

CREATED (OR UPDATED): October 27, 2014
DEPARTMENT: Office of the Chief Medical Health Officer

What to do During a Boil Water Notice

The following general precautions should be followed when there is a boil water notice in effect. **Note:** precautions may vary depending on the circumstances of the notice.

Boiled water is required for:

Drinking purposes This includes all beverage concentrates such as fruit juice and iced tea where water is added.

Food preparation This includes washing fruits and vegetables that will not be cooked. Water used as an ingredient does not need to be boiled prior to use, providing it will be brought to a boil during the cooking process.

Coffee Machines Coffee machines usually produce water heated to about 70 to 80 degrees Celsius, which is sufficient to destroy pathogens. This temperature must be maintained for a sufficient amount of time to ensure that all harmful organisms are destroyed. Therefore, let the coffee stand for at least five minutes before drinking.

Brushing teeth This includes daily oral hygiene such as cleaning dentures

Infant formulas Formulas should always be prepared by using boiled tap water or bottled water that is boiled.

Making Ice It is important to note that freezing does not destroy most pathogens. Bacteria and viruses can survive in frozen products for long periods of time. Discard any ice made from contaminated or potentially contaminated water.

Fruit and vegetable washing Boiled water should be used to wash all produce that to be eaten raw.

Home canning To be safe postpone home canning until the boil water notice has been rescinded.

Beer and wine making To be safe postpone beer and wine making until the boil water notice has been rescinded.

Water for pets Veterinarians that were consulted by IH recommend that drinking water for pets including dogs, cats, birds and reptiles should also be boiled. Information on water quality for livestock can be accessed at the [BC Ministry of Environment water quality objectives](#) website .

Immune-Compromised Individuals People who are immune-compromised should always boil their tap water for the purposes above. [BC Health files](#)

The following uses do not require boiled water but require additional cleaners or sanitizers:

Cleaning food contact surfaces Food contact surfaces are all those surfaces that food comes into contact with during the food preparation process. These include counter tops, cutting boards and chopping blocks. Food contact surfaces should be washed with clean water and then sanitized using an acceptable sanitizing agent. Sanitizing agents for food contact surfaces include unscented household bleach, iodophors, and quaternary ammonia compounds. To prepare stock bleach solutions add 2-4 ml of 5% bleach per liters of water (1 tablespoon per gallon). This will make a 100 to 200 ppm chlorine solution.

Hand washing Using warm water and soap should be sufficient.

Dishwashing by hand Dishes washed by hand should be sanitized for two minutes in a separate sink using a bleach solution (2-4 ml of bleach per liter of water or 1 tablespoon per gallon) after the dishes have been washed and rinsed. The dishes should then be left to **air dry** prior to being used. Attempting to wash and sanitize dishes in the same sink at the same time is not recommended because soap, grease and food particles interfere with the sanitizing process.

Mechanical dishwashers Residential home-style dishwashers may not provide a high enough temperature to destroy all pathogens. Dishwashing units that reach 82 degrees Celsius (180 Fahrenheit) for twelve seconds (or an equivalent time-temperature relationship) during the final rinse cycle will destroy pathogens. See the attached PDF file on dishwashing time-temperature relationships. To optimize dishwasher disinfection you should consider:

- Using the highest temperature setting possible and
- Using the heated dry cycle on the dishwasher.

All other water should be boiled. Simply put, any water that has a chance of being ingested should be boiled.

How to boil tap water

Tap water should be boiled for **one minute**. Use any clean pot or kettle. Kettles that have automatic shut offs are acceptable.

After boiling, let the water cool by leaving it on the counter or in the refrigerator in covered containers. After water is boiled it can be stored in food grade containers at room temperature or in the refrigerator. You can bring back flavour by shaking water in a container, pouring the water between two containers, and/or adding a pinch of salt.

When will the Boil Water Notice be lifted?

The Boil Water Notice will be lifted once the water is safe to drink.

After a Boil Water Notice has been lifted:

Flush all water-using fixtures for 1 minute.

Run cold-water faucets and drinking fountains for 1 minute before using the water.

Drain and flush all ice-making machines in your refrigerator.

Run water softeners through a regeneration cycle.

Drain and refill hot water tanks set below 45 C (normal setting is 60 C).

Change any pre-treatment filters (under sink style and refrigerator water filters, carbon block, activated carbon, sediment filters, etc.).

Alternatives to Boiling Water

Although there are alternatives, not all of them will be feasible or practical in all situations. In part, it will depend on how much water you need and what you need it for. Safe alternatives to boiling water include:

Using commercially prepared bottled water,

Obtaining water from an approved source that is not on a boil water notice.

If the water is clear and boiling water is not practical, you can use the following as a guide to using bleach.

Gallons of water to disinfect (equivalent shown in brackets)	Amount of Household bleach (5%) to add *
1 gal. (4.5 litres)	2 drops (0.18 ml)
2 1/5 gal. (10 litres)	5 drops (0.4 ml)
5 gal. (23 litres)	11 drops (0.9 ml)
10 gal. (45 litres)	22 drops (1.8 ml)
22 gal. (100 litres)	3/4 teaspoon (4 ml)
45 gal. (205 litres)	1 1/2 teaspoons (8 ml)
50 gal. (230 litres)	1 3/4 teaspoons (9 ml)
100 gal. (450 litres)	3 1/2 teaspoons (18 ml)
220 gal. (1000 litres)	8 teaspoons (40 ml)
500 gal. (2200 litres)	6 tablespoons (90 ml)
1000 gal. (4550 litres)	6 1/2 ounces or 12 tablespoons (180 ml)