

Centers of Excellence on Environmental Health Disparities Research



National Institute
on Minority Health
and Health Disparities

Program Description

The **Centers of Excellence on Environmental Health Disparities Research** support interdisciplinary research to better understand how the complex interactions between social, natural, biological, and built environments influence the health of individuals and populations. Outcomes of this research are expected to promote innovative approaches to mitigate environmentally driven health disparities and improve access to healthy environments for vulnerable populations.

This program was established through a partnership between the Environmental Protection Agency and three National Institutes of Health (NIH) Institutes: NIMHD, the National Institute of Environmental Health Sciences, and the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development.

Research topics of interest include but are not limited to the following:

- **Cumulative effects of multiple environmental, physical, and social stressors.** How do the cumulative effects of exposure to multiple environmental chemical contaminants combine with the effects of social stressors to affect health? What is the role of genetics and epigenetics in relation to environmental exposures and social stressors? What multidisciplinary approaches or methods would best characterize these combined effects or interactions?
- **Differential exposures.** How do different socioeconomic groups' exposures to environmental hazards and contaminants vary? What are the drivers for such exposures? How does information about differential environmental exposures increase our

understanding of its contributions to health, particularly among racial and ethnic minority groups?

- **Land use considerations and health disparities.** How do different land uses and land use decisionmaking processes contribute to environmental health disparities? What are the impacts of resource extraction on environmental health disparities? What approaches could communities take to reduce or prevent impacts from land use decisions that lead to environmental health disparities?
- **Built environment, housing, and transportation exposures.** How does proximity to transportation infrastructure affect levels and types of exposures? How does poverty contribute to indoor and outdoor air pollution in residential settings?
- **Environmental sustainability and health disparities.** How do sustainable approaches reduce disproportionate health burdens and build community resilience? How might improvements in environmental health literacy enable sustainable lifestyle and community-level changes to improve health?

Goals

This initiative is expected to achieve goals and objectives in the following areas:

Research

- Stimulate basic and applied research that takes an integrated and systems approach to assessing and potentially mitigating environmentally driven health disparities
- Establish and support multidisciplinary research that combines basic, clinical, and environmental health sciences and social sciences (e.g., anthropology, economics, sociology, communications)

- Develop tools and methodologies for data capture, measurement, analysis, and risk assessment that foster integration of the multiple factors that contribute to environmental health disparities.

Capacity and Mentoring

- Develop infrastructure and build capacity to expand existing collaborations or establish new partnerships with other researchers and organizations investigating environmental health disparities
- Build capacity of affected community partners and other stakeholders and include them as active members of the research team to assist with the development of research questions and to provide input on translating scientific findings into locally appropriate language and effective delivery formats
- Recruit and mentor investigators to conduct environmental health disparities research, including investigators from health disparities populations

Communication and Translation

- Disseminate scientific knowledge that is culturally appropriate, targeted to specific communities, and developed through research collaborations with researchers and members of affected communities
- Generate information and new knowledge that directly benefits affected communities and population groups within those communities and leads to improved diagnosis, health care, intervention, and prevention strategies

Eligibility

Eligible organizations may include higher education institutions, nonprofit organizations, for-profit organizations, or other organizations with a role in providing services that affect health, such as school districts, housing authorities, or community- or faith-based organizations.

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