



National Drought & Public Health Summit

June 17-19, 2019

Atlanta Marriott Marquis A703/A704

265 Peachtree Center Ave NE

Atlanta, Georgia

Over the last century, droughts have caused more deaths internationally than any other weather- or climate-related disaster**. Droughts in the United States, however, are generally not thought of as public health threats. This meeting brings together local, state, federal, Tribal, non-profit, and academic participants for a discussion around the linkages between droughts and human health. The goal is to discuss ways to properly prepare our public health agencies and organizations for the health hazards associated with drought, which, in turn, can reduce negative outcomes and save lives.

Meeting Objectives Include:

- Share the current state of knowledge for research and preparedness activities
- Identify gaps and needs for evidence-based research, capacity building, and communication
- Engage and develop a drought-public health community of practice
- Jointly develop a collaborative, multi-partner NIDIS Drought & Public Health Strategy that builds upon Summit outcomes.

This meeting will also help better identify the role that NOAA's [National Integrated Drought Information System \(NIDIS\)](#) and its partners and stakeholders, along with other agencies, have in supporting and preparing the public health community for drought.

Thank you for our Summit Planning Partners:

Centers for Disease Control and Prevention (CDC)
NOAA National Integrated Heat Health Information System (NIHHIS)
Environmental Protection Agency (EPA)
Natural Resources Defense Council (NRDC)
UNL National Drought Mitigation Center (NDMC)

Monday June 17

8:00-9:00 am Registration & Check In, Coffee & Breakfast (provided)

9:00-9:10 am Welcome & Opening Remarks

- Jesse Bell (UNMC) & Amanda Sheffield (NIDIS)

9:10-9:40 am Why Drought Matters to Human Health?

- Jesse Bell (UNMC)

9:40-10:20 am Organization Introductions

- NOAA National Integrated Drought Information System (NIDIS): Advancing Drought Science & Preparedness Across the Nation

- Veva Deheza (NOAA)
- Centers for Disease Control and Prevention (CDC) Climate & Health Activities
 - Paul Schramm (CDC)
- NOAA Climate & Health Activities
 - Juli Trtanj (NOAA)
- Introduction to the National Drought Mitigation Center (NDMC)
 - Kelly Smith (NDMC)

10:20-10:45 am Break

10:45 am-12:00 pm Drought Impacts on Human Health: Part 1

Moderator: Paul Schramm (CDC)

Drought & Environmental Exposures (15 minutes)

- The NIEHS Superfund Research Program: Research Highlights on Drought-Associated Environmental Exposures
 - Danielle Carlin (NIH/NIEHS Superfund Research Program) (remote)

Drought & Water Quality & Quantity

- Assessing the Impact of Drought on Arsenic in Groundwater (15 minutes)
 - Melissa Lombard (USGS)
- Current & Projected Impacts of Droughts on Water Resources of the Southeast (15 minutes)
 - Puneet Srivastava (Auburn University)

Drought & Heat (15 minutes)

- Hunter Jones (NOAA)

Drought & Environmental Data (15 minutes)

- Environmental Tracking (CDC)

12:00-1:00 pm Working Lunch (provided)

1:00-2:45 pm Drought Impacts on Human Health: Part 2

Moderator: Shubhayu Saha (CDC)

Drought & Mortality (15 minutes)

- Jesse Berman (U. of Minnesota)

Drought & Air Quality

- John Haynes (NASA) (15 minutes)
- Fire & Health (15 minutes)
 - Ambarish Vaidyanathan (CDC)
- Dust Storms, Air Quality, & Drought (15 minutes)
 - Daniel Tong (GMU/NOAA) (remote)

Drought & Disease

- Contributions of drought and temperature to West Nile Virus risk in Nebraska (15 minutes)
 - Kelly Smith (NDMC)

Drought & Vulnerable Populations (30 minutes)

- Lori Peek (Natural Hazards Center, University of Colorado Boulder)
- Amy Wolkin (CDC)

2:45-3:00 pm Break

3:00-4:20 pm Facilitated Discussion on the Role of Drought and Health

Facilitator: Nicole Wall

4:20-4:30 pm **Wrap-up/Day 1 Summary**

Tuesday June 18

8:00-9:00 am **Coffee & Breakfast (provided)**

9:00-9:15 am **Introduction & Recap of Day 1**

- Jesse Bell (UNMC)

9:15-10:30 am **State, Local, & Tribal Health Departments - Stories & experiences from state, local, & Tribal health departments.**

Moderator: Amanda Sheffield (NIDIS)

