

Training & Capacity Building

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Innovative Climate Tools Now Feature Themes on Public Health & Resilience

By Kenda Freeman

On April 7, NIEHS Senior Advisor for Public Health, John Balbus, M.D., M.P.H. joined climate change experts from federal agencies, academia, and the private sector at the White House to launch the health theme of the Climate Data and Tools Initiative. This initiative was developed as part of President Obama's [climate action plan](#) to better prepare the United States for the impacts of climate change.

As part of the launch event, the U.S. government unveiled datasets that can help individuals and communities plan for the impacts of climate change on the public's health. "The datasets and toolkits we released will help empower health care professionals, researchers, and the general public to make good science-based decisions and do innovative new work to promote climate resilience and public health," explained Balbus.

Sharing Health Data

The [White House Climate.data.gov website](#)—a resource consisting of datasets related to climate change and its impacts—now features data that focuses on public health topics related to extreme heat and precipitation, air pollution, vector-borne disease, and food and water-borne illnesses. For example, users can now access datasets to help them assess individual and community vulnerabilities to air pollution or vector-borne illnesses. These accessible datasets will enhance the capacity of communities, business owners, and citizens to make more informed decisions when planning for climate change and weather events.



Balbus (right) presented the latest climate and health tools at the White House.

(Photo courtesy of [The White House OSTP](#))

The [U.S. Climate Resilience Toolkit](#) (CRT) was also expanded and now features health resources covering topics such as extreme heat, infectious diseases, and building health care sector resilience. The CRT provides user-friendly resources to guide stakeholders through a process of planning and implementing resilience building projects. Its framework provides a clearly defined approach to help

stakeholders identify and mitigate climate risks for vulnerable communities. Tools such as map-based interfaces allow users to visualize projected changes of climate stressors and explore applications that translate weather conditions to health-risk levels. It also features case studies and training courses related to climate resilience. These resources may serve as a guide that stakeholders can use when developing climate change preparedness plans.

Building Health Care Sector Resilience: A Local and Global Concern

The [Sustainable and Climate Resilient Health Care Facilities Toolkit](#), an important element of the president's climate action plan, recognizes the important role that health care organizations play in community resilience and public health following extreme weather events. This initiative aims to promote and enhance climate resilience in health care settings through a five-element framework featured in the U.S. Department of Health and Human Services (HHS) guide, [Primary Protection: Enhancing Health Care Resilience for a Changing Climate](#).

Health care systems are developing best practices to ensure that their facilities and the communities they serve can survive and thrive through the impacts of climate change. The health care climate resilience framework is designed to help health care system managers and providers, public health professionals, and policymakers understand how climate change impacts health facility operations, and determine how to incorporate best practices to prepare for and respond to impending climate threats. It includes guidance on methods to identify climate risks and community vulnerabilities and provides additional resources that support these efforts.

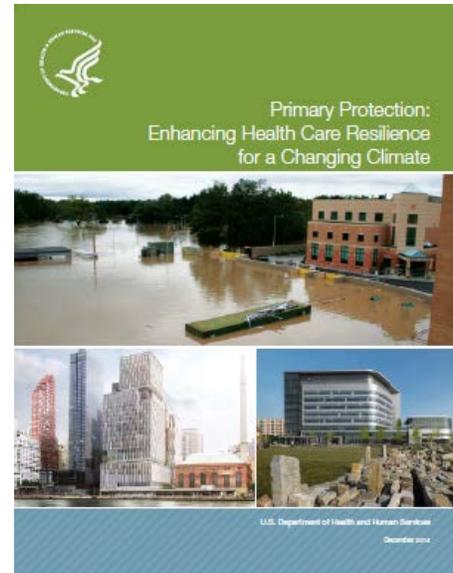
Several emerging best practices of health care sector resilience have been integrated into case studies within the CRT. Balbus noted that the case studies will be especially useful in guiding climate change resilience for different stakeholders and facilities because they can tell a story of what has gone right and what has gone wrong.

- **Building Health Care Sector Resilience**
- Element 1: Climate Risks and Community Vulnerabilities Assessment
- Element 2: Land Use, Building Design, and Regulatory Frameworks
- Element 3: Infrastructure Protection and Resilience
- Element 4: Essential Clinical Care Service Delivery Planning
- Element 5: Environmental Protection and Strengthening of Ecosystems

The five core elements of building health care sector resilience.

(Adapted from [U.S. Climate Resilience Toolkit](#))

Building climate resilience in health care systems is a major concern globally. The initiative to build sustainable climate-resilient health care facilities also offers approaches that could be helpful to increase climate resilience in low- and middle-income countries (LMICs). Balbus is currently working with the Pan American Health Organization and other international partners through the NIEHS/WHO Collaborating Centre for Environmental Health Sciences, to explore the use of the HHS health care resilience framework and tools in North and South America. Translation of these materials into additional languages will enhance the capacity of health care professionals and health care facility managers in LMICs to prepare for and respond to the needs of the public during extreme weather events.



Balbus is a co-author for the HHS guide on building health care climate resilience, which was released in December 2014 (above).