



# Building the Evidence Base for Disaster Risk Reduction for Health Systems in Response to Natural Disasters

**JANUARY 24, 2018**  
**11:00-12:30 PM ET**

This is the first in a series of webinars, workshops, pilot studies and regional preparedness exercises to discuss the current state and future direction of critical healthcare infrastructure modeling for disaster events. This series is co-sponsored by the National Center for Disaster Medicine and Public Health (NCDMPH), National Institute for Standards and Technology (NIST), and the National Institute of Environmental Health Sciences (NIEHS) with coordination through the Global Change Research Program. The goal is to develop a platform for integrating extreme event forecasts, health risk/impact assessment and population simulations, critical infrastructure (electrical, water, transportation, communication) impact and response models, health care facility-specific vulnerability and failure assessments, and health system/patient flow responses. Many of these components exist individually at present, but they have not been combined. The integration of these models is intended to create a more resilient regional health care system by better understanding critical tipping points in the vulnerability of current health systems during natural and human disasters and build an evidence base for specific interventions.

## Agenda

- **Moderator**  
Dr. John Balbus, National Institute of Environmental Health Sciences
- **Modeling of Connected Infrastructure Systems in Response to Natural Disasters**  
Dr. Gerald Geernaert, Department of Energy
- **Modeling of Health System Impacts and Failure Analysis**  
Dr. Judith Mitrani-Reiser, National Institute of Standards and Technology
- **Modeling of Mass Casualty Scenarios**  
Dr. Nathaniel Hupert, Weill Medical College, Cornell University
- **Development of Integrated Impact Assessment Modeling Platforms**  
Dr. Ian Kraucunas, Pacific Northwest National Labs

## WEBINAR 1 GOALS

### State of the Science

This first webinar will focus on the framework and concepts and mechanistic considerations of these models, rather than on specifics of any one of the modular components. Latter sessions will focus on practical applications from the end-user perspective.

1

Establish the framework for the overall predictive modeling project—its modular components, consideration of the foundational modeling platform, types of expertise to be brought together

2

Learn from leading experts about existing research and models that serve as starting points for the main modular components

3

Begin to document and catalog the inputs and outputs of the main modular components for comparison with user needs assessment, which will follow

## REGISTRATION

Please register for the event at: <https://nih.webex.com/nih/onstage/g.php?MTID=e81303469c580a399bed9af4ca248d53e>

*If you have any questions or need reasonable accommodations to participate in this event, contact Ms. Trisha Castranio at [Trisha.Castranio@nih.gov](mailto:Trisha.Castranio@nih.gov) or 984-287-3245 and/or the Federal Relay at 1-800-877-8339.*