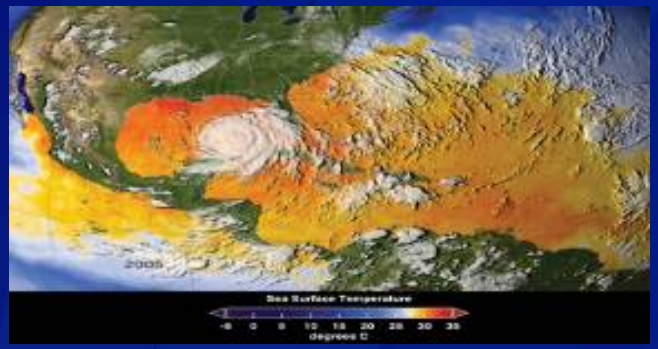
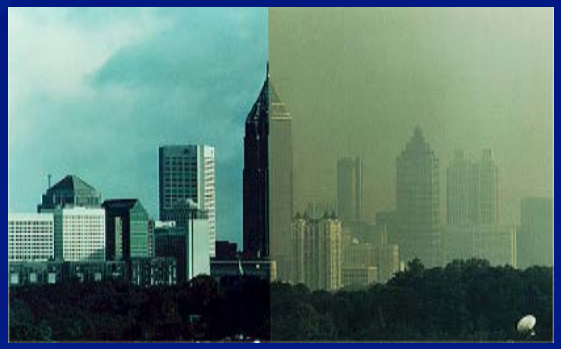
Overview of CDC's Climate and Health Program





George Luber, PhD

Associate Director for Climate Change
National Center for Environmental Health
Centers for Disease Control and Prevention

Climate and Health Program

Formally constituted as a Program in March 2009

Leads efforts to:

- identify the health impacts of climate change and the populations most vulnerable to these impacts;
- anticipate future trends;
- assures that systems are in place to detect and respond to emerging health threats;
- and takes steps to assure that these health risks can be managed now and in the future.

The Climate and Health Program fills three critical roles:

(1) to **analyze and translate** the latest evidence in climate science to our public health partners;

(2) to apply these findings to evidence-based **decision support tools**

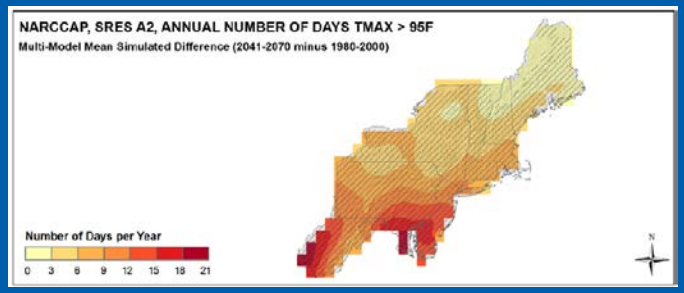
- aid in the state and local public health response

(3) to **provide leadership**

- inside and outside CDC
- ensure that public health concerns are represented in climate change adaptation and mitigation strategies
- create linkages between public health and other sectors

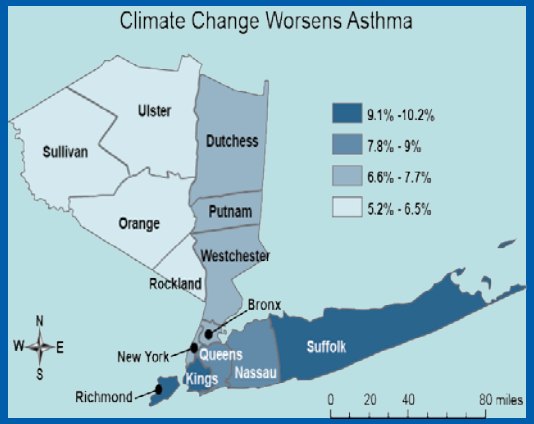
CDC's Priority Actions for Climate Change:
Translate Climate Science to our Public Health Partners

Identify regional climate trends that impact health



Identify the health impacts of climate change and the populations most vulnerable to these impacts

