# California Climate Action Team Public Health Workgroup (CAT-PHWG)

# **Preparing for the Health Effects of Drought**

A Workshop for Public Health Professionals and Partners

February 4, 2019 | 10:00 am - 4:00 pm PSTCalEPA Headquarters, Sierra Hearing Room,  $2^{\text{nd}}$  Floor, 1001 I Street, Sacramento, California Webinar link <u>here</u> | Live Webcast link <u>here</u>

# Sponsored & Organized by:

California Department of Public Health (CDPH); Centers for Disease Control and Prevention's (CDC) National Center for Environmental Health, Division of Environmental Hazards and Health Effects; National Drought Mitigation Center (NDMC); National Integrated Drought Information System (NIDIS)

\*The CAT-PHWG is co-hosted by the California Air Resources Board and the California Dept. of Public Health

# **AGENDA**

#### 10:00 – 10:30 AM Welcome & Introductions

- Welcome: Solange Gould, Chief, Health Equity Policy and Planning Unit, Office of Health Equity, CDPH
- Facilitator: Linda Helland, Team Lead, Climate Change & Health Equity Program (CCHEP), CDPH

# 10:30 – 10:45 AM An Overview of Drought and California

• Mike Anderson, State Climatologist, California Department of Water Resources (DWR)

# 10:45 – 11:00 AM Drought and Health Impacts

• Jesse Bell, Claire M. Hubbard Professor of Health & Environment, Univ. of Nebraska Med. Center (UNMC)

# 11:00 – 11:15 AM Assessing Drought Impacts Using Community Assessment for Public Health Emergency Response (CASPER)

Jason Wilken, Career Epidemiology Field Officer, Centers for Disease Control and Prevention (CDC) / CDPH

# 11:15 – 12:30 PM Drought and Health Panel

- Drought Impacts on Water Supplies Jeanine Jones, Interstate Resources Manager, DWR
- Water Quality Changes During Drought Conditions Betsy Lichti, Chief, Quality Assurance Section, Division of Drinking Water, State Water Resources Control Board
- Health and Economic Impacts of the 2012-2016 California Drought: Lessons Learned Josué Medellín-Azuara, Associate Director, UC Agricultural Issues Center, UC Merced
- Impacts of Extreme Weather Events and Water Policy on Birthweights and Psychological Distress in CA Kurt Schwabe, Associate Dean and Professor of Environmental Economics and Policy, UC Riverside, and Maithili Ramanchandran, Postdoctoral Researcher in Health & Public Policy, UC Riverside
- Impact of Climate Change on Vector-Borne Diseases Robbie Snyder, Epidemiologist, Vector-Borne Disease Section, CDPH

# 12:30 – 1:15 PM Working Lunch: Drought, Climate and Health Data & Tools Demonstration

- Cal-Adapt: Linking Climate Science with Practitioner Need Nancy Thomas, Executive Director, Geospatial Innovation Facility, UC Berkeley / Cal-Adapt Project Lead
- Climate Change and Health Vulnerability Indicators for California Jason Vargo, Lead Research Scientist, Climate Change and Health Equity Program, CDPH

#### 1:15 – 1:30 PM Break

# AGENDA (continued)

# 1:30 – 1:35 PM Working Session Overview and Agenda

Nicole Wall, Research and Outreach Specialist, National Drought Mitigation Center (NDMC)

# 1:35 – 1:50 PM Mariposa County Drought Response and Recovery Overview

- Eric Sergienko, County Health Officer, Mariposa County Health & Human Services Agency
- Mike Anderson, DWR
- Jason Wilken, CDC / CDPH

# 1:50 – 2:05 PM Tulare County Drought Response and Recovery Overview

- Tulare County Drought Response Andrew Lockman, Emergency Services Manager, County of Tulare
- **Tooleville Community Vulnerability Assessment** Pedro Hernández, Policy Advocate, Leadership Counsel for Justice and Accountability

#### 2:05 -2:10 PM CDC Data Resources Guide Overview

• Tesfaye Bayleyegn, Senior Service Fellow, Disaster Epidemiology and Response Team Lead / Physician, National Center for Environmental Health (NCEH), CDC

