



Renal Dialysis Units

During a boil water advisory

General Procedures

Dialysis may continue during a boil water advisory if the water treatment components in use are sufficient to remove or destroy bacteria, such as Reverse Osmosis (RO). RO will also remove *Cryptosporidium*. See Guidance for Dialysis Care Providers (http://www.cdc.gov/ncidod/hip/dialysis/boilwater_advisory.htm) for more information.

Patients, families, staff, and visitors should not use or consume:

- water that has not been disinfected,
- ice or drinks made with water that has not been disinfected, or
- raw foods rinsed with water that has not been disinfected.

Discontinue service of food and beverage equipment with water line connections (e.g., post-mix beverage machines, spray misters, auto-fill coffee/tea makers, instant hot water heaters, ice machines, etc.).

Discard ice made prior to the boil water advisory issuance and discontinue making ice. Use commercially-manufactured ice.

All employees with diarrheal illness should be regulated by standard rules of exclusion from work.

Use only disinfected water to treat skin wounds.

Monitor patients closely for signs and symptoms of gastrointestinal illness.

If your water system is treating water chemically beyond normal levels advise dialysis units to:

- Sample water for chemical analysis to ensure compliance with AAMI standards.
- Conduct chlorine/chloramine tests to ensure compliance with AAMI standards.
- Monitor water system gauges once per shift.

Drinking Water

For drinking water, use:

- commercially-bottled water (see A Guide to Commercially-Bottled Water and Other Beverages at <http://www.cdc.gov/crypto/factsheets/bottled.html>)
- and/or water that has been disinfected for *Cryptosporidium* by:
 - ◆ boiling at a rolling boil for 1 minute (at altitudes greater than 6,562 feet (>2,000 m), boil water for 3 minutes), **or**
 - ◆ distilling
- and/or water hauled from an approved public water supply in a covered sanitized container
- and/or water from a licensed drinking water hauler truck.

Note: Although chemicals (e.g., bleach) are sometimes used for disinfecting small volumes of drinking water for household use, chemical disinfection is generally not recommended for commercial establishments because of the lack of onsite equipment for testing chemical residuals. Furthermore, *Cryptosporidium* is poorly inactivated by chlorine or iodine disinfection. *Cryptosporidium* can be removed from water by filtering through a reverse osmosis filter, an “absolute one micron” filter, or a filter certified to remove *Cryptosporidium* under NSF International Standard #53 for either “cyst removal” or “cyst reduction.” See A Guide to Water Filters at <http://www.cdc.gov/crypto/factsheets/filters.html>. However, unlike boiling or distilling, filtering as just described will not eliminate other potential disease-causing microorganisms, such

as bacteria and viruses. Ultraviolet light treatment of water is not effective against *Cryptosporidium* at normally-used levels.

Cooking and Food Preparation

For cooking and food preparation:

- Discard any ready-to-eat food prepared with water prior to the discovery of the water contamination.
- Prepare/cook ready-to-eat food using the drinking water alternatives listed above and/or restrict the menu to items that do not require water.

For equipment/utensils/tableware in cooking and food preparation:

- Use single service/use articles.
and/or
Clean and sanitize equipment/utensils/tableware using the drinking water alternatives listed above. Follow the established procedures to wash, rinse, and sanitize.
- *Cryptosporidium* on equipment/utensils/tableware may be disinfected using dishwashing machines that have a dry cycle or a final rinse that exceeds 113°F for 20 minutes or 122°F for 5 minutes or 162°F for 1 minute.
- Discontinue operations when inventories of clean equipment/utensils/tableware are exhausted.

Handwashing

For hand hygiene recommendations in health care settings, visit hand Hand Hygiene in Healthcare Settings (<http://www.cdc.gov/handhygiene>).

Note: *Cryptosporidium* is not killed by alcohol gels and hand sanitizers. Soap and disinfected water are specifically recommended for preventing cryptosporidiosis.

When the boil water advisory is cancelled

Make sure equipment with water line connections are flushed, cleaned, and sanitized according to manufacturers' instructions. Consult your facilities engineer and/or the manufacturer when re-starting the equipment.

Managers of large buildings with water-holding reservoirs should consult with their facility engineer and health department about draining the reservoir.

Flush pipes and faucets. Run cold water faucets continuously for at least 5 minutes.

Flush drinking fountains. Run water continuously for at least 5 minutes.

Run water softeners through a regeneration cycle.

Drain and refill hot water heaters set below 113°F.

Change all point-of-entry and point-of-use water filters, including those associated with equipment that uses water.

Resume usual bathing practices and care for patients with breaks in the skin.

Note: This information supersedes the "Issuing and Rescinding a Boil Water Advisory" portion of the *Cryptosporidium* and Water Handbook.

From <http://www.cdc.gov/crypto/bwa/dialysis.html>

