

Attachment A- Instrument: Word Version

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[INTRODUCTION]

The Centers for Disease Control and Prevention (CDC), National Center for Environmental Health, Division of Environmental Health Science and Practice is conducting an online assessment of state, tribal, local, and territorial (STLT) health departments to identify best practices, lessons learned, knowledge gaps, and barriers to including public health in drought preparedness and response activities. This assessment will ask questions about your current practices, the resources you use or would like to have, collaborations you have created, challenges you have experienced, and successes you have had in preparing for and responding to drought.

The assessment will take approximately 20 minutes to complete. Your participation in this assessment is voluntary, however, your input is important to informing future drought preparedness and response activities and education efforts.

If you wish to save your progress and continue the assessment at another time (e.g., if you need to consult another source to find the answer to a question), you can click “Finish later” on the bottom of any page to receive a link and passcode that will let you start where you left off.

There are no known or expected risks to participating in the assessment. Results of the analysis will be reported only in aggregate. If you have questions, please contact Angela Salazar, Public Health Advisor, aos9@cdc.gov or 770.488.3949.

Thank you for your participation.

CDC estimates the average public reporting burden for this collection of information as **20 minutes** per response, including the time for reviewing instructions, searching existing data/information sources, gathering and maintaining the data/information needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0879).

[BACKGROUND OF ORGANIZATION AND EXPERIENCE WITH DROUGHT]

1. In what state or territory do you conduct work on drought preparedness and response activities?
(Select all that apply.) [Drop down menu of states and territories]

2. What is the jurisdictional level where you work?
 - a. City
 - b. County
 - c. State
 - d. Territorial
 - e. Tribal
 - f. Regional (e.g., multi-state, multi-county)

3. What is the population size of your jurisdiction?
 - a. > 15,000,000
 - b. Between 10,000,001 to 15,000,000
 - c. Between 5,000,001 to 10,000,000
 - d. Between 1,000,001 to 5,000,000
 - e. Between 100,000 to 1,000,000
 - f. < 100,000

4. Has your agency conducted any type of planning and preparedness for drought in the last five years?
 - a. Yes
 - b. No
 - c. Other, please specify _____
 - d. I don't know

5. Has your agency actively responded to drought conditions in the last five years?
 - a. Yes
 - b. No
 - c. I don't know

6. In how many of the last 10 years has your jurisdiction experienced drought?
 - a. All 10 years
 - b. 6 to 9 years
 - c. 3 to 5 years
 - d. 1 to 2 years
 - e. My jurisdiction has not experienced drought at all in the last 10 years
 - f. I don't know

7. How likely is it that your jurisdiction will experience drought in the next 10 years?
 - a. Very likely
 - b. Somewhat likely
 - c. Somewhat unlikely

- d. Very unlikely

[HEALTH EFFECTS AND VULNERABLE POPULATIONS]

- 8. In your jurisdiction, what do you consider the most important potential health effects of drought? (Check all that apply)
 - a. Compromised quantity and quality of drinking water
 - b. Increased recreational risks
 - c. Decreased air quality, impacting respiratory illnesses and infections
 - d. Increased incidence of illness and disease
 - e. Compromised sanitation and hygiene
 - f. Compromised food and nutrition
 - g. Other (please specify) _____

- 9. In your jurisdiction, what drought-related health effects has your agency seen evidence for? (Check all that apply)
 - a. Increase in rates of chronic respiratory illness (e.g., asthma) and infections (e.g., bronchitis and pneumonia)
 - b. Increase in rates of cardiovascular disease
 - c. Increase in rates of vector-borne diseases (e.g., Lyme, West Nile)
 - d. Increase in rates of fungal infections (e.g., Valley Fever)
 - e. Increased in rates of bacterial (e.g., e-coli, salmonella) or gastrointestinal infections
 - f. Increase in rates of water-related recreational injuries
 - g. Increase in rates of water-related infections or exposures (e.g., from harmful algal blooms or *Vibrio vulnificus*)
 - h. Increase in rates of heat-related issues
 - i. Increase in issues associated with mental/behavioral health
 - j. Other (please specify) _____
 - k. My agency has not seen any health effects related to drought
 - l. My agency does not monitor health effects related to drought

