

CLIMATE ACTION TEAM Public Health Working Group

Near-Term Implementation Plan Strategy 6: Research and Program Evaluation

CAT Working Group Overview: The Public Health Working Group of the Climate Action Team was established to address cross-cutting issues related to climate change and health. The purpose of the Working Group is to provide a forum for communication, coordination, and education across agencies and with stakeholders. The Working Group is responsible for providing public health input into the AB 32 implementation process, as well as other public health issues related to climate change mitigation and adaptation. Climate change will significantly increase disease burden in California. Public health impacts will result from more severe extreme heat and other weather events, a decline in air quality, increases in allergenic plant pollen, more frequent wildfires, altered environmental conditions that foster the spread of communicable and vector-borne diseases, and impacts on food supply, water quality, shelter, and mental health. Public health has important roles in preventing the most catastrophic climate outcomes through engagement in climate change mitigation, in ensuring that climate change adaptation efforts address likely public health impacts, and in public health preparedness for response to climate-related emergencies.

Working Group Agencies: California Department of Public Health (designated lead), California Air Resources Board, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, Department of Pesticide Regulation, California Natural Resources Agency, California Department of Fish and Game, California Department of Forestry & Fire Protection, California Department of Water Resources, California Department of Conservation, California Energy Commission, California Department of Food and Agriculture, California Occupational Safety and Health Administration, Local Health Departments, and Stakeholder Organizations.

Measure / Strategy

- A) **Description:** Through this Strategy, the Public Health Working Group will conduct research to enable enhanced promotion and protection of human health in light of climate change. Climate change introduces varying levels of vulnerability based on geographic location, community and individual characteristics, and the preparedness and response capacity of individuals and communities. Assessments of such vulnerabilities allow for appropriate direction of resources to reduce vulnerability and increase resiliency. Research collaboration allows for more efficient and effective use of resources and is essential.
- B) **Agencies Involved:** CDPH, California Energy Commission, University of California.
- C) **Scoping Plan/Adaptation Plan Reference:** This Strategy is drawn from Public Health Strategy 7 (Conduct Research to Enable Enhanced Promotion and Protection of Human Health in Light of Climate Change), Near-Term Action (a) Vulnerability Assessments, and Near-Term Action (b), Research Collaboration in the 2009 California Climate Adaptation Strategy.
- D) **Metrics:** The metrics used to define success for this Strategy are process measures that vary with each Task (see enumerated Deliverables below).
- E) **Crosscutting Issues:** Intersections with the Research Working Group will be addressed through participation of CDPH staff on the Research Working Group.

F) Tasks and Deliverables:**Task 6.1: Heat Vulnerability Assessment***

1. Description: Plan and conduct a comprehensive health impact vulnerability assessment of heat, including identification of vulnerable populations and communities based on demographic and environmental characteristics. Identify geographic regions with common exposure characteristics related to extreme heat, identify vulnerable populations based on population baseline characteristics by region, and identify vulnerable populations based on adaptive capacity by region.
2. Deliverables:
 - a. Completion of grant application to conduct heat vulnerability assessment
 - b. Completed heat vulnerability assessment and comprehensive report.
3. Agency Roles: CDPH is the lead agency.
4. Timeline:
 - a. Grant application submitted May, 2010
 - b. Comprehensive heat vulnerability assessment report completed by September 2011.

** Note that completion of this deliverable is dependent upon receipt of external funding*

Task 6.2: Heat Warning Systems Collaborative Research

1. Description: A team of public health and climate scientists will research methods for predicting magnitudes of heat waves and their public health impacts in California, developing models and information required to enhance heat warning systems and vulnerable population protection under current and future California climate conditions.
2. Deliverables: Completion of project, final report of project findings.
3. Agency Roles: The Principal Investigator, Helene Margolis, is at The University of California, Davis. CDPH's CEHTP will contribute GIS and health education expertise to the project. The Scripps Institution of Oceanography is also a partner. The project is funded by the National Institutes of Health (NIH) as part of the American Recovery and Reinvestment Act.
4. Timeline: The project began September 2009 and will be completed by June 2011. The final project report is anticipated by September 2011.

Task 6.3: Local Public Health Vulnerability Assessment

1. The California Energy Commission has funded researchers at UC Berkeley to conduct research to develop local public health vulnerability assessments for the Bay Area. CDPH will participate in the oversight of this research, working with UCB researchers.
2. Deliverables: Completed report
3. Agency Roles: Principal Investigator Mike Jarrett is at the University of California, Berkeley. Project is funded by California Energy Commission, lead staff at CEC is Guido Franco. CDPH is in a supportive oversight role.
4. Timeline: The project report is anticipated by December 2010.

G) SUMMARY TABLE:

Deliverable	Agencies	Deadline
Comprehensive Heat Vulnerability Assessment Report (dependent on external resources)	CDPH	Grant submitted May, 2011. Completed by September 2011
Enhanced Heat Warning System Project	UC Davis, CDPH	Project complete by June 2011, final report by September 2011
Local PH Vulnerability Assessment	UC Berkeley, CEC, CDPH	Project report by December 2010