



Using Water Safely in Swimming Pools During a Boil Water Advisory

What is a boil water advisory?

A boil water advisory is issued when harmful germs (e.g., *E.coli* bacteria, *Giardia* parasite) may be in a drinking water supply. Drinking water contaminated with these germs can make people and animals very sick. Boiling will kill the germs and make the water safe to drink after cooling.

What immediate steps must a pool operator take when a boil water advisory is issued?

- All alternative water provided to clients and staff for drinking must be safe.
- Post signs at the entrances and all faucets, including any kitchen areas and washrooms as a reminder of the boil water advisory and not to drink the water.
- Turn off or disconnect drinking fountains.
- Provide washrooms with an alcohol-based hand sanitizer that has at least 60% alcohol content. Inform students and staff that the hand sanitizer should be used after hands are properly washed and dried.

Does the pool need to be closed during a boil water advisory?

There is no need to close down the pool during a boil water advisory unless otherwise specified by Environmental Public Health Services.

Chlorine is not very effective against *Cryptosporidium* under normal swimming pool operations, as a CT value of 15300 is needed to destroy this organism. If *Cryptosporidium* is potentially present in the drinking water supply, all fill water may need to be treated to a CT of 15300 prior to use. Contact your Environmental Health Officer to evaluate if the *Cryptosporidium* procedure is required.

To calculate the CT Value of 15300, use the following:

$$CT = C \text{ (concentration of free chlorine in mg/L) times } T \text{ (time in minutes)}$$

$$\text{Example: } 20 \text{ ppm} \times 765 \text{ min (i.e. 12.75 hours)} = 15300$$

After filling, normal pool use and operation can resume only after the required CT inactivation value has been achieved. The free chlorine and pH levels should also have been returned to the normal operating range allowed by Environmental Public Health Services. Any water added to the pool, either through manual methods or from automated fill systems, needs to be treated to the CT 15300 or be from an alternative source that is not at risk for contamination. If the automated fill cannot be isolated, the pool cannot be operated during the boil water advisory. Additional treatment such as full stream UV installed on the fill line may be considered as equivalent to treating the swimming pool to a CT of 15300.

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

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

- drink
- make baby formula
- make juice
- make ice
- prepare foods
- wash fruits or vegetables
- brush teeth

During a boil water advisory use boiled water, bottled water or water from another safe public supply not affected by the advisory.

To make the water safe, **bring to a rapid rolling boil for at least one minute**. Boil only as much water in the pot that one can comfortably lift without spilling. Ensure water is cooled appropriately before using or before direct handling to prevent scalds.

What special precautions should people with a weakened immune system take?

For clients with weakened immune system, entering the pool during a boil water advisory should not pose any additional risks, as the pool operator would have taken any needed special precautions.

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

Sometimes you can use bottled water, but it depends on when and how the water was bottled. Bottling plants and/or water dispensers that use local water must treat the water to remove harmful germs. Check with the Environmental Public Health Office (phone numbers below) about bottled water brands or water dispensers that have been treated so the water is safe. You can also use water bottled from another public water supply not affected by the advisory.

Is the water safe to drink if an on-site water filtration device is used?

If you have a water filtration device, **do not** use the water during a boil water advisory. Many filtration devices do not remove harmful germs. Check with the manufacturer to find out what the filtration device does remove.

GENERAL HYGIENE DURING A BOIL WATER ADVISORY

Can tap water be used for handwashing?

Yes. Wash hands using tap water and soap, making sure to lather and scrub all surfaces of the hand for a minimum of 20 seconds. Rinse hands well with running water, and dry with a paper towel. After washing hands with tap water, **use an alcohol-based hand sanitizer** containing more than 60% alcohol. Ensure that hand sanitizer is provided at each handwashing station, including washrooms.

Can tap water be used for showering?

Healthy individuals may take showers with untreated tap water, if they are careful not to swallow any tap water. Younger children (elementary school age) should not use the water for showering unless properly instructed and supervised.

Can tap water be used for washing laundry?

Yes. During a boil water advisory, continue washing laundry like normal. Ensure that a mechanical dryer (hot drying method) is used to completely dry the material.

Can tap water be used for general cleaning purposes?

Yes. Tap water can be used for general cleaning of surfaces and to prepare sanitizing solutions. Cleaned high touch surfaces should be sanitized with one of the approved sanitizers listed below, and allowed to air dry. Sanitizer concentration should be tested regularly with sanitizer test papers or other testing equipment, unless the sanitizer is premixed by the manufacturer and marked with an expiry date.

Approved Sanitizers:

- Chlorine solution: 100 ppm chlorine (1/2 teaspoon household bleach per litre of water).
- Quaternary Ammonia Solution: Generally 200 ppm. Follow manufacturer's instructions for correct dilution and contact time. The product must have a DIN issued by Health Canada.
- Iodine Solution: 12.5-25 ppm iodine. Follow manufacturer's directions.
- Accelerated Hydrogen Peroxide: 0.5% AHP. Follow manufacturer's instructions for correct dilution and contact time. The product must have a DIN issued by Health Canada.

PROCEDURES TO TAKE AFTER A BOIL WATER ADVISORY IS ENDED

- Flush all water-using fixtures by running the tap for five minutes. If the service connection is long or complex, consider flushing for a longer period of time.
- 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 manufacturer's recommendations.
- Drain and refill hot water heaters that have been set below 45°C/110°F.

For more information about using water during a boil water advisory, contact the local Environmental Health Officer.

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