- 10. Which populations are **most vulnerable** to drought in your jurisdiction? (Check all that apply)
 - a. Elderly
 - b. Children
 - c. Pregnant women or mothers of infants
 - d. Low socioeconomic status (SES)
 - e. Those with chronic illness
 - f. Users of private wells, ground water supplies, or not connected to organized water distribution systems
 - g. Those involved in fishing, farming, livestock, or poultry production for their livelihoods
 - h. Those in businesses licensed to have running hot and cold water (e.g., hospitals, hair salons, restaurants)
 - i. Those with limited access to alternative employment/incomes
 - j. Those in remote areas with limited access to medical services and mental health facilities

- k. Those who engage in outdoor recreation
- l. Other (please specify) _____

[WHEN EVERY DROP COUNTS]

11. Which statement best describes your knowledge and use of the document, *When Every Drop Counts: Protecting Public Health during Drought Conditions — A Guide for Public Health Professionals*?
- a. I've used it to inform plans or activities in my work.
 - b. I've used it as a quick reference.
 - c. I've seen or heard about it but not used it.
 - d. I am not aware of this document.
12. How has this document, *When Every Drop Counts*, been used by others within your agency? (Check all that apply)
- a. My agency has used it to draft the public health sections of the state's drought plan.
 - b. My agency has used it for messaging and communication.
 - c. It has informed my agency about health effects and available interventions for drought.
 - d. It is linked from our agency's website.
 - e. Other (please specify) _____
 - f. I don't know.

[ORGANIZATIONS INVOLVED IN DROUGHT PREPAREDNESS AND RESPONSE]

13. What lead agency, organization, or group is responsible for drought preparedness and response in your jurisdiction?
- a. State or local emergency management services
 - b. State or local department of water resources
 - c. Governor's office
 - d. Mayor or County Executive's office
 - e. Homeland security
 - f. State or local climatologist
 - g. State or local department of natural resources
 - h. State or local department of agriculture
 - i. Other (please specify) _____
14. Which external partners (for example, other agencies, organizations, groups, or jurisdictions) does your agency collaborate with for drought preparedness and response? (Check all that apply)
- a. Food and agriculture
 - b. Environmental protection (e.g., air, toxic substances, environmental hazards, pollution, etc.)
 - c. Natural resources (e.g., water, coastal, parks/recreation, forestry, fire, fish/wildlife, energy, etc.)

- d. Health and human services (e.g., community services, emergency management, mental health, hospitals, social services, etc.)
- e. Labor and workforce (e.g., employment, training, etc.)
- f. Housing and community development
- g. Business and commerce
- h. Public water suppliers
- i. Private well owners
- j. Regional resource districts
- k. Other (please specify) _____

[ROLE OF PUBLIC HEALTH IN PREPAREDNESS AND RESPONSE]

15. In what ways is the public health agency involved in drought preparedness and response for your jurisdiction? (Check all that apply)
- a. Represented on drought council, board, or advisory group
 - b. Public education
 - c. Surveillance and epidemiology
 - d. Water testing
 - e. Other (please specify) _____
16. Is the public health sector included in your jurisdiction's drought plan?
- a. Yes
 - b. No
 - c. I don't know
17. Which public health activities are included in your jurisdiction's **preparedness** activities for drought? (Check all that apply)
- a. Conduct adaptation Planning (e.g., assess disease burden, identify suitable interventions)
 - b. Analyze health/disease surveillance data (e.g., track data on chronic diseases during drought and non-drought periods)
 - c. Assess health impacts (e.g., review reports from healthcare facilities during periods of droughts to assess changes in physical and mental health)
 - d. Conduct vulnerability assessments (e.g., develop model of social vulnerability using drought monitoring tools and social variables)
 - e. Collaborate with state and local health departments (e.g., for evacuation planning, messaging, training, public education, etc.)
 - f. Other (please specify) _____
18. Which public health activities are included in your jurisdiction's **response** activities for drought? (Check all that apply)
- a. Provide assistance to other agencies (e.g., delivering drinking water, food)
 - b. Conduct activities related to water quality and quantity
 - c. Conduct activities related to air quality (e.g., dust storms, wildfires, pollen counts)
 - d. Assess and monitor weather trends and drought patterns

