

## Boil Water Advisories: Questions and Answers

### What is a Boil Water Order? What is a Boil Water Advisory?

The terms Boil Water Order and Boil Water advisory are often used interchangeably; however, they mean different things. A Boil Water Order is an important health risk management tool available to Regional Medical Officers of Health (RMOH). The *Public Health Act* gives a RMOH authority to issue Orders requiring certain actions to be taken to address health hazards. When a Boil Water Order is issued, the RMOH is effectively ordering the owner of a drinking water system to release a Boil Water Advisory to its customers.

### Why are Boil Water Orders issued?

A Boil Water Order is typically issued to a drinking water system owner when the RMOH feels that, to protect public health, water should be boiled before it is consumed. Boiling water will kill any potentially disease-causing microbes, making it safe to drink.

There are a number of situations which may prompt the issuance of an order, including:

- unacceptable levels of *E. coli* or other disease-causing microbes (e.g., bacteria, viruses or parasites) at any point in the water distribution system;
- unacceptable levels of turbidity (cloudiness) in the water entering the distribution system or other problem with water treatment, or
- as a precautionary measure if there is a risk of microbial contamination (e.g., planned maintenance or unscheduled repairs (i.e., water main break) in the distribution system, equipment malfunction or an environmental emergency).

### My drinking water supplier has advised me to boil our water, what do I do now?

During boil water advisories any water to be used for cooking, drinking, food preparation, juice and drink mix preparation, making ice, washing fruits and vegetables or brushing teeth should be boiled. Water should be boiled for 2 minutes when preparing infant formula, regardless of a boil water advisory.

#### ➤ How do I properly boil and store water during an advisory:

To kill potentially disease-causing microbes water will need to be brought to a **rolling boil for 1 minute** in a heat-resistant container. Once boiled the water should be left to cool in a safe place, away from children and pets, and then poured into clean covered containers.

**Please take care to avoid scalding yourself when boiling and storing water.**

### ➤ Can I use my electric kettle or microwave to boil water?

An electric kettle can be used as long as it does not have an automatic shut-off, as it may not boil water for a full minute. A microwave can also be used to boil water; however, a glass rod or wooden or plastic stir stick should be placed in the container to prevent super-heating the water, which could explode when bumped or otherwise disturbed. Super-heated water occurs when water has been heated above its boiling point without steam forming.

### ➤ What else should I do?

Dispose of all ice cubes, infant formula, juice and other drinks, and anything else made with possibly contaminated tap water before the boil water advisory. Do not thaw frozen food in tap water. All home canning and beer/wine making should be postponed until after the boil advisory has been lifted.

In most situations, it is not necessary to boil water used for household purposes such as bathing, showing, laundry or washing dishes. Adults, adolescents and older children may bathe, shower or wash provided no water is swallowed. Toddlers, infants and immunocompromised individuals should only be sponge bathed during boil water advisories to avoid accidental ingestion. Hands can continue to be washed using tap water and a proper handwashing technique that includes rubbing all parts of the hands with soap and warm water for a minimum of 20 seconds.

***Please note the Department of Health may impose additional precautions and instructions during boil water advisories.***

### I have a water treatment device in my home; do I still need to boil my drinking water?

**Yes.** If the device is designed to improve the taste, odour or chemical quality of the water, such as activated carbon filters or water softeners, it is still necessary to boil the water. It may be possible to continue to use devices designed to disinfect the water, such as UV lights, as an alternative to boiling. However, depending on the reason for the boil water advisory, the water quality may have changed. If the water is discolored or cloudy it is recommended to boil the water as these devices may not function as intended

### How long will the boil water advisory last?

The boil water advisory will remain in effect until the RMOH determines that the conditions creating the need for the advisory have been resolved and the water supply is safe. All precautions and special instructions should be followed until the boil water advisory has been lifted. The owner of the water system should notify you when it is safe to return to normal water use.

### What do I do when the boil water advisory is lifted?

After the boil water advisory has been lifted:

- Flush out your water pipes to ensure the water is safe before using. To do this, turn on the cold water tap at all faucets and run the water until you feel a change in

temperature (i.e. the water gets noticeably colder), which can take several minutes. You should begin with the faucet that is highest up in your home or building and make your way to the bottom turning on all faucets.

- Run water softeners through a regeneration cycle (follow manufacturer's directions).
- Drain and refill hot water tanks set below 45°C/110°F (normal setting is 60°C/140°F). For more information on hot water tank settings please see the NB Power link at the end.
- Remove and clean all screens and aerators on taps.
- Replace any water filters in water treatment devices following the manufactures instructions.

