



# CDC Climate & Health Update

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# CDC's Climate & Health Program



Formally constituted as a Program in March 2009 with a congressional appropriation

Leads efforts to:

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

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# Building Resilience Against Climate Effects (BRACE)

A FRAMEWORK FOR HEALTH AGENCIES

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# BRACE's 5 Steps



- Forecasted Impact & Vulnerability Assessment
- Health Risk Assessment
- Intervention Assessment
- Health Adaptation Planning & Implementation
- Evaluation



# Key Points to Consider



- Stakeholder Engagement
  - ◆ Critical throughout
  - ◆ Appropriate stakeholders may change by stage.
- Prioritization of health impacts
  - ◆ Can occur at Stage 1, 2 or 3
  - ◆ Dependant on level of prior analysis
  - ◆ Available evidence
  - ◆ Political considerations



# Step 1. Forecasted Impact & Vulnerability Assessment



Goal: Identify the range of climate impacts, associated potential health outcomes, & vulnerable populations and locations within a jurisdiction

- Determine the geographic and temporal scope of the assessment
- Assess localized forecasted climate impacts
- Assess health outcomes sensitive to these climate impacts



# Step 1: CDC Supporting Activity



- Catalogue sources of national, regional and local climate data and projections
- Review and summarize literature on health impacts related to different climatic conditions
- Review and summarize literature and case studies on how to assess vulnerability to climate related health impacts.
- Develop climate impact/ health impact/ vulnerability pathway matrix



## Step 2: Health Risk Assessment



Goal: Estimate/quantify the additional burden of health outcomes due to Climate Change

- Identify data sources for climate related mortality/ morbidity assessment
- Employ qualitative and quantitative approaches to assessing the data
- Quantify potential magnitude of individual health risks (absolute or relative)





## Step 2: CDC Supporting Activity



- Literature searches and reviews of climate change attribution to health outcomes
- Develop guidelines for how to conduct health risk assessments for climate change
- Profile state/local case studies of health risk assessments for climate change
- Archivable webinar on best practice approaches for conducting health risk assessments for climate change



## Step 3: Intervention Assessment



Goal: Identify the most suitable health interventions

- List the range of health interventions available for each health outcome
- Assess capacity to deliver each intervention
- Prioritization of health interventions deemed most suitable for the jurisdiction



## Step 3: CDC Supporting Activity



- Catalogue range of interventions for each climate related health impact
- Provide information re effectiveness of interventions (eg links to Community Guide etc)
- Links to intervention assessment & analysis tools
  - ◆ National Public Health Performance Standards
- Profile state/local case studies of processes where interventions have been prioritized



# Step 4: Health Adaptation Planning & Implementation



Goal: Develop and implement a plan that introduces health system program changes that address the health impacts of climate change

- Applying agency procedures to developing a unified plan of action
- Disseminating the plan to stakeholders that play a part in executing the interventions
- Incorporating adaptations into executing the interventions



## Step 4: CDC Supporting Activity



- Profile case studies of state/local health adaptation planning process
- Profile state/local health adaptation plans
- Develop training for Health Impact Assessment tailored to climate change policies, programs and projects
- Profile case studies of Health Impact Assessments conducted on climate change policies, programs or projects



## Step 5. Evaluation



- Process evaluation goal: Periodic review to ensure that the projections continue to be sound and the adaptations are still suitable.
- Outcome evaluation goal: Ensure that climate change is considered in broader PH planning and implementation activities. To ensure that PH is considered in broader climate change planning and implementation activities.



# Step 5: CDC Supporting Activity



- Develop an evaluation strategy and metrics
- Process metrics
  - ◆ Do processes enable estimation of the magnitude of health impacts?
  - ◆ Do processes enable optimal prioritization of
    - health impacts to be addressed?
    - effective interventions/adaptations?



# Step 5: CDC Supporting Activity



- Outcome metrics
  - ◆ Have short &/or medium term actions improved effectiveness in resource allocation decisions?
- Impact metrics
  - ◆ Have changes to interventions lead to reductions in morbidity and mortality for climate sensitive disease and injury compared to projections?





# Thank You



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