- e. Assess access to mental/behavioral health services
- f. Conduct disease surveillance (e.g., of illnesses that may be impacted by/related to drought, such as asthma or Valley Fever)
- g. Other (please specify) _____

[BARRIERS AND GAPS IN PREPAREDNESS AND RESPONSE]

19. From your perspective, what are the biggest challenges to including public health in drought preparedness and response in your jurisdiction? (Check all that apply)
- a. Inadequate funding
 - b. Inadequate staff expertise (e.g., staff not trained to merge and analyze drought and health data)
 - c. Lack of staff
 - d. Difficulties in communicating the role of public health in drought
 - e. Lack of data
 - f. Limited generalizability or other problems with existing data
 - g. Lack of health impact assessments
 - h. Difficulties in translating the science of public health risk to policy
 - i. Difficulties engaging legislators, policy makers, and other decision makers
 - j. Difficulties connecting drought with specific health effects
 - k. Difficulties connecting drought with climate change
 - l. Other (please specify) _____

[RESOURCES NEEDED AND QUESTIONS TO ADDRESS FOR PREPAREDNESS AND RESPONSE]

20. What environmental data does your agency need (that it does not already have) to prepare for and respond to drought? (Check all that apply)
- a. Drought mapping (i.e., data on the spatial and temporal extent of drought)
 - b. Soil moisture
 - c. Private well locations
 - d. Vegetation data
 - e. Rainfall data
 - f. Agricultural data
 - g. Air quality data
 - h. Water quality data
 - i. Reservoir and water supply levels
 - j. Other (please specify) _____
21. What health-related data does your agency need (that it does not already have) to prepare and respond to drought? (Check all that apply)
- a. Medical records
 - b. Chronic and infectious disease surveillance
 - c. Emergency room visit data

- d. Vector (mosquitos, rodents) data
- e. Healthcare utilization trends
- f. Environmental impact data
- g. Veterinary records
- h. Other (please specify) _____

22. What geographic level of health and/or drought data does your agency currently use to effectively research or monitor health effects of drought in your jurisdiction? (Check all that apply)

- a. Zip code
- b. Census-tract
- c. County
- d. State
- e. Other (please specify) _____

23. What geographic level of health and/or drought data does your agency *need* but does not currently have to effectively research or monitor health effects of drought in your jurisdiction? (Check all that apply)

- a. Zip code
- b. Census-tract
- c. County
- d. State
- e. Other (please specify) _____

24. Briefly describe the public health questions that you are trying to answer or would like to answer regarding drought in your jurisdiction.

- a. _____
- b. We are not addressing any questions regarding drought in our jurisdiction.

[BEST PRACTICES IN PREPAREDNESS AND RESPONSE]

25. Which resources and/or activities have been most useful for drought **preparedness** in your jurisdiction? (Check all that apply)

- a. Multi-agency collaborative planning
- b. Working with subject matter experts (e.g., toxicologists, climatologists, hydrologists, etc.)
- c. A framework for drought activities (e.g., BRACE, One Health)
- d. Federal resources (e.g., crop insurance, federal grants)
- e. Vulnerability assessments
- f. Long-term disease surveillance
- g. Forecasts of future drought conditions
- h. Other (please specify)_____

26. What resources and/or activities have been most useful for drought **response** in your jurisdiction? (Check all that apply)

- a. Multi-disciplinary coordination of activities
- b. National data
- c. State data
- d. Emergency response plan
- e. Needs assessment
- f. Assistance to private well users
- g. Education
- h. Training
- i. Disease surveillance
- j. Accurate drought maps and information
- k. Providing social and health services to vulnerable populations
- l. Other (please specify)_____

27. What lessons has your agency learned in the process of planning for, preparing for, and responding to drought?
