

ECHO

at a glance



Enhancing the Health of Children for Generations to Come

The ECHO Program is a nationwide research network launched in 2016 by the National Institutes of Health that answers big questions about what affects the health and well-being of children in the United States.

Through ECHO, many of the nation's leading researchers are working together to find the answers to those questions.

ECHO examines a broad range of early environmental influences—including socioeconomic status, family support, biological factors, nutrition, and physical and chemical exposures — to discover what can enhance the lives of children today and across generations.

Research Focus

ECHO studies five areas of child health that have a high public health impact:



Pre-, Peri-, and Postnatal Outcomes
Pregnancy and Birth



Neurodevelopment
Brain Development



Upper and Lower Airway Health
Breathing



Positive Health
Well-being

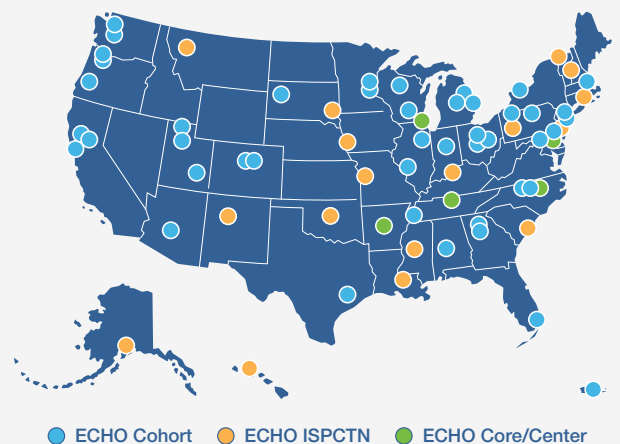


Obesity
Body Weight

The Environmental influences on Child Health Outcomes (ECHO) Program

A research program in the Office of the Director at the National Institutes of Health (NIH)

- The **ECHO Cohort** uses **observational** research to learn what environmental factors affect children's health.
- The **IDeA States Pediatric Clinical Trials Network (ISPCTN)** uses **intervention** research to learn how to enhance children's health.
- **ECHO Cores and Centers** provide operational support for the Cohort and ISPCTN.
- Together, these make up the ECHO Program, which includes 107,000+ participants and their caregivers at 75+ study sites in 42 states, the District of Columbia, and Puerto Rico.



Participants come from diverse geographic, socioeconomic, racial, and ethnic backgrounds, enhancing the scientific power of the ECHO Program's dataset and clinical trials.

Researchers are helping ECHO discover what influences in early growth—and even before birth—affect us throughout our lives and across generations.

ECHO conducts observational and intervention research that aims to inform programs, policies, and practices.

The ECHO Cohort Consortium conducts observational studies.

ECHO Cohort researchers help us understand the factors influencing children's health as they grow. They analyze a range of data, including participants' medical, lifestyle, and demographic information and details about their neighborhoods, families, education, and living conditions.

107,000+
participants

30,000+
active follow-up

64,000+
children

100,000+
biospecimens
collected



ECHO ISPCTN conducts intervention studies.

Through the IDeA States Pediatric Clinical Trials Network (ISPCTN), researchers test whether making changes in children's lives can enhance their health and well-being.

- The network provides underserved or rural populations with access to state-of-the-art clinical trials in ECHO's five areas of health outcomes.
- This initiative builds pediatric research capacity in **18 states** with historically low NIH funding.
- Trial topics include newborn opioid withdrawal syndrome, indoor air quality, and obesity medicines for teens.



ECHO researchers have published more than 1,700 manuscripts.

Sharing the results of ECHO data collection and analysis allows the program to contribute to the scientific process and enhance child health in the U.S. and beyond. An online list of [ECHO research articles \(https://bit.ly/3Zsu0tN\)](https://bit.ly/3Zsu0tN) is available for filtering and sorting by outcome area and selected topics.



Publications in Each Outcome Area and Topic

- Pre-, Peri-, and Postnatal
- Upper and Lower Airways
- Obesity
- Neurodevelopment
- Positive Health
- COVID-19
- Chemical Exposure
- Other



The ECHO Program provides data so the larger scientific community can discover new insights about public health. Available ECHO data from 63,215 ECHO Cohort participants includes demographic information, environmental exposure data, pregnancy and birth information, and more. Researchers can request this **de-identified public-use data** at the NIH Data and Specimen Hub [website \(https://bit.ly/3Zpwlpi\)](https://bit.ly/3Zpwlpi).

FOR MORE INFORMATION ABOUT ECHO

Visit: ECHOChildren.org

Contact: NIHKidsandEnvironment@NIH.gov

X: [@ECHOChildHealth](https://twitter.com/ECHOChildHealth)



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A program supported by the NIH