Model future health impacts

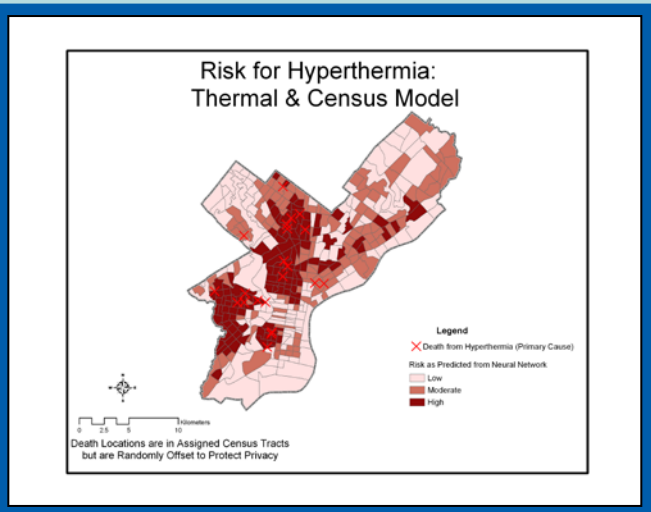


Priority Actions for Climate Change:
Develop Support Tools for State and Local Public Health

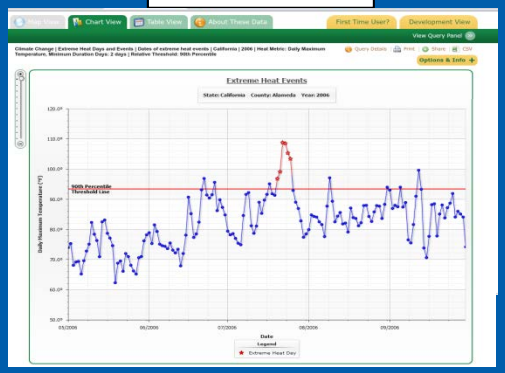
Technical guidance adaptation planning – BRACE Framework

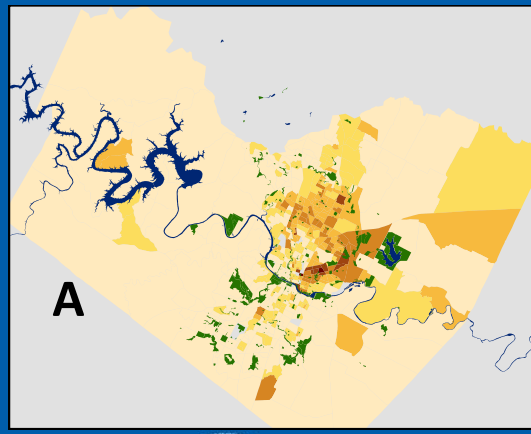
Vulnerability mapping

Enhanced surveillance tools



NATIONAL Environmental Public Health Tracking Program





Priority Actions for Climate Change:
Leadership and Collaboration

Establish and communicate the key importance of public health in the climate change response

Create linkages between public health and efforts in other sectors (i.e. water, urban planning, energy)

United States Global Change Research Program

Austin Climate Protection Program
Cool Austin. Cool Planet.™

IPCC
INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE
WMO UNEP

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA
CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Enhance the Science Base

In FY 2009, 7 Extramural research grants were awarded totaling 2.1 mil. per year for 3 years

Research Institution	Environmental Factor	Health impact
University of California, Davis	Increase temperature	Mosquito-borne arbovirus transmission
University of Florida	Algal bloom	Ciguatera Ecology and the Atlantic Warm Pool
Wisconsin State Department of Health/Family Services	Precipitation	Gastrointestinal illness linked to environmental contamination
University of Washington	Heat event, air pollution	Mortality and morbidity
New York State Department of Health: Center for Environmental Health	Spatial Synoptic Classification II system - composite weather index	Tick-borne and water/food-borne diseases, adverse birth outcomes, and cold-related diseases
Georgia Institute of Technology	Land use scenario in urban areas	Heat-related morbidity and mortality
Emory University	Heat wave, Ozone and PM 2.5	Cumulative climate-related health risks in the Eastern U.S.

