

WHAT YOU NEED TO KNOW ABOUT WATER QUALITY AFTER WILDFIRES

How do wildfires affect water quality?

Wildfires can impact the water quality of an entire community, not just in the immediate fire zone. Ash, chemicals or runoff from fire scenes can contaminate groundwater or surface water, and intense heat can damage plastic water pipes, allowing contaminants to enter pipelines. Intense demands on water systems during firefighting can cause pressure differences that draw toxic chemicals in through compromised pipes, contaminating the water distribution system.

After Northern California's Tubbs Fire (2017) and Camp Fire (2018), researchers found extremely high levels of **volatile organic compounds (VOCs)** such as benzene in the municipal water system. Because these chemicals had entered the system after the water had been treated to meet the Safe Water Drinking Act, municipalities were not always aware of these localized contaminations.

Depending on the severity of the damage to the water system, household water quality might be impacted for days or even months after the fire. Bottled water is a good choice until your water systems can be safely returned to service.



Why are VOCs dangerous?

High levels of VOCs in drinking water can pose both an ingestion risk and an inhalation risk. With wildfires, contaminations can be highly localized, with some houses severely impacted while nearby homes are unaffected, so it is essential to test the water in your specific location for VOCs.



Severe health risks associated with elevated VOC levels in drinking water include cancer or damage to the liver, kidneys, spleen, stomach, nervous system, circulatory system, immune system, or reproductive, cardiovascular and respiratory problems. Children may be especially vulnerable.

What if I have a water filtration system in my home?



Home systems are not designed to handle extremely high levels of contamination often found during wildfires. Consider putting your system on bypass during the emergency, and follow local water safety guidance.

What should I do?

Be on high alert for water safety announcements from your public water provider and health officials, and follow their guidance completely. During wildfires, the public water system could issue one of these notices:

- **DO NOT USE:** Your tap water should not be used for any reason at all, even for things like laundry or showering. **Use only bottled water.**
- **DO NOT DRINK:** Tap water should not be ingested; use only bottled water for drinking, cooking, baby formula, ice, and food preparation. You could bathe, but refrain from long, hot baths or showers to avoid the risk of inhaling VOCs.
- **BOIL WATER:** You must boil water before drinking it. Boiling water kills microbial contaminants, but boiling water will not remove VOCs, and it increases the risk of VOC inhalation. Bottled water can be a useful interim solution during Boil Water Notices.

Once the fires are contained and the emergency orders are lifted, it is essential to test your drinking water for VOCs before making any treatment decisions.

How do I get my water tested?

Most certified drinking water laboratories can provide VOC testing. You can [search for certified laboratories](#) on EPA's website, or a trusted local water treatment professional can gather the samples and arrange testing at a certified laboratory for you.



How will I know when I can use my home water again?

Follow guidance from your local water department and health officials as they work to ensure your local water supply. You might need to rely on bottled water for weeks or months while the system is flushed and pipes are repaired or even replaced. Pay close attention any instructions on flushing your home's pipes, remembering to include things like your water heater, your ice maker and your refrigerator's cold water dispenser tank.

Home water treatment equipment might need to be flushed, serviced and/or sanitized as well. Contact the manufacturer, the company who installed the equipment, or a local water treatment professional for advice on safely bringing equipment back online.

How do I find a water treatment pro I can trust?

Members of the Water Quality Association have agreed to abide by a strict code of ethics that upholds the highest principles of honesty, integrity, fair dealing, and professionalism. To find a WQA member nearby, use [WQA's online search tool](#).



This material is provided by the Water Quality Association, the recognized resource and advocate for the betterment of water quality. WQA represents more than 2,500 member companies around the world in the residential, commercial, and industrial water treatment industry. For more information, visit the website: wqa.org.