

Understanding Boil Water Advisories and Notices

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July 13, 2018

Every day new boil water advisories or notices are issued in the United States for various reasons and affect thousands.¹ Perhaps you have experienced one and wondered what it is, why it was given, and whether it could be ignored? (DON'T ignore it!)



Photo credit: City of Asheville, NC

Fortunately, the vast majority of almost 300 million Americans served by more than 50,000 community drinking water systems enjoy virtually unlimited access to safe and treated (**finished**) tap water for pennies per gallon. This is made possible through a “multi-barrier approach” that includes source water protection, treatment appropriate for the water source, and protection from contamination as water moves from the treatment plant to the consumer’s tap. A final step in this multiple barrier approach is verification that the water is safe to drink, which includes routine water quality monitoring and an established notification system that errs on the side of public health protection in the event of any evidence of a problem.²

Boil Water Advisories and Notices

Enacted in 1974 and implemented collaboratively by federal, state, tribal, and local governments and utilities, the Safe Drinking Water Act and its amendments provide protection of the quality of US drinking water. The Act includes the [Public Notification Rule](#) that ensures consumers are alerted if there is—or could be—a

¹ See <http://www.boilwaterwatch.org/> to track current boil water notifications in the US and Canada and for FAQ, infographics, and other useful resources.

² See Centers for Disease Control and Prevention (CDC). 2016. Drinking Water Advisory Communication Toolbox. <https://www.cdc.gov/healthywater/emergency/pdf/dwact-2016.pdf>.

problem with their drinking water quality.³ Although federal regulations require and specify the content of such notifications, local authorities are responsible for issuing timely boil water advisories and notices.

A **boil water advisory** is a public statement issued by a utility no later than 24 hours after learning of a microbial water quality violation, such as excess levels of [indicator organisms](#) that can follow a water main break, or during situations that may pose a risk to public health like natural disasters, pipe replacement programs, or treatment plant software failures. These can all potentially contaminate the water distribution system. Notifications are typically spread through social media, news media, the local water utility's website, phone calls, or emails and warn affected consumers to boil (and allow to cool!) tap water before drinking.⁴ It is important to emphasize that an advisory does not necessarily mean that the tap water is contaminated. Rather, it means that the **water could be contaminated, and that the public should take precautionary measures**, especially the elderly, very young, or those with a weak immune system. In contrast, a **boil water notice** is issued when contamination in a water system is **confirmed**. Advisories and notices remain in effect until publicly lifted by the utility (typically for at least 24 hours), and following water quality test results that demonstrate the tap water is safe to drink or use.

Do's and Don'ts during a Boil Water Advisory or Notice

BE CAREFUL! The risk of scalding can be reduced by handling containers of hot water very carefully; allowing them to cool on a back burner of the stove is recommended. The table below includes a partial list of when tap water use remains acceptable during a boil water advisory or notice, when to use boiled or disinfected water, and when extra caution is needed. This is not a complete list. Please refer to other resources cited or hyperlinked in this article for further information, such as FAQ lists.

³ See also US Environmental Protection Agency (EPA). 2009. The Public Notification Rule: Quick Reference Guide. <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100529C.txt>.

⁴ According to [CDC](#) and [EPA](#), "boiling" means bringing the water to a rolling boil for 1 minute (at elevations above 6,500 feet, boil for 3 minutes) to kill disease-causing microorganisms like bacteria, viruses, and protozoa. Other tap water alternatives during water emergencies, especially during power outages, include use of commercially bottled water or [addition of sodium hypochlorite \(liquid bleach\) to water](#).

Use Tap Water for:	Use Boiled Water for:	Use Caution:
<ul style="list-style-type: none"> • Washing clothes (unless the water is cloudy) • Washing hands • Taking showers (for adults and older children) • Flushing toilets 	<ul style="list-style-type: none"> • Drinking • Brushing teeth • Washing fruits and vegetables • Preparing food • Mixing baby formula • Making ice • Giving water to pets 	<ul style="list-style-type: none"> • Most kitchen and other household water filters do not remove bacteria or viruses • Coffee makers, vending machines, and soda dispensers with a line to the water supply • Bathing babies and young children (give sponge bath; use boiled water that has cooled) • Use clean, sanitized containers for storing boiled water

Source: CDC, 2016

After a Boil Water Notification ... and Being Prepared

[Following a boil water advisory or notice](#), consumers will need to disinfect (or replace) any object that was in contact with the (potentially) contaminated tap water, including containers and water filters, before drinking or using tap water again. Household plumbing should be flushed to clear pipes, and ice from refrigerator ice makers should be discarded for two cycles. Adherence to proper precautionary measures should protect your health and the people and pets in your home or place of business. Perhaps most importantly, don't let a boil water advisory or notice paralyze your daily life and activities. For further information on how you can be prepared for a drinking water or related emergency, see our [collection of articles on emergency preparedness](#).

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www.waterandhealth.org