

Frequently Asked Questions about drought and public health

Q: How do I find out if my county is in a drought?

A: The Oregon Drought Council determines when a particular county is in a drought emergency. Get the latest information from the <u>Oregon Water Resources Department</u>. Here, you can find current drought conditions across the state, drought declarations, water supply information and drought tips.

Q: If my county is in a drought, what should I do?

A: During a drought, it's important to stay informed. The State of Oregon now has a website: drought.oregon.gov. In some cases, drought conditions may require us to change our behaviors to protect our families and communities. This may include taking additional water conservation measures and being more aware of health risks.

Q: What are the health risks I should be concerned about?

A: Drought can affect both our physical and mental health. It can affect our most basic needs, including the safety of our water, air, and food. Some people are more vulnerable to risks than others. Your geographic location, your drinking water source, your age, occupation, health condition and household income are all factors in determining risks. Oregon's Public Health Division developed a Social Vulnerability
Assessment that can help communicate different kinds of vulnerabilities.

The next questions in this FAQ address the risks and vulnerabilities associated with:

- 1. Drinking water quality,
- 2. Vector-borne diseases,
- 3. Air quality,
- 4. Recreational waters and harmful algal blooms,
- 5. Food access and affordability, and
- Mental health



Q: How can drought affect my drinking water?

A: Drought can reduce stream flows and water table levels, impacting water supplies. Over time, reduced precipitation, like rain and snow, mean that groundwater supplies are not replaced at a typical rate. This can have impacts to the quality of our drinking water. Changes in water quality, such as increased concentrations of contaminants, can be especially threatening to infants, children, pregnant women, persons living in households reliant on private or community wells, and persons whose immune systems are compromised.

The first step to addressing this risk is to understand where your water comes from. If you pay a water bill, contact the water provider to learn more. If you are on a private or small community well, you can read these <u>Domestic Well Tips</u> and go to the <u>Domestic Well Safety</u> program for additional resources.

Q: Is it safe to use reclaimed, recycled, or grey water?

A: The Department of Environmental Quality regulates the uses of recycled water, or water that has already been used for hygiene or other purposes. In general, it is not safe to use recycled water for drinking or cooking. More information can be found on the website for DEQ's Water Reuse Program.

Q: How can drought affect exposure to vector-borne diseases?

A: Vector-borne diseases are infectious diseases that are transmitted to humans by animals, such as mosquitoes, ticks, fleas, lice, and rodents. Climate change can affect availability of food or water to animals that might serve as vectors for disease. An increase in food and water might cause vector species to proliferate. A decrease in access to food or water in areas where animals usually live might cause them to move closer to human populations. In other situations, climate change might lead to a decrease in predators of the vector species, allowing its numbers to increase.

Some animals require certain conditions of temperature or access to water in order to live and breed. Changes in climate might allow new vector species, for instance, new types of mosquitos, to colonize areas where they could not live before. When vectors spread to new areas, people who live there may be at risk for new diseases. Vector-borne diseases that may be affected by drought and climate change include: West Nile virus disease, dengue virus infection and Lyme disease.



Q: How can drought affect air quality?

A: The dusty, dry conditions along with the wildfires that often accompany drought, can harm health. Fire, dry soil, and vegetation, like trees and bushes, increase the number of particulates that are suspended in the air, such as pollen, smoke, and fluorocarbons. These substances can irritate the lungs, making chronic respiratory illnesses, like asthma, worse. This can also increase the risk for respiratory infections like bronchitis and bacterial pneumonia.

Drought can increase incidence of freshwater algal blooms of cyanobacteria. These toxins can become airborne and have been associated with lung irritation. Drought-related changes in air quality can also irritate the eyes, lungs, and respiratory systems of those especially with existing respiratory conditions.

One easy way to gauge air quality in your area is to use a Visibility Index described on the Oregon Smoke Blog.

Q: How can drought affect our food?

A: Drought can limit the growing season and create conditions that encourage insect and disease infestation in certain crops. Low crop yields can result in rising food prices and shortages. Low-income households may be more affected by changes in food access and affordability. A list of resources for Finding Help in Tough Times is provided by the OSU Extension Service.

Drought can also affect the health of livestock raised for food. During drought, livestock can become malnourished, diseased, and die. Oregon State Extension also has information about <u>Livestock Water Management</u> during a drought.

Q: How can drought affect our mental health?

A: Severe and ongoing droughts can result in significant economic losses to those whose livelihoods depend on stable climate conditions. Farmers, ranchers & others who work in agriculture are at particular risk for distress during extreme droughts. Changes to a familiar landscape or way of life can also trigger grief and depression.



If you or someone you know showing signs of worry, hopelessness, increased alcohol or substance abuse...Talk with us. You are not alone! Call the toll-free number 1-800-985-5990 or text 'TalkWithUs' to 66746 (Spanish-speakers can text 'Hablanos' to 66746) for support and crisis counseling.

Q: Do I need to stop swimming, fishing or other water recreation during a drought?

A: No, but untreated surface water can be a health threat in drought conditions. Reduced groundwater can cause stagnation and increase the concentration of pollutants in water. Low water levels and warmer water temperatures can reduce oxygen levels and encourage the growth of bacteria and pathogens. These changes in the water quality can affect fish and other aquatic life.

Before heading out, check to see if there are any alerts at your favorite swimming hole or fishing area:

Find the latest on Harmful Algae Blooms in Oregon.

Find the latest on Oregon Fish Advisories.

Q: What is Oregon doing to prepare for future drought conditions?

A: We cannot exactly predict when a drought will subside. Drought is a seasonal condition, although it can also become a chronic condition and span several years or even decades.

Due to longer term changes in our climate, we expect that drought will continue to present challenges in the State of Oregon. <u>Climate hazards</u> can be interconnected and drought conditions may lead to an increased incidence of other natural hazards such as wildfire or flooding.

The Governor's office is working to coordinate inter-agency collaboration and recently developed the new <u>Drought Watch</u> website. A summary of <u>Drought Procedures</u>, <u>Processes and State Assistance</u> provides an outline of the different actions that cities, counties, state and federal agencies are taking to address drought in Oregon.



Additional information on public health and drought can be found at the <u>Centers for Disease Control and Prevention</u>.