

ECHO's Mission:

To enhance the health of children for generations to come



The ECHO Program's uniquely diverse, nationwide research network enables it to explore how a broad range of early environmental influences—from society to biology—affect child health.

Observational and Intervention Two types of research

ECHO's 69 pediatric cohorts use **observational research** to understand the factors that influence children's health over time.



90,000+
participants

57,000+
children

25,000+
active follow up

33,000+
biospecimens collected

ECHO stitches together a network of pediatric cohorts across the United States. For an interactive map of our cohorts, visit (<https://echochildren.org/map-echo-cohorts-observational-study-sites/>)



ECHO's IDeA States Pediatric Clinical Trials Network (ISPCTN) conducts **intervention research** to investigate how making changes in children's lives can enhance their long-term health.

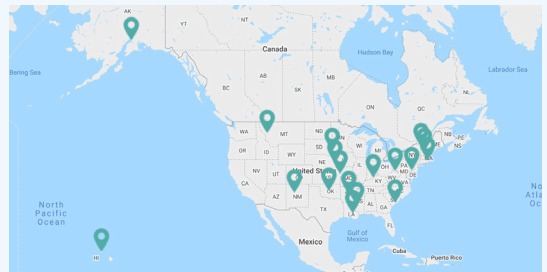
5 ongoing collaborative multi-center pediatric clinical trials



Builds pediatric research capacity in **18** states with historically low NIH funding

4,500+ clinical trial participants

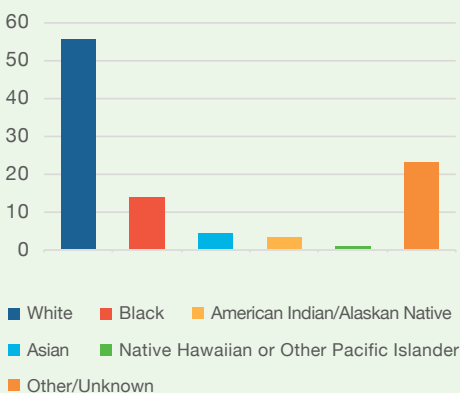
ISPCTN helps address disparities in pediatric research by including children from rural or underserved populations in clinical trials, and by building research capacity in states with historically low NIH funding. For an interactive map of our IDeA states projects, visit (<https://echochildren.org/map-idea-states-pediatric-clinical-trials-network/>)



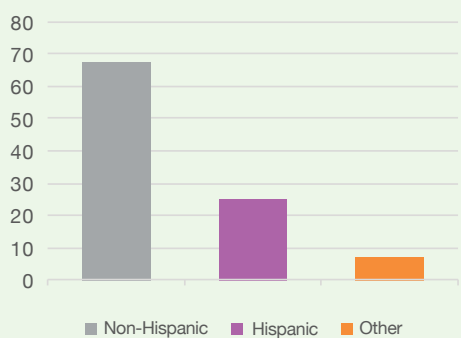
Diversity distributions

ECHO is constantly working to ensure diversity across our program in order to represent and serve all families.

ECHO Cohort Race



ECHO Cohort Ethnicity



ISPCTN Rurality

More than a quarter of ISPCTN trial participants live in rural settings.



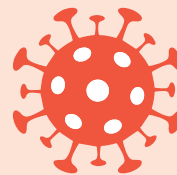
ECHO's Response to Public Health Crises

Covid-19 Pandemic

COVID survey results:

Over 10,000 ECHO-wide cohort participants responded to our COVID-19 questionnaire.

The purpose of this questionnaire was to gather information about the impact of the COVID-19 pandemic on the health and well-being of pregnant women and children enrolled in the ECHO-wide cohort.



6 COVID projects

In September 2020, the NIH/ECHO funded six COVID-19 projects, which include the participation of 24 ECHO Cohorts or Centers.

- a. How does COVID-19 amplify racial and social inequalities?
- b. How do COVID-19 infection and maternal stress affect perinatal and neurodevelopmental outcomes?
- c. How do societal changes during the COVID-19 pandemic affect obesity-related behaviors?
- d. How does the COVID-19 pandemic affect childhood environmental exposures and their impact on child health outcomes?
- e. How do the stressors associated with COVID-19 impact the neurodevelopment of marginalized populations?
- f. How do stress and COVID-19 infection affect birth outcomes?

Can a Mobile App Help Improve COVID-19 Vaccine Uptake?

In Fall 2021, ISPCTN launched a series of focus groups and individual interviews to understand parental attitudes about the COVID-19 vaccine. Study investigators have used feedback from interviews to create a COVID-19 vaccine education app that will be tested in a multi-state clinical trial starting in Spring 2022.

Opioid Epidemic

The **Advancing Clinical Trials in Neonatal Opioid Withdrawal Syndrome (ACT NOW)** Program aims to inform the clinical care of infants who are exposed to opioids in the womb. Currently, few evidence-based treatments exist for this condition. ISPCTN is part of 3 ACT NOW studies.*

ISPCTN ACT NOW (Advancing Clinical Trials in Neonatal Opioid Withdrawal)

1

ACT NOW Weaning

For babies that need medication to wean off of opioids, what is the best way to decrease the medication dose?

2

ACT NOW Eat Sleep Console

Do newborns who receive a soothing regimen as part of their opioid withdrawal treatment get better faster than those who don't?

3

ACT NOW Current Experience

How do hospitals currently care for infants experiencing opioid withdrawal?

**ISPCTN ACT NOW is a collaborative effort with National Institute of Child Health and Human Development*

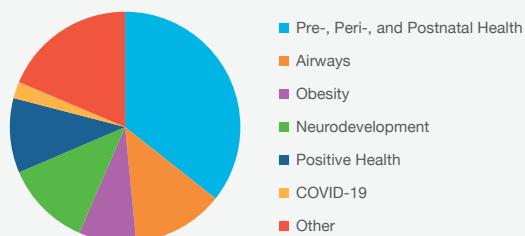
Publications

ECHO researchers have published over 950 manuscripts

Find them all at: <https://echochildren.org/echo-program-publications/>

Read brief research summaries for select publications at: <https://echochildren.org/research-summaries/>

Publication focus areas



Learn more at: ECHOChildren.org



ECHO

Environmental Influences
on Child Health Outcomes
A program supported by the NIH