NIH CHORDS: Building a climate, environment, and health data ecosystem to advance climate change and health research

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Abstract

Addressing the health risks from climate change and related disasters requires timely, accessible, harmonized, and interoperable data from multiple disciplines. Under the National Institutes of Health (NIH) Climate Change and Health Initiative (CCHI), the **C**limate and **H**ealth **O**utcomes **R**esearch **D**ata **S**ystems (CHORDS) project aims to develop data resources and tools to advance research on the impacts of climate change and related disasters on human health. This transdisciplinary project is building a data ecosystem of tools and training materials to enable health researchers, public health practitioners, and others to assess climate-related health impacts, evaluate interventions, and respond to growing community health risks. The project has five main objectives: 1) to build a catalog of data related to climate and health with a focus on wildfires; 2) to develop standardized, linked climate, health, and demographic datasets; 3) to provide tools and guides to help researchers connect health and climate data; 4) to develop a use case study on the effects of wildfires on human health; and 5) to address stakeholder feedback to ensure user needs are met. This presentation will introduce the new CHORDS Platform (https://niehs.github.io/chords_landing/index.html), a free, online data catalog of climate, environment, sociodemographic, and health data resources, and provide an overview of glossaries, tutorials, and other available data analysis products. Through CHORDS and other CCHI investments across the nation, NIH aims to improve understanding of effective public health actions for the harmful effects of climate change and climate-related disasters on health.

Presentation Type

In-person, oral

Session Description

Merging Environmental and Health Data for Climate Resilience in the Face of Extreme Weather

Topic Description: The financial cost of climate-enhanced weather disasters is measured in the billions of dollars every year, but the toll on human health is not far behind in terms of cost, and obviously much more important in terms of human suffering. We are well aware of the human toll that air pollution, extreme heat events, drought, flooding, and wildfires places on society, but adaptive responses and preparation are not always prioritized. Perhaps the most important priority on this front is to enhance resilience, at the global, national, regional, and local level, to reduce the impacts of climate disruptions. Mitigation of the root cause of these impacts (i.e., carbon emissions), is critical, but climate change is already severely impacting society, and resilient responses are critical to "weathering the storm" of climate change. We encourage submissions that improve our understanding of the present and future health impacts of extreme weather events, and also potential solutions to adapting or mitigating such disasters. Submissions are encouraged from highly transdisciplinary fields, including health geography, epidemiology, environmental justice, health policy, disaster modeling, and emergency response. We also welcome studies of a range of extreme weather types, from heat to flooding, and including compound events. Particular areas of focus may include lessons learned from Hurricane Katrina in the 20 years since landfall, and the resilience of the post-Katrina landscape.

Topic Keywords: Climate, Health Impact Assessment, Heat, adaptation, climate adaptation