Linking Complex Science to Policy for Heat-Health Decision-Making

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The mission:

1) Identify vulnerable populations to climate change
2) Prevent and adapt to current and anticipated health impacts
3) Assure that systems are in place to detect and respond to current and emerging health threats

3 core functions:

1) Translate climate change science to inform health departments and communities
2) Create decision support tools to build capacity to prepare for climate change
3) Assist in planning for the public health impacts of climate change
1. Forecasting Climate Impacts and Assessing Vulnerabilities

2. Projecting the Disease Burden

3. Assessing Public Health Interventions

4. Developing and Implementing a Climate and Health Adaptation Plan

5. Evaluating Impact and Improving Quality of Activities

Building Resilience Against Climate Effects

Climate and Health Program, National Center for Environmental Health
The focus on extreme heat...

- Common environmental exposure in popular perception
- Extreme heat is the primary cause of weather-related mortality
- Widely assessed as an important threat by local health agencies
- Availability of exposure data at varying spatial and temporal scales
- Robust epidemiologic research linking ambient temperature and health
Access to exposure data

Vulnerability assessment
The network provides data on:

- Extreme heat days and events
- Heat vulnerability
- Health effects associated with extreme heat

http://ephtracking.cdc.gov/showHome.action
The National Environmental Public Health Tracking Network

http://ephtracking.cdc.gov/showHome.action
Vulnerable neighborhoods during heat wave
Estimating the burden of disease
Mortality risk from heat waves

Andersen and Bell, 2011, Environmental Health Perspectives
Temperature profile on ED visit days change by place

Saha et al., (in press)

Max Temp

Latitude category °N

CDC, National Center for Environmental Health
Odds ratio of ED visit associated with extreme heat by Latitude

Saha et al., (in press)
Building capacity for health interventions
CDC’s New Extreme Heat Webpage

A one-stop shop for CDC extreme heat resources, organized by subject and audience
Guidance for preventing heat-related illness

These guidebooks provide information about:

- Defining and responding to extreme heat events
- Climate change and extreme heat events
- Variables that affect extreme heat events
- The development and implementation of extreme heat event programs (case studies)
Thank you

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