Program Highlight:
Climate-Ready States and Cities Initiative

Objective: To enhance the capability of state and local health agencies to deal with the challenges associated with climate change

Cooperative Agreements with State and Local HDs:

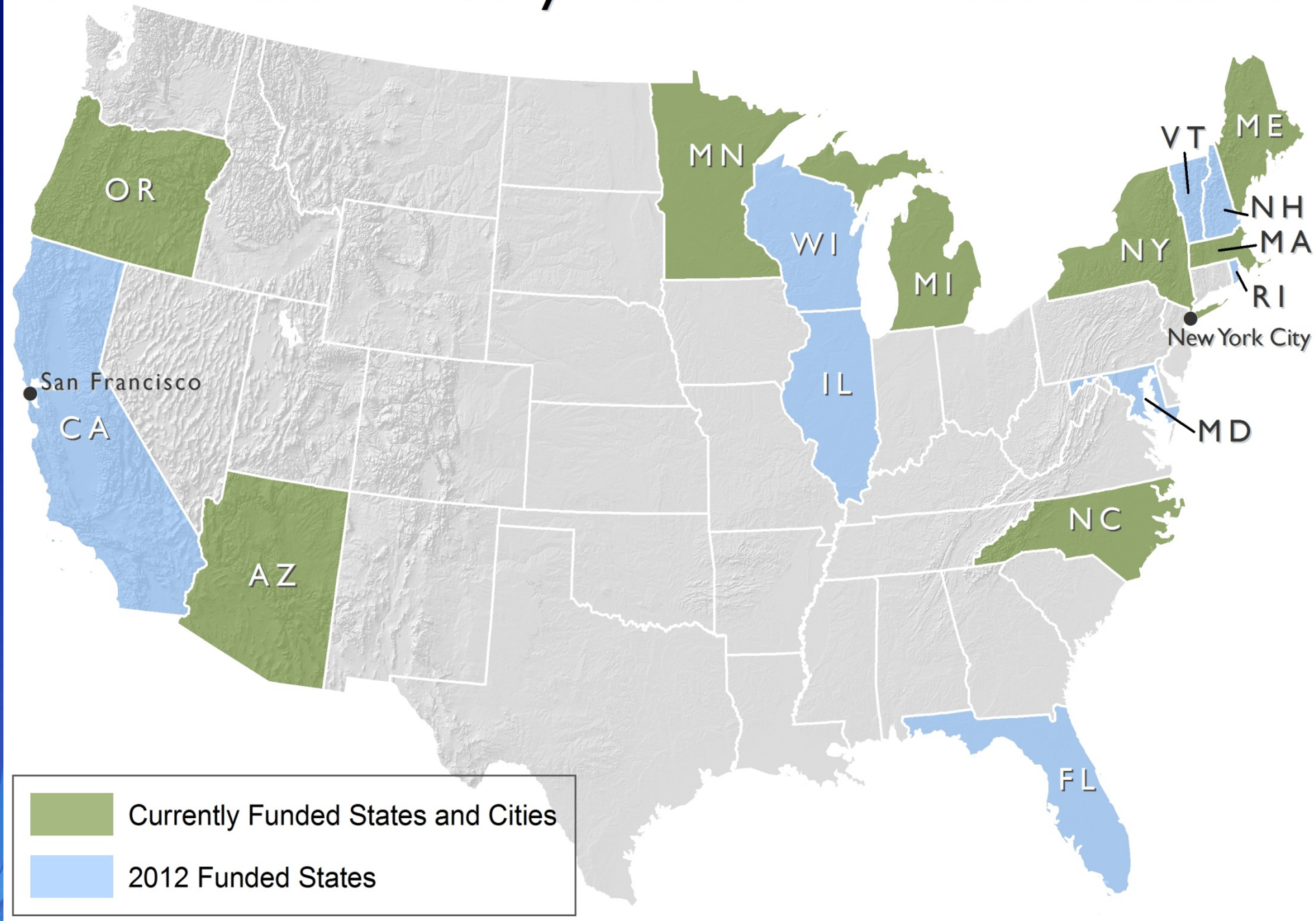
"Developing Public Health Capacity and Adaptations to Reduce Human Health Effects of Climate Change"

Developing Decision Support Tools:

