

Collaborative Centers in Children's Environmental Health Research and Translation

Building on a 20-year base of robust research in children's environmental health, the National Institute of Environmental Health Sciences (NIEHS) established a network of collaborative centers to translate key research findings into clinical and public health practice. The centers share the common goal of being a resource in developing practical and scalable solutions to protect children's health from adverse environmental exposures.

Relevant partners include other researchers, federal and state agencies, health care and public health practitioners, community leaders, and families.

Effective translation of research findings requires collaboration of researchers from various disciplines, such as environmental health sciences, communication, behavioral and social sciences, dissemination and implementation science, medicine, and policy.

Examples of research translation may include communication strategies, risk management strategies, public health interventions and practices, curriculums and educational activities and toolkits, clinical guidelines, policies, and other products. Such products are intended to help protect and improve children's environmental health and to promote health equity.

The current funding period is 2021-2026.

Activities of each center involve:

Translation Core: As the focal point for these centers, the translation core supports multidisciplinary collaborations that expedite application and implementation of evidence-based research findings to practice. The core also measures the adoption of these approaches and shares insights with researchers, federal and state agencies, health care professionals, communities, and others to improve children's health. This core also supports pilot projects to test, implement, adapt, and evaluate new translational approaches and strategies.

Developmental Core: The developmental core provides professional development and career advancement for the next generation of children's environmental health scientists by engaging them in translational pilot projects and mentorship through interdisciplinary collaborations and intellectual exchange.



This core also supports a catalyst program of translational research projects directed at emerging and time-sensitive issues relevant to children's environmental health, such as air quality from wildfires.

Administrative Core: Prioritizes resources, accesses guidelines, and evaluates the impact of the center on the scientific community and stakeholders.

National Coordinating Center Children's Environmental Health Network (CEHN)

CEHN, a national organization with nearly 30 years of experience in children's environmental health, serves as the National Coordinating Center.

The coordinating center is responsible for developing and maintaining a central web portal, promoting the activities of the program across the research community, and hosting conferences and other interactions among principal investigators. It coordinates and disseminates the program to a variety of audiences that include researchers, communities, and policymakers. The coordinating center also evaluates actions and outcomes of the network. It operates through a partnership with the CHARTER Center at Emory University.

The centers are:

**ASP3IRE Center
Oregon State University**

The Advancing Science, Practice, Programming and Policy in Research Translation for Children's Environment Health (ASP3IRE) Center focuses on interdisciplinary collaborations that accelerate the adoption of evidence-informed interventions that reduce harmful environmental exposures where kids live, learn, and play. ASP3IRE also uses data science to build dynamic digital tools that can identify real-time trends and outcomes in children's environmental health.

**CHARTER Center
Emory University and University of Georgia**

The Center for Children's Health Assessment, Research Translation, and Combating Environmental Racism (CHARTER) works to develop effective strategies to translate research findings of importance in children's environmental health to relevant stakeholders in the community, academia, and health care. CHARTER works closely with community partners to develop cutting-edge communication products to reduce environmental racism, nurture next generation scholars, promote transdisciplinary science in children's environmental health, and improve children's health in underserved communities.

**Collaborative Center in Children's Environmental Health Research and Translation
New York University**

The cross-cutting themes of this center include translational science, economic evaluation, endocrine-disrupting chemicals, and climate change. This center aims to improve children's health from environmental exposures, promote environmental health equity, and serve as a resource to the scientific community and to community stakeholders to provide opportunities for collaborations and access to center expertise.

**Kids BREATHE Center
Johns Hopkins University**

The Bridging Research, Lung Health, and the Environment (BREATHE) Children's Center translates findings regarding environmental exposures that impact children's respiratory health and interventions to reduce risk. Their Lung Health Dashboard displays relevant, actionable information with map-based visualization strategies and storyboard techniques to engage the public. The center's Lung Health Ambassadors Program curriculum also focuses on children's respiratory environmental health.

**Philadelphia Regional Center for Children's Environmental Health
University of Pennsylvania**

Children in the Philadelphia region face many environmental threats and health problems: asthma, lead poisoning, air pollution, and toxic chemicals. This center's partners and member researchers work to implement real-world solutions and interventions in their region to serve as a model for success elsewhere.

**Southern California Center for Children's Environmental Health Translational Research
University of Southern California**

The theme of this center is urbanism, air pollution, children's health, and environmental justice. The center framework includes novel approaches to youth engagement and community science, urban design and policy solutions, and communication and public knowledge to imagine a Los Angeles without fossil fuels.

For more information on the Collaborative Centers in Children's Environmental Health Research and Translation, visit <https://www.niehs.nih.gov/research/supported/centers/collaborative>.

For more information on the National Institute of Environmental Health Sciences, visit <https://www.niehs.nih.gov>.