- Amanda Sheffield (NIDIS) & Nicole Wall, Outcomes from the [California Preparing for the Health Effects of Drought Workshop](#)
- Shasta Gaughen (Pala Band of Mission Indians)
- Matt Roach (Arizona Department of Health Services)
- Christopher Uejio (Florida State University)

Panel Discussion (20 minutes)

10:30-11:00 am Break

11:00 am-12:00 pm **Role of Other Institutions - Discussion of the role of non-government entities.**

Moderator: Azar Abadi (UNMC)

- Juanita Constible (NRDC)
- Hayleigh McCall (CSTE)
- Mark Shimamoto (AGU)
- Keith Hansen (UNMC, AHEPP)

12:00-12:45 pm **Working Lunch (provided)**

12:45-1:00 pm

Drought & Disease

- Valley Fever (15 minutes)
 - Orion McCotter (CDC)

1:00-1:45 pm **International Expertise - Lessons learned from international partners.**

Moderator: Amelia Blumberg (CDC)

- Latin America (30 minutes)
 - Sally Edwards (PAHO)
- Cisterns Climate & Health post Hurricanes Irma & Maria in the USVI (15 minutes)
 - Christina Chanes, University of the Virgin Islands Cooperative Extension Agent I
 - Ulric Baptiste, UVI Water Quality Ambassador & Climate and Health Intern

1:45-2:00 pm **How to Communicate Drought Preparedness & Response Strategies (CDC Resource Guide for Public Health Professionals)**

- Nicole Wall

2:00-2:30 pm Break

2:30-4:20 pm **Facilitated Discussion on Communicating Drought & Health Impacts**

Facilitator: Nicole Wall

4:20-4:30 pm **Wrap-up/Day 2 Summary**

Wednesday June 19th

8:00-9:00 am **Coffee & Breakfast (provided)**

9:00-9:20 am **Introduction & Recap of Day 1-2**

- Jesse Bell (UNMC) & Amanda Sheffield (NIDIS)

9:20 am-11:45 am **Break Out Groups to Discuss Next Steps**

Facilitator: UNMC Center for Preparedness Education

9:20-9:30 am	Introduce Breakout Goals & Logistics
9:30-11:00am	Breakout Group Discussions
11:00-11:10am	Reconvene
11:10-11:45am	Report out from Breakout Groups

11:45 am-12:00 pm **Closing Remarks & Thank You**

List of Acronyms:

AGU - American Geophysical Union

AHEPP - Association of Healthcare Emergency Preparedness Professionals

CDC - Centers for Disease Control and Prevention

CSTE - Council of State and Territorial Epidemiologists

NASA - National Aeronautics and Space Administration

NDMC - National Drought Mitigation Center

NIDIS - National Integrated Drought Information System

NIEHS - National Institute of Environmental Health Sciences

NIH - National Institute of Health

NIHHIS - National Integrated Heat Health Information System

NOAA - National Oceanic and Atmospheric Administration

NRDC - Natural Resources Defense Council

PAHO - Pan American Health Organization

UNMC - University of Nebraska Medical Center

USGS - United State Geological Survey

Relevant Resources:

** CRED. Centre for research on the epidemiology of disasters: the international disaster database—EM-DAT. 2015. <http://www.emdat.be/>

[CDC: Drought & Health:](#)

[When Every Drop Counts: Protecting Public Health During Drought Conditions. A Guide for Public Health Professionals](#)

[Preparing for the Health Effect of Drought: A Resource Guide for Public Health Professionals](#)

CASPERs Related to Drought: [California](#) (See Mariposa and Tulare Counties, 2015), [Oregon](#) (2017)

[CDC National Environmental Public Health Tracking](#)

[CDC Climate & Health Program](#)

U.S. drought portal: www.drought.gov

[NIDIS and Partners Host California Preparing for the Health Effects of Drought Workshops](#)

[National Integrated Heat Health Information System](#)

[Daugherty Water for Food Global Institute](#)

State Efforts:

[Wisconsin: Toolkit](#)

Missouri: Tips for Coping with Drought Related Stress ([version 1](#), [version 2](#))

Arizona: [Fall 2013 newsletter](#), [2017 Climate and Health Adaptation Plan](#)

www.tribalclimatehealth.org

[USGCRP Climate and Health Assessment \(2016\)](#)

[NRDC Climate Change and State Health Impacts](#)

[Drought & Equity in California](#)

[Physical, Mental, and Financial Impacts from Drought in 2 California Counties](#)

[Australia: National Strategy on Climate, Health, and Well-Being for Australia](#)

Please contact Amanda if you'd like to add your resource to this list for sharing after the meeting and on the future drought.gov Public Health page!