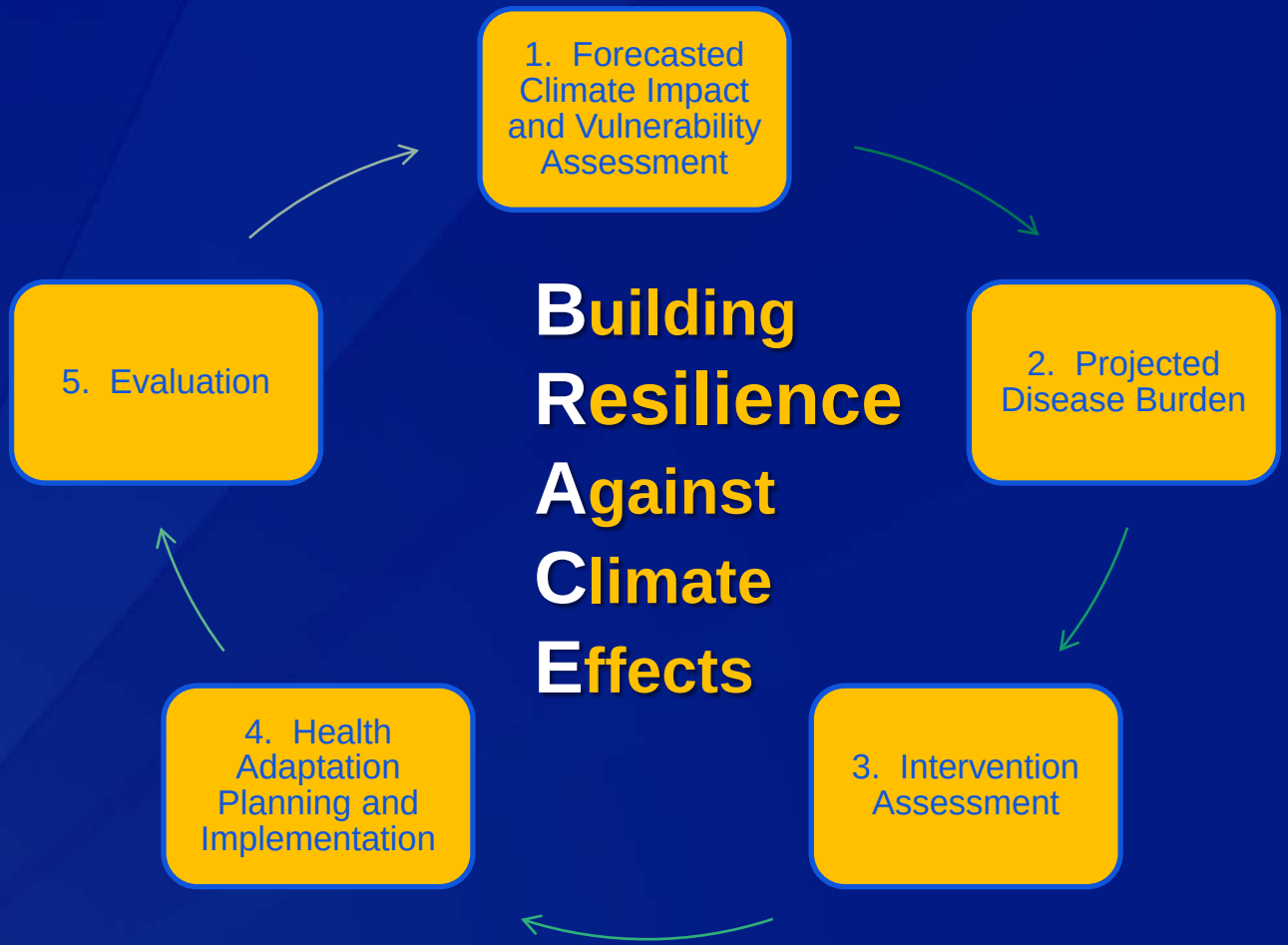
Communications and Educational Tools

Vulnerability Mapping Tools

CDC Climate Ready States and Cities Initiative



The BRACE Framework



Other Approaches: Community-Based Participatory Research (CPBR) for Adaptation Planning -- Alaska

➢ Building community partnerships – Citizen Science

- Systematic , on-going, collection of community observations of unusual shifts in local ecosystems and health hazards
- Early warning for public health significance
- Develop culturally appropriate risk communications and inform adaptation planning for Health and other sectors

Public Health Adaptation Strategies for Climate Change

- Develop evidence-based approaches that identify spatially-specific vulnerable populations and places
- Enhance surveillance by integrating environmental, meteorological and health data
- Identify co-benefits for health of mitigation and adaptation strategies