

How to Use Water Safely in Long Term Care Facilities, Supportive Living and Home Living Sites During a Boil Water Advisory

What is a boil water advisory?

A boil water advisory is a notification that the drinking water supply may be contaminated with pathogenic microorganisms (e.g., *E.coli* bacteria, *Giardia* parasite, and that drinking the tap water can make residents, staff and visitors sick. Boiling the tap water destroys pathogens and makes the water safe to drink and use.

A boil water advisory may be issued for a variety of reasons. If facility staff, such as Infection Prevention and Control personnel, are reviewing modifications to procedures or changes to service delivery, it may be prudent to contact the Environmental Public Health office that issued the boil water advisory to gather more information and insight.

What immediate steps must be implemented when a boil water advisory is issued?

- Signs should be posted at the entrance to the facility and at all faucets, including the kitchen area, washrooms and handsinks as a reminder that a boil water advisory is in effect and that the water is not safe to drink. See attached signs.
- Provide an alcohol-based hand sanitizer, containing at least 60% alcohol, in all public and staff washrooms and at all stand-alone handsinks. Post signs advising staff, residents and visitors to apply the alcohol-based hand sanitizer, after normal handwashing procedures with warm tap water and paper towels.
- Disconnect all drinking water fountains, pop dispensers with post-mix service and ice making machines from the affected water supply. Discard any ice and beverages that may have been prepared with the affected water supply.
- Use boiled water that has been cooled to room temperature, or use sterile water to wash broken skin and wounds and for other resident care activities.
- If switching to bottled water, please note that commercially bottled water is *not sterile*. Consider using sterile-bottled, boiled or otherwise disinfected drinking water for severely immune-compromised residents.
- All alternate sources of water provided to residents, staff and visitors must be safe for drinking.

When a boil water advisory has been issued, how can the tap water be used?

When a boil water advisory has been issued, **do not** use the tap water to:

- drink
- prepare foods
- make juice
- make ice
- wash fruits or vegetables
- brush teeth
- give to pets or animals in pet therapy programs

During a boil water advisory, the water is not safe. Therefore, use boiled water, bottled water, or water from another safe public supply not affected by the advisory. Discard any ice in your freezer made with the affected water and sanitize the ice cube trays (see next page). Make ice with bottled water or with tap water that was previously boiled and cooled.

What is the correct way to boil water?

Boiling the tap water will destroy any pathogens that might be present, and it will make the water safe to drink and use. To correctly boil water, bring it to a rolling boil for at least one minute. Use an electric kettle if possible. Only boil as much water as you can safely lift without spilling. If you must boil water on the stove, place the pot on the back burner. Be careful not to burn yourself or others.

What special precautions should residents with weakened immune system take?

Residents with weakened immune systems may require special consideration, and this should be discussed with their personal physician.

Is bottled water or water from self-serve water dispensers safe to use?

In most instances, bottled water is safe to use, but it depends on when and how the water was bottled. Bottling plants and water dispensers that operate in the municipality affected by the boil water advisory must treat the water to ensure that harmful microorganisms are removed. Check with the Environmental Public Health Office (phone numbers below) about brands of bottled water or water dispensers that are considered to be safe. Bottled water produced in locations that are not affected by the boil water advisory is considered to be safe.

Do water filtration devices make the tap water safe to drink or cook with?

No. Many water filtration devices do not remove pathogens. If the water passes through a water filtration device in your facility, **do not** use this water unless it has been boiled first. Check with the manufacturer to find out what the water filtration device removes.

PERSONAL HYGIENE DURING A BOIL WATER ADVISORY

Can tap water be used to wash hands?

Yes, tap water can be used for handwashing but an alcohol-based hand sanitizer should be applied afterwards. Wash your hands with warm tap water and soap, making sure to lather for at least 20 seconds. Rinse your hands well under running water and dry them with a paper towel. When hands are dry, apply an alcohol-based hand sanitizer containing at least 60% alcohol.

Can tap water be used for showering or bathing?

Yes. Residents and staff may take showers or baths with tap water, but they must be careful to avoid the face, and avoid swallowing any of the water. The use of hand-held showerheads is recommended to assist with this concern. Open wounds, cuts, blisters or recent surgical wounds should be covered with a waterproof covering, and care must be taken not to contaminate these areas during bathing, showering or towel-bathing. Pre-boiled water, sterile water and water from a safe alternate source may also be used if towel-bathing is required. Residents with weakened immune systems may require special consideration, and this should be discussed with their personal physician.

Can tap water be used for brushing teeth?

During a boil water advisory, tap water is NOT safe for brushing teeth. Only pre-boiled water that is cooled, bottled water or water from another safe source should be used to brush teeth.

CLEANING AND SANITIZING PRACTICES

Can tap water be used for cleaning and disinfecting contact and non contact surfaces?

Contact surfaces such as door knobs, handles, railings, vanities, etc., and non-contact surfaces such as walls, floors and ceilings can be cleaned and disinfected using normal routine practices.

