



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

Which Children Develop Asthma in the US

Author(s): Christine Cole Johnson and Aruna Chandran

Who sponsored this study?

This research was supported by the Environmental influences on Child Health Outcomes (ECHO) program, Office of The Director, National Institutes of Health.

Why was this study needed?

Childhood asthma is a major cause of suffering, missed school for children, and missed work for parents. Researchers and doctors need to understand who is more likely *to get* asthma, not just focus on who already has it as other studies have done. That's a step to finding out why certain kids get asthma and preventing it. Using information from children from diverse backgrounds in the United States, this paper describes which children developed asthma from early childhood through adolescence.

Who was involved?

Children younger than 18 years old taking part in 31 studies within the ECHO program

What happened during the study?

The research team found out the ages when children learned from a doctor they had asthma, and the children's race, sex, and what state they lived in. It was also important to collect information on whether their parents had asthma or not.

What were the study results?

The study found that children with at least one parent with a history of asthma had two to three times higher rates of asthma. This higher risk with family history of asthma mostly affected younger children, through four years old. The rates for boys went down with age, but rates for girls stayed about the same, so by the teenage years girls developed asthma more often than boys. Black children were diagnosed with asthma more than white children during preschool years, but less than white children after age 9-10 years.

Footnote: Results reported here are for a single study. Other or future studies may provide new information or different results. You should not make changes to your health without first consulting your healthcare professional.

Impact

This study helps us understand what groups of children are more likely to get asthma. The research shows that young Black children and young children whose parents had asthma develop asthma more often than other groups. Researchers can work to develop new asthma programs to help keep children at highest risk from getting asthma.

What happens next?

Researchers should work on asthma prevention programs for very young children, especially Black children and those whose parents have had asthma.

Where can I learn more?

If you would like to learn more about asthma in children, please visit the [Centers for Disease Control and Prevention](#) or the [National Heart Lung and Blood Institute \(NHLBI\)](#).

Access the full journal article, titled “Childhood Asthma Incidence Rate Patterns from the ECHO Consortium: Identifying High-Risk Groups for Primary Prevention.”

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