



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

Changes in children sleep habits during the COVID-19 pandemic

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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?

Sleep health during childhood is important for overall health and brain development. Poor sleep can increase a child's risk for chronic illnesses, behavioral problems, and poor memory. Factors that affect sleep health may have been significantly impacted by the COVID-19 pandemic due to lockdowns and curfews, increased stress, and changes in social support. Many studies have shown that, due to systemic and structural inequities, the pandemic has affected the health behaviors of children differently based on their socioeconomic status, race, and ethnicity. These differences may worsen existing gaps in children's health.

Several studies have reported on how the pandemic has affected childhood sleep habits, but few of these studies involved children in the United States. Most previous studies have relied on self-reported or time-limited data and have focused primarily on early stages of the pandemic. The goal of this study was to investigate changes in nighttime sleep habits and frequency of daytime naps during the COVID-19 pandemic.

Who was involved?

This study included 528 children aged 4 to 12 from 14 ECHO cohorts across the United States. The caregivers of 38 participants provided additional information about how they thought their children's sleep habits may have been affected by the COVID-19 pandemic.

What happened during the study?

The researchers compared data from before the pandemic with data collected at two different time periods during the pandemic. They used this data to examine the length of time it took children to fall asleep, time spent asleep at night during the week and on weekends, and the frequency of later bedtimes and daytime naps. They also collected sociodemographic information (child sex, age, race and ethnicity, maternal education) from self-reports and medical records.

What were the study results?

During the COVID-19 pandemic, children in the United States went to bed later, woke up later, and took longer to fall asleep, but their overall time spent asleep did not change. Interviews with caregivers

revealed that they prioritized routines to maintain their children's amount of sleep but were more flexible about bedtime. Across all time periods studied, children from racial and ethnic minority communities went to bed later, slept less, and napped more often.

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 is one of the first studies investigating changes in childhood sleep habits in the United States during the COVID-19 pandemic using data collected before and during the pandemic. The researchers found significant changes in children's sleep habits, as well as differences in children's sleep behaviors between racial/ethnic groups. These results highlight potential areas for future research and support the need to examine and address root causes of racial/ethnic sleep disparities in childhood.

What happens next?

ECHO researchers are currently analyzing and publishing results on changes in diet, physical activity, and screen time during the COVID-19 pandemic from the same cohort of children.

Where can I learn more?

Access the full journal article, titled "Impact of the COVID-19 pandemic on children's sleep habits: an ECHO study," in [Pediatric Research](#).

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