



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

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## **\* \* \* Fact Sheet \* \* \***

# **When there is a Boil-Water Advisory**

A boil-water advisory is a public health announcement that the public should boil tap water before drinking it. When issued, the public should assume the water is unsafe to drink.

Advisories can be issued after 1) failure of or substantial interruption in water treatment processes that result in increased turbidity levels or particle counts and mechanical or equipment failure; 2) positive test results for pathogens (e.g., *Cryptosporidium*, *Giardia*, or *Shigella*) in water; 3) violations of the total coliform rule or the turbidity standard of the surface water treatment rule; 4) circumstances that compromise the distribution system (e.g., water main break) coupled with an indication of a health hazard; or 5) a natural disaster (e.g., flood, hurricane, or earthquake).<sup>1</sup>

In recent years, increased numbers of boil-water advisories have resulted from contamination of public drinking water systems with waterborne pathogens. Most notable was the outbreak of cryptosporidiosis in Milwaukee, Wisconsin, where the municipal water system was contaminated with the protozoan parasite *Cryptosporidium parvum*. An estimated 403,000 persons became ill.<sup>2,3</sup>

### **Actions to Take While a Boil-Water Advisory is in Effect**

- Water should not be delivered to patients through the dental unit, ultrasonic scaler, or other dental equipment that uses the public water system. This restriction does not apply if the water source is isolated from the municipal water system (e.g., a separate water reservoir or other water treatment device cleared for marketing by FDA).
- Patients should rinse with bottled or distilled water until the boil-water advisory has been cancelled.
- During these advisory periods, tap water should not be used to dilute germicides or for hand hygiene unless the water has been brought to a rolling boil for >1 minute and cooled before use.<sup>1,4-6</sup>
- For hand hygiene, antimicrobial products that do not require water (e.g., alcohol-based hand rubs) can be used until the boil-water notice is cancelled. If hands are visibly contaminated, bottled water and soap should be used for handwashing; if bottled water is not immediately available, an antiseptic towelette should be used.<sup>7,8</sup>

### **When the Advisory is Cancelled**

- The local water utility should provide guidance for flushing of waterlines to reduce residual microbial contamination.
- All incoming waterlines from the public water system inside the dental office (e.g., faucets, waterlines, and dental equipment) should be flushed. No consensus exists regarding the optimal duration for flushing procedures after cancellation of the advisory; recommendations range from 1 to 5 minutes.<sup>1,6,8,10</sup> The length of time needed can vary with the type and length of the plumbing system leading to the office.
- After the incoming public water system lines are flushed, dental unit waterlines should be disinfected according to the manufacturer's instructions.<sup>1</sup>

## **Alternatives**

Because water from the affected public system should not be delivered to the patient during a boil-water advisory, many dental procedures cannot be performed. Alternative water sources, such as separate water reservoirs that have been cleared for marketing by the FDA, can be used. However, if the alternative water source were to flow through a dental operative unit previously connected to the affected public water supply, the dental operative unit water lines should first be flushed and disinfected according to the manufacturer's instructions.

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This information is from the Centers for Disease Control and Preventions (CDC)

For more information on healthy water, visit:

<http://www.cdc.gov/healthywater/emergency/index.html>

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