Can tap water be used for washing laundry?

During a boil water advisory, tap water may still be used for general laundry procedures. However, wet laundry should be dried in a mechanical drying machine on a normal setting or hotter. For sterile linen processing, consult with Infection Prevention and Control staff to verify correct procedures.

Can an autoclave be used during a boil water advisory?

Review the directions and procedures for cleaning instruments, prior to sterilizing using an autoclave. Instruments being placed into autoclaves should be cleaned using water that was previously boiled, bottled water or water from another safe source. Only distilled water should be used in the autoclave itself, but Infection Prevention and Control staff should be consulted to verify the correct procedures.

Can medical equipment that is directly connected to the water supply be used?

Generally NO. However, use of any specialized medical equipment directly connected to the water supply for invasive medical procedures should first be evaluated by Infection Prevention and Control staff. Contact Environmental Public Health for any specific questions related to the water quality.

PREPARING FOOD DURING A BOIL WATER ADVISORY

Can tap water be used in commercial coffee brewers and hot tea towers during a boil water advisory?

Yes. Ensure the coffee maker and hot tea towers produce water at 70°C/160°F. This temperature is sufficient to inactivate disease-causing microorganisms. It is recommended that the coffee pot be held for at least **five minutes** on the burner before consumption. The temperature should be verified using a probe thermometer.

Can tap water be used to wash dishes by hand?

Tap water can be used to wash and rinse dishes provided that the water is hot. After the dishes are washed and rinsed, dishes must be sanitized to destroy the pathogens. To do this, soak your dishes for at least two minutes in a chlorine bleach solution. To make a chlorine bleach solution, mix 10 mL (2 tsp) of liquid, unscented bleach (5.25% sodium hypochlorite) in 5 litres (20 cups) of warm water. Let the dishes air-dry completely.

Can domestic style dishwashers be used in the facility?

Domestic style dishwashers may be used, provided the machine has a hot temperature setting or sanitizer cycle. If the dishwasher does not have a hot temperature setting, it is recommended to stop the dishwasher at the start of the rinse cycle, add 4 teaspoons (20 mL) of liquid household chlorine bleach containing 5.25% sodium hypochlorite, and then re-start the dishwasher. Let the dishes dry completely, preferably using a heated dry cycle on the dishwasher.

Can tap water be used for cleaning and disinfecting counter tops, cutting boards and other kitchen surfaces?

Wash kitchen surfaces with soap, then rinse and sanitize with a bleach solution. Make a new bleach solution every day (this is because bleach breaks down quickly once it is mixed with water), so it works well to kill germs.

To prepare the sanitizer solution (sanitizer strength of 200mg/L chlorine solution), add one teaspoon of liquid household bleach (5.25% sodium hypochlorite) to one litre of room temperature water that has either been previously boiled, is from a bottled water source or hauled from a safe public supply. Spray or pour this solution onto the food contact surfaces and let sit for a minimum of two minutes. Vinegar is not an acceptable disinfectant.

Is there further information on safe food preparation in a public food establishment?

Follow the procedures listed in the document, "How to Use Water Safely in Your Food Establishment During A Boil Water Advisory". This document is available on the Alberta Health Services website or by contacting your local Public Health Inspector.

PROCEDURES TO TAKE AFTER A BOIL WATER ADVISORY IS ENDED

- Flush all water-using fixtures and faucets by running them for five minutes. If your service connection is long or complex, consider flushing for a longer period of time.
- For multi-storey facilities, maintenance staff can start on the upper storey flushing each fixture and faucet for five minutes. Once every fixture and faucet on the entire floor has been flushed for five minutes, proceed to the next floor, and continue the procedure until the fixtures and faucets on all floors are flushed.
- Ensure equipment with water line connections, such as refrigerator water and ice dispensers are drained, flushed, cleaned and disinfected according to the manufacturer's recommendations.
- Flush, drain, clean and disinfect cisterns that contained the affected water source.
- Run water softeners through a regeneration cycle according to the manufacturer's recommendations.
- Replace the filters on any water filtration devices, and flush the fixture according to the manufacturer's directions.
- Drain and refill hot water heaters that have been set below 45°C/110°F.

For more information, please contact your nearest Environmental Public Health office.

Edmonton Main Office
Calgary Main Office
Lethbridge Main Office

780-735-1800
403-943-2295
403-388-6689

Grande Prairie Main Office
Red Deer Main Office
www.albertahealthservices.ca/eph.asp

780-513-7517
403-356-6366

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CAUTION !



**Boil Water Advisory in effect.
This water is not safe for drinking.**

Contact **Environmental Public Health** for more information.

Edmonton and Area Ph: 780-735-1800

Calgary and Area Ph: 1-855-943-2288

Southern Alberta Ph: 403-388-6689

Northern Alberta Ph: 780-513-7517

Central Alberta Ph: 1-877-360-6366

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Boil Water Advisory in effect.

WASH YOUR HANDS

Apply hand sanitizer after handwashing.

