ECHORN: Leveraging a regional coordination network for disaster-resilient noncommunicable disease control in the Eastern Caribbean

Sydney A. Steel, MPH¹, Vivien Wambugu, MScGH¹, Carol Oladele, PhD¹, Marcella Nunez-Smith, MD, MHS¹, Saria Hassan, MD^{1,2}

¹Equity Research and Innovation Center, Yale School of Medicine, New Haven, CT, ²Emory University School of Medicine, Rollins School of Public Health, Atlanta, GA





The Caribbean is one of the most exposed regions to climate-related natural disasters.

Climate change and NCDs in the Caribbean

Small island developing states in the Eastern Caribbean face a dual burden of climate-related disasters and noncommunicable diseases (NCDs). While the relationship between disasters and health has been demonstrated for acute emergencies, there is limited understanding of the impacts of repeated disaster exposure on NCD management and control.

What is ECHORN?

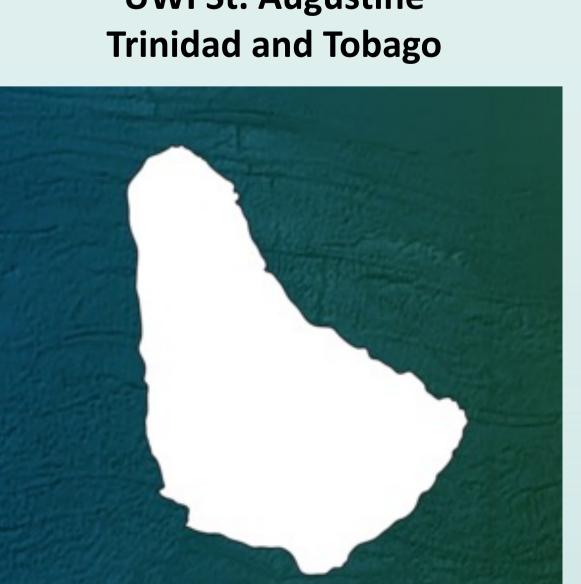
The Eastern Caribbean Health Outcomes Research Network (ECHORN) is a first-of-its-kind regional network that generates action-oriented NCD research. The program supports policy translation and community engagement to reduce the burden of NCDs in the region.

The flagship **ECHORN Cohort Study** follows nearly 3,000 adults in Puerto Rico, the US Virgin Islands, Trinidad and Tobago, and Barbados to examine risk and protective factors for the development of chronic disease.

Where is our network?



UWI St. Augustine



UWI Cave Hill Barbados



University of the Virgin Islands U.S. Virgin Islands



Universidad de Puerto Rico **Puerto Rico**

Our consortium includes stakeholders from more than 30 Caribbean health, policy, and community organizations. A full list of ECHORN partners can be found by scanning the QR code.

Objectives

Our robust community-driven network for resource sharing and implementation science is uniquely poised to further global discourse and understanding of the relationship between disaster exposure and NCDs. Between our cohort study and commitment to regional interdisciplinary collaboration and capacity building, ECHORN offers a data-driven approach to sustainable NCD management and climate-centered policy development.

Given its salience, regional partners in the Caribbean identified climate change and disaster exposure as a priority focus for research and coordination moving forward.

Methods

The first wave of the ECHORN Cohort Study ran from 2013-2018, and our second wave (2019 -) is culminating this year.

Upon enrollment, all study participants complete:

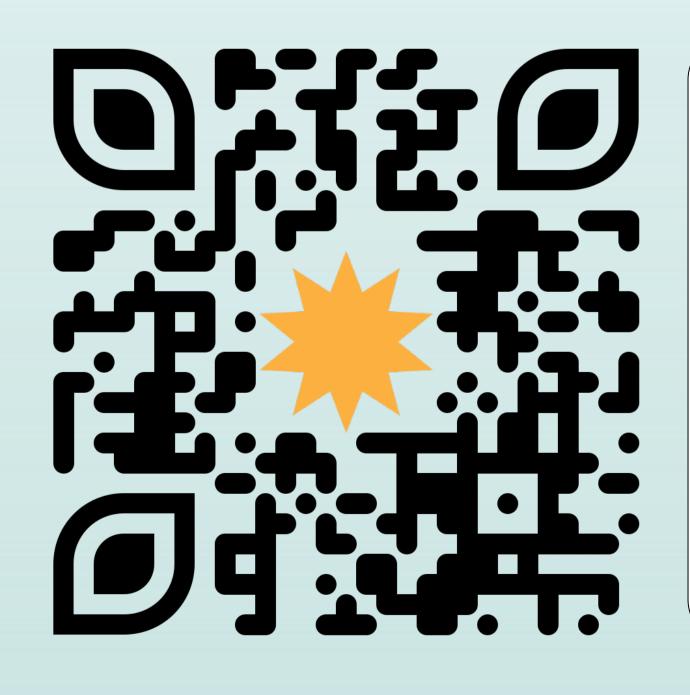
- a baseline survey with questions on sociodemographic factors, environmental exposure, health behavior, and medical history
- a clinical assessment with physical examination
- laboratory testing, with an optional biobanking component

Results & Conclusion

The third wave of the ECHORN Cohort Study is designed to include a disaster exposure survey to analyze the impact of exposure to repeated climate events and natural disasters on NCD management and control in the Eastern Caribbean.

With the anticipated acceleration of NCDs and disasters across the Caribbean, ECHORN's work to inform disaster-resilient NCD management and control is imperative and time-sensitive.

References & Further Information



For more information on our research, advocacy, and consortium partners, please visit:

www.echorn.org

For our data and visualizations, please visit

https://echorndata.org