were commonly used in a range of industrial products, could be at risk of an increase in asthma symptoms, according to new research.

The study will be presented in a poster discussion this week (Sunday 2 September 2012) at the European Respiratory Society's Annual Congress in Vienna.

[PCBs](#) were regularly used between 1930s and 1970s in a range of electrical equipment, lubricants and paint additives. They were eventually phased out due to the harm they were causing to the environment and animals.

Although they are not widely used now, the toxic substance does not break down easily. It can be transported in water and air and it can exist in the environment, particularly at waste sites, for a number of years.

Researchers from the University of Queensland in Australia examined 240 children to assess the impact PCBs are having on [asthma symptoms](#). They measured the levels of PCBs found in their blood, along with three pesticides, and also assessed prevalence of wheeze, a common symptom of asthma. The results found that overall, those with higher levels of PCBs were more likely to report wheeze (odds ratio 1.61). The findings also suggest that the link between PCBs and wheeze was stronger in non-atopic (non-allergic) asthma.

Lead author, Professor Sly, from the University of Queensland, said: "Despite PCBs being banned from use in many countries, people are still suffering from the effects of these [toxic substances](#). Our findings suggest that people with high levels of the chemicals in their [blood stream](#) are suffering from higher levels of wheeze, a common asthma symptom.

"This could be due to high [concentration levels](#) being passed from a mother to a baby while in the womb, or PCBs may be ingested if a person consumes contaminated food. They could also be inhaled from contaminated [hazardous waste](#) sites."

Provided by European Lung Foundation

Citation: Exposure to common toxic substances could increase asthma symptoms (2012, September 1) retrieved 3 May 2024 from <https://medicalxpress.com/news/2012-09-exposure-common-toxic-substances-asthma.html>

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