# 2:10 – 2:20 PM CDC Resources Guide Module 1 – Basics of a Hazard & Vulnerability Assessment

Tesfaye Bayleyegn, NCEH, CDC

#### 2:20 – 2:45 PM CDC Resources Guide Module 1 – Facilitated Discussion

- Facilitator: Nicole Wall, NDMC
- Jesse Bell, UNMC

#### 2:45 – 3:00 PM CDC Resources Guide Module 5 – Current and Future Resources

- CDC Resources Guide Module 5 Overview: Resources Tesfaye Bayleyegn, NCEH, CDC
- Building Resilience to Drought Through California Climate Investment grants & California Office of Emergency Services Resources - Linda Helland, CCHEP, CDPH
- Additional Resources

# 3:00– 3:10 PM CDC Resources Guide Modules 2 & 3 – Basics of Communication Related to Drought Preparedness and Response Strategies

Tesfaye Bayleyegn, NCEH, CDC

# 3:10 – 3:30 PM CDC Resources Guide Modules 2 & 3 – Facilitated Discussion

• Facilitator: Nicole Wall, NDMC

# 3:30 – 4:00 PM Workshop Closing / Wrap Up

- Continued Collaboration Tesfaye Bayleyegn, NCEH, CDC
- Facilitator: Nicole Wall, NDMC
- Closing Remarks / Post-Workshop Evaluation

# **Useful Links and Resources**

# **Workshop Information:**

- U.S. Drought Portal Workshop details: <a href="https://www.drought.gov/drought/calendar/events/preparing-health-effects-drought-california-climate-action-team-public-health">https://www.drought.gov/drought/calendar/events/preparing-health-effects-drought-california-climate-action-team-public-health</a>
- California Climate Action Team Public Health Workgroup Meetings (including archived materials and recordings of past meetings): <a href="https://www.arb.ca.gov/cc/ab32publichealth/meetings/meetings.htm">https://www.arb.ca.gov/cc/ab32publichealth/meetings/meetings.htm</a>

# **Centers for Disease Control and Prevention (CDC):**

- FEATURED RESOURCE: Preparing for the Health Effects of Drought: A Resource Guide for Public Health Professionals: <a href="https://www.cdc.gov/nceh/hsb/cwh/docs/CDC">https://www.cdc.gov/nceh/hsb/cwh/docs/CDC</a> Drought Resource Guide-508.pdf
- Drought & Health: <a href="https://www.cdc.gov/nceh/drought/default.htm">https://www.cdc.gov/nceh/drought/default.htm</a>
- Drought Communication Toolkit: <a href="https://www.cdc.gov/nceh/drought/toolkit/default.htm">https://www.cdc.gov/nceh/drought/toolkit/default.htm</a>
- When Every Drop Counts: Protecting Public Health During Drought Conditions: <a href="https://www.cdc.gov/nceh/ehs/publications/Drought.htm">https://www.cdc.gov/nceh/ehs/publications/Drought.htm</a>
- National Environmental Public Health Tracking Network: <a href="https://ephtracking.cdc.gov/DataExplorer/#/">https://ephtracking.cdc.gov/DataExplorer/#/</a> (select Drought under Content Area in the Data Explorer)
- Community Assessment for Public Health Emergency Response (CASPER) in California: <a href="https://www.cdc.gov/nceh/hsb/disaster/casper/states/ca.htm">https://www.cdc.gov/nceh/hsb/disaster/casper/states/ca.htm</a>
- CDC Framework for Program Evaluation: <a href="https://www.cdc.gov/eval/framework/index.htm">https://www.cdc.gov/eval/framework/index.htm</a>

National Integrated Drought Information System: <u>www.drought.gov</u>

National Drought Mitigation Center: <a href="https://drought.unl.edu/">https://drought.unl.edu/</a>

# **California Department of Public Health:**

- Climate Change and Health Equity Program (CCHEP): <a href="https://www.cdph.ca.gov/Programs/OHE/Pages/CCHEP.aspx">https://www.cdph.ca.gov/Programs/OHE/Pages/CCHEP.aspx</a>
- Community Assessment for Public Health Emergency Response (CASPER) Reports:
   <a href="https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/Pages/Emergency-Preparedness-Team.aspx">https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/Pages/Emergency-Preparedness-Team.aspx</a>
  - Mariposa County 2016 CASPER Report (PDF, 6MB) CDC, together with Mariposa County and CDPH
     Division of Environmental and Occupational Disease Control's (DEODC) Emergency Preparedness Team
     (EPT), conducted rapid community assessment in Mariposa County.
  - <u>Tulare County CASPER Report (PDF, 6MB)</u> CDPH DEODC EPT conducted two rapid community assessments concerning the public health impacts of drought.

