

# **Drought and Human Health**

## **Signs and Symptoms from Droughts**

Concern	Signs and Symptoms	Actions
Extreme heat	<ul><li>Heat exhaustion</li><li>Heat stroke</li></ul>	<ul><li>Stay cool</li><li>Stay hydrated</li><li>Stay informed</li></ul>
Diminished food supply	<ul> <li>Drought-damaged crops</li> <li>Healthy foods not readily available or more expensive</li> </ul>	<ul> <li>Maintain the healthiest diet possible</li> <li>Seek services of food banks or other resources if necessary</li> </ul>
Poor air quality	<ul> <li>Breathing problems</li> <li>Worsening asthma or other respiratory conditions</li> <li>Fatigue with exertion</li> </ul>	<ul> <li>Stay indoors</li> <li>Avoid strenuous outdoor activity</li> <li>Take prescribed medications</li> <li>Talk to your health care provider if symptoms worsen</li> </ul>
Limited water supply	<ul> <li>Lower lake and river levels</li> <li>Lower water levels in aquifers, thus affecting private wells</li> <li>Public restrictions on water use</li> </ul>	<ul> <li>Listen for local government officials' directions on how to conserve water</li> <li>Continue practicing proper sanitation</li> <li>Use recycled water for non-sanitary purposes</li> <li>Avoid swimming in warm, shallow waters</li> <li>For private well users:</li> <li>Know and obey federal, state, local restrictions on water use</li> </ul>
Mental health	<ul><li>Stress and Anxiety</li><li>Depression</li></ul>	Consult with a mental health provider and/or your doctor

### **Disease and Drought**



#### **Chronic Disease**

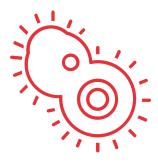
Conditions associated with drought can adversely affect people with certain chronic health conditions such as asthma and some immune disorders. Drought-related changes in air can irritate eyes, lungs, and respiratory systems of individuals with chronic respiratory conditions. Changes in water quality can threaten people whose immune systems are compromised.<sup>9</sup>



#### **Diseases Transmitted by Insects and Animals**

In periods of limited rainfall, both human and animal behavior can change in ways that increase the likelihood of human contact with wildlife, the insects they host, and the diseases they carry.

Drought reduces the size of water bodies and causes them to become stagnant. This provides additional breeding grounds for certain types of mosquitoes. Outbreaks of West Nile Virus have occurred under such conditions. Inadequate water supply can cause people to collect rainwater, leading to collections of stagnant water that can become manmade mosquito breeding areas.



#### Infectious Disease

- Viruses, protozoa, and bacteria can pollute groundwater and surface water
  when rainfall decreases. People who get their drinking water from private wells
  may be at higher risk for drought-related infectious disease. Lowered
  groundwater levels can concentrate contaminants such as nitrates and arsenic.
- Acute respiratory and gastrointestinal illnesses are more easily spread from
  person to person when handwashing is compromised by a perceived or real lack
  of available water.
- *E. coli* and *Salmonella* are examples of bacteria that can more readily contaminate food and cause infectious disease.
- Other infectious disease threats arise when drought leads to the contamination
  of surface waters and other types of water that are used for recreational
  purposes.