



Water Contamination Preparedness

Be Prepared

In a disaster, water supplies may be cut off or contaminated. Store enough water to provide for your family for up to 7 days or more, but no less than 3 days. Store 1-gallon of water per person, per day. 3 gallons per person per day will give you enough to drink and for limited cooking and personal hygiene. Remember to plan for pets.

Tap Water

If you store tap water:

- Tap water from a municipal water system can be safely stored without additional treatment.
- Store water in food grade plastic containers, such as clean 2-liter soft drink bottles. Heavy duty, reusable plastic water containers are also available at sporting goods stores. Empty milk bottles are not recommended because their lids do not seal well and bottles may develop leaks.
- Label and store in a cool, dark place.
- Replace water at least once every 6 months.

Bottled Water

If you buy commercially bottled “spring” or “drinking” water:

- Keep water in its original container, and don’t re-store a bottle once it’s been opened.
- Store in a cool, dark place.
- If bottles are not marked with the manufacturer’s expiration date, label with the date and replace bottles at least once per year.



Treating Water After Disaster

If you run out of stored drinking water, strain and treat water from your water heater or the toilet reservoir tank (except if you use toilet tank cleaners). Swimming pool or spa water should not be consumed but you can use it for flushing toilets or washing.

Listen to and follow public announcements. Local authorities will tell you if tap water is safe to drink or to use for cooking or bathing. If the water is not safe to use, follow local instructions to use bottled water or to boil or disinfect water for cooking, cleaning, or bathing.

Use only bottled, boiled, or treated water for drinking (however, see guidance in the Food section for infants), cooking or preparing food, washing dishes, cleaning, brushing your teeth, washing your hands, making ice, and bathing until your water supply is tested and found safe. If your water supply is limited, you can use alcohol-based hand sanitizer for washing your hands.

Treatment Process

Boiling water, when practical, is the preferred way to kill harmful bacteria and parasites. Next, purify the water 1 of 2 ways:

Boil

- Bringing water to a rolling boil for 1 minute will kill most organisms. Boiling will not remove chemical contaminants. If you suspect or are informed that water is contaminated with chemicals, seek another source of water, such as bottled water.



Disinfect

- If you can't boil water, you can treat water with chlorine tablets, iodine tablets, or unscented household chlorine bleach (5.25% sodium hypochlorite). If you use chlorine tablets or iodine tablets, follow the directions that come with the tablets. If you use household chlorine bleach, add 1/8 teaspoon (~0.75 milliliter [mL]) of bleach per gallon of water if the water is clear. For cloudy water, add 1/4 teaspoon (~1.50 mL) of bleach per gallon. Mix the solution thoroughly and let it stand for about 30 minutes before using it. Treating water with chlorine tablets, iodine tablets, or liquid bleach will not kill many parasitic organisms. Boiling is the best way to kill these organisms.

Water Supply

Do not rely on water disinfection methods or devices that have not been recommended or approved by local health authorities. Contact your local health department for advice about water treatment products that are