



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

How did the COVID-19 pandemic affect the development of infants and toddlers?

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Who sponsored this study?

The Environmental influences on Child Health Outcomes (ECHO) Program, Office of the Director, National Institutes of Health supported this research.

What were the study results?

In this study, up to 15% of infants and toddlers who were developmentally on track prior to the COVID-19 pandemic showed signs of developmental delays during the pandemic. Male children showed more delays than female children, and language was the most affected developmental area. Families from minority communities and those with lower socioeconomic status were more likely to experience pandemic-related hardships. However, financial and social pandemic-related hardships were not associated with the individual changes observed in children's developmental progress.

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.

What was the study's impact?

This study highlights the importance of early developmental screening during times of adversity, such as pandemics, in order to identify delays and connect children to supportive services. Previous studies have shown negative impacts of the pandemic on overall child development but have not looked at the effects of the pandemic on individual children's development over time.

Why was this study needed?

Many studies have focused on the COVID-19 pandemic's effects on the development of school-aged children, evaluating the effects of the pandemic on academic performance and behavior problems. Fewer studies have examined the pandemic's effects on the developmental progress of infants and toddlers, whose needs are different than those of school-aged children. During this study, researchers examined whether the negative developmental effects observed in school-aged children over the course of the pandemic could also be seen in infants and toddlers.

Who was involved?

The study included 684 children between the ages of 2 months and 4 years from 8 ECHO cohort research sites across the United States. Researchers included children whose parents had filled out the Ages and

Stages Questionnaire (ASQ), which uses parent-reported information to pinpoint a child's developmental progress, within the 18-month period before and after March 2020. Parents of participating children were also asked about financial hardship, defined as at least one parent experiencing job loss or change, or social hardships, defined as families' quarantining from household members or extended family and friends, during the pandemic.

What happened during the study?

Parents answered 30 questions before and during the pandemic to determine whether their child had achieved developmental milestones in language, motor, cognitive or problem solving, and socioemotional development. Researchers also used the ECHO COVID-19 survey that was developed in April 2020 to gauge pandemic-related financial and social stress on families.

What happens next?

Future research can follow the developmental patterns in these children over time to determine if COVID-19 related delays are lasting or reversible. Studies may also focus on pandemic-related stressors that could particularly effect infants and toddlers, such as family dynamics, parent-child interactions and parental stress.

Where can I learn more?

Access the full journal article, titled "Effects of COVID-19 financial and social hardships on infants' and toddlers' development in the ECHO program," in the [International Journal of Environmental Research and Public Health](#).

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