

The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment

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The USGCRP Climate and Health Assessment

The purpose of this interagency assessment is to provide a comprehensive, evidence-based, and where possible, quantitative estimation of observed and projected climate change-related health impacts in the United States.

Climate change is a public health issue and is one of the greatest threats to human health.

Lynn Goldman, Testimony to Subcommittee on Energy and Power, Representing American Public Health Association

- *Few Americans have thought much about the health consequences of global warming*
- *Few Americans are aware of the current or projected future health impacts of global warming [for the U.S. or worldwide].*

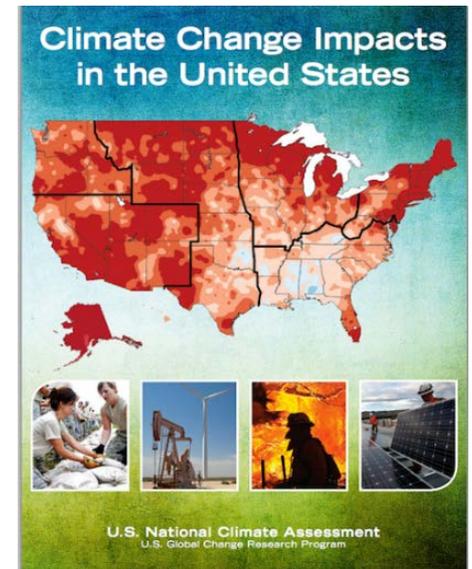
Public Perceptions of the Health Consequences of Global Warming,
Yale Project on Climate Change Communication

For public health, climate change is the defining issue for the 21st century.

Margaret Chan: Director General of
World Health Organization

USGCRP Climate and Health Assessment: The cast

- The Climate and Health Assessment is an interagency product of the US Global Change Research Program (USGCRP)
- Part of the National Climate Assessment (NCA) sustained assessment process
- Coordinated by the Interagency Crosscutting Group on Climate Change and Human Health (CCHHG), an interagency workgroup of the USGCRP co-chaired by NIH, CDC, and NOAA
- EPA is coordinating development of the assessment. Several EPA employees are authors on the report.



What's in

1. Climate Change and Human Health (Intro)
2. Temperature-Related Death and Illness
3. Air Quality Impacts
4. Vectorborne Disease
5. Water-Related Illnesses
6. Food Safety, Nutrition, and Distribution
7. Extreme Weather
8. Mental Health and Well-Being
9. Risk Factors and Populations of Concern



What's out

- Mitigation, adaptation, or economic valuation
- Policy recommendations
- Most compounding, secondary, or cumulative climate and health effects
- Assessment of research needs

An “interim report”

- To be published between the Third and Fourth National Climate Assessments
- Current plan for release is Spring 2016
 - After National Research Council (NRC) peer review
 - After interagency review and clearance

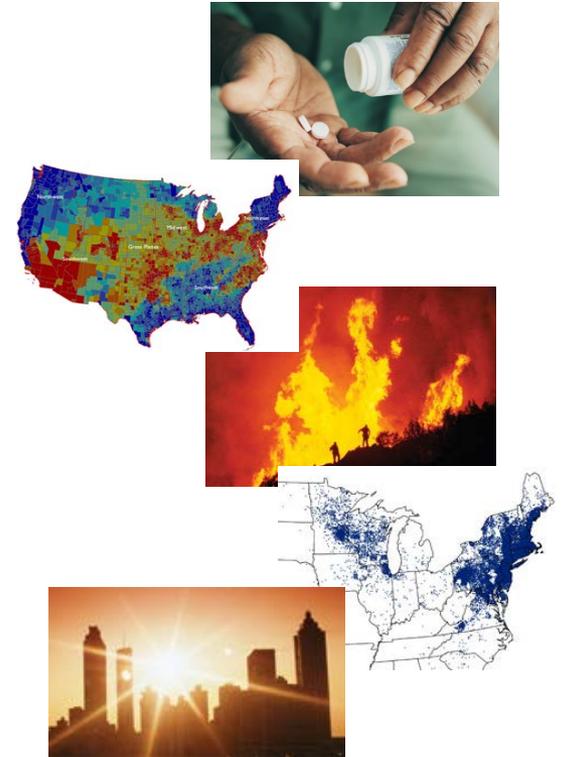
Strengthens and expands our understanding of health impacts

- Updated Findings
- Stronger Evidence
- New analyses
- Broader Scope
- Identifies Risks and Vulnerabilities



Climate change

- is a significant threat to the health of the American people
- exposes more people in more places to public health threats
- exacerbates and accelerates some existing health threats and creates new public health challenges



Water-Related Illness Chapter

Draft Key Finding 1: Increases in both coastal and inland water temperatures associated with climate change will expand the seasonal windows of growth and the geographic range of suitable habitat for naturally occurring pathogens and toxin-producing harmful algae. These changes are projected to increase the risk of exposure to waterborne pathogens and algal toxins that can cause a variety of illnesses.



Water-Related Illness Chapter

Draft Key Finding 2: Recreational waters and sources of drinking water will be compromised by increasingly frequent and intense extreme precipitation events. Surface runoff and flooding associated with heavy precipitation and storm surge events increase pathogen loads originating from urban, agricultural, and wildlife sources and promote blooms of harmful algae in both fresh and marine waters. Greater pathogen or algal toxin loading in drinking and recreational water sources following an extreme weather event will increase risk of human exposure to agents of water-related illness.



Water-Related Illness Chapter

Draft Key Finding 3: Increases in some extreme weather events and storm surge will increase the risk of failure of, or damage to, water infrastructure for drinking water, wastewater, and stormwater. Aging infrastructure is particularly susceptible to failure. A breakdown in water infrastructure would contribute to increased risk of exposure to water-related pathogens, chemicals, and algal toxins.



Public Comment Period Now Open

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www.globalchange.gov/health-assessment

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