# Other State of California Resources:

- State of California Interagency Drought Task Force and Web Portal: http://drought.ca.gov/
- California Department of Water Resources (DWR)
  - o DWR Drought Homepage: https://water.ca.gov/Water-Basics/Drought
  - DWR Drought Preparedness, Water Conservation and Water Supply Emergency Response:
     <a href="https://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/DroughtPreparedness.html">https://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/DroughtPreparedness.html</a>
- California Office of Emergency Services (CalOES)
  - o 2018 State Hazard Mitigation Plan: <a href="https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation-planning/state-hazard-mitigation-plan">https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation-planning/state-hazard-mitigation-plan</a>
    - o Section 9.1.5 covers droughts and water shortages. See tables 9.I and 9.J on drought disaster assistance programs and drought grant programs
  - o Hazard Mitigation Grant Program (HMGP): <a href="https://www.caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/404-hazard-mitigation-grant-program">https://www.caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/404-hazard-mitigation-grant-program</a>
  - o Pre-Disaster Mitigation (PDM) and Flood Mitigation Assistance (FMA): <a href="https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/pre-disaster-flood-mitigation">https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/pre-disaster-flood-mitigation</a>

# **Workshop Presenters & Organizers Contact Information**

First	Last	Title / Organization	Email
Amanda	Sheffield	Regional Drought Information Coordinator / NOAA National Integrated Drought Information System	Amanda.sheffield@noaa.gov
Andrew	Lockman	Emergency Services Manager / County of Tulare	alockman@tularehhsa.org
Betsy	Lichti	Chief, Quality Assurance Section / Division of Drinking Water, State Water Resources Control Board	Betsy.Lichti@waterboards.ca.gov
Dan	Woo	Health Program & Policy Specialist / Climate Change & Health Equity Program, California Department of Public Health	daniel.woo@cdph.ca.gov
Eric	Sergienko	County Health Officer / Mariposa County Health and Human Services Agency	esergienko@mariposacounty.org
Jason	Wilken	CDC Career Epidemiology Field Officer / Centers for Disease Control and Prevention (CDC) / CDPH	Jason.Wilken@cdph.ca.gov
Jason	Vargo	Lead Research Scientist / Climate Change & Health Equity Program, CDPH	jason.vargo@cdph.ca.gov
Jeanine	Jones	Interstate Resources Manager / California Department of Water Resources	Jeanine.Jones@water.ca.gov
Jesse	Bell	Claire M. Hubbard Professor of Health and Environment / University of Nebraska Medical Center	jesse.bell@unmc.edu
Josué	Medellín- Azuara	Associate Director, UC Agricultural Issues Center / University of California Merced	jmedellin-azuara@ucmerced.edu
Kurt	Schwabe	Associate Dean and Professor of Environmental Economics and Policy / School of Public Policy, University of California Riverside	kurt.schwabe@ucr.edu
Linda	Helland	Team Lead / Climate Change & Health Equity Program, CDPH	linda.helland@cdph.ca.gov
Maithili	Ramachan- dran	Postdoctoral Researcher in Health & Public Policy / School of Public Policy, University of California Riverside	mrama001@ucr.edu
Michael (Mike)	Anderson	State Climatologist / California Department of Water Resources	Michael.L.Anderson@water.ca.gov
Nancy	Thomas	Cal-Adapt Project Lead and Executive Director / Geospatial Innovation Facility, University of California Berkeley	nethomas@berkeley.edu
Nicole	Wall	Research and Outreach Specialist / National Drought Mitigation Center	nwall2@unl.edu
Pedro	Hernández	Policy Advocate / Leadership Counsel for Justice and Accountability	phernandez@leadershipcounsel.org
Robert (Robbie)	Snyder	Epidemiologist / Vector-Borne Diseases Section, CDPH	Robert.Snyder@cdph.ca.gov
Solange	Gould	Chief, Health Equity Policy & Planning Unit, Office of Health Equity, CDPH	Solange.Gould@cdph.ca.gov
Tesfaye	Bayleyegn	Senior Service Fellow, Disaster Epidemiology and Response Team Lead & Physician / National Center for Environmental Health, CDC	bvy7@cdc.gov