***Any other directions provided by the Department of Health or water utility / system owner should be followed.***

## **What about commercial businesses and public establishments?**

Boil water advisories apply to all commercial businesses (e.g., restaurants, grocery stores, food processing facilities, dental and medical offices, etc.) and public establishments (e.g., hospitals, schools, arenas, pools, community centres, gyms, child care facilities, care homes, etc.) that are connected to the water supply for which the advisory applies. During a boil water advisory commercial businesses and public establishments must follow the conditions below:

- An alternative safe water source (e.g., boiled or bottled water) is used for all food and drink prep and given to customers/clients as drinking water.
- Signs are posted at all sinks, drinking fountains and washrooms advising customers/clients and employees not to drink tap water.
- Disconnect or shut down all beverage dispensers and fountains as well as spray and mist hoses (e.g., grocery store fruit and vegetable sprinkler system) and any other food prep equipment that is directly connected to tap water lines. This includes all carbonated drink dispensers, slush and other iced drink machines, ice cream machines, ice machines and any other drink machines.
- Dispose of any recently made ice, drinks and uncooked food and disinfect all containers prior to reuse.
- All dishes, utensils and glassware potentially contaminated prior to the boil water advisory must be disinfected.
- Do not thaw frozen food in tap water.
- All staff must regularly wash their hands using approved hand washing procedures submitted under Section 6(1)(o) of the *Food Premises Regulation*.
- Post signs warning people not to swallow shower water in public facilities (e.g., gyms, pools and studios). In facilities with an increased risk of shower water being swallowed (e.g., child care and special care establishments), the showers should be shut down.
- Dishes must be sanitized by washing in a commercial dishwasher that has a hot water cycle of 82°C or higher. If dishes are to be washed manually a sanitizing solution must be used. The dishes must be left to air dry and are not to be rinsed with tap water.

***Please note the Department of Health may impose additional precautions and instructions during boil water advisories.***

## Can coffee machines still be used?

Commercial coffee machines, steeped tea brewers and hot water towers directly connected to tap water lines can be used during boil water advisories provided the following conditions are met:

- Water is *thermostatically* maintained at a temperature of at least 75°C (167°F). If equipment cannot *thermostatically* maintain the product at a temperature of at least 75°C, the product is not to be served.
- Temperature readings are taken every 2 hours with a metal stem probe thermometer and recorded. Records must be available to Public Health Inspectors upon request.
- The temperature of the water is verified using a metal stem probe thermometer by running a full batch and taking the temperature at a point below the funnel when the decanter is half full. The minimum temperature must reach 70°C (158°F) or hotter.

Non-commercial or domestic coffee machines should not be used during an advisory unless a safe water source (e.g., bottled or boiled water) is used, as there can be variations in machine temperatures.

## What about dental offices?

Any equipment being supplied by tap water must be shut off. Bottled or boiled water must be provided for patient mouth rinsing.

## What must commercial businesses and public establishments do when the advisory is lifted?

Once the boil water advisory has been lifted the following should be completed:

- All equipment and any water-using fixtures will need to be re-started and flushed according to the manufacturer's specifications.
- All lines for machines and equipment disconnected during the advisory must be disinfected prior to re-use.
- Properly flush and sanitize all ice, drink and ice cream machines before reuse.
- Drain and refill hot water tanks.
- Water softeners are to be run through a regeneration cycle.

***Any additional directions provided by the Department of Health or water utility should be followed.***

## What about other drinking water advisories?

There may be locations where boiling water is not possible or practical such as at public drinking water fountains. In these situations a clear "do not use" or "do not consume" notice should be used and access to the water supply should be restricted.

If a water supply is impacted by a chemical or other contaminant (such as metals like chromium or toxins from blue green algae blooms) boiling water will not be protective. In these occasions a **Do Not Consume Advisory** would be issued.

***Should such an advisory ever be needed the Office of the Chief Medical Officer of Health would provide clear information and instructions on how to manage the situation.***

**For more information, please visit the following:**

**Health Canada:**

<https://www.canada.ca/en/health-canada/services/environmental-workplace-health/consultations/guidance-issuing-rescinding-boil-water-advisories-health-canada-2014.html>

**NB Power:**

<https://www.nbpower.com/en/products-services/water-heaters/water-quality/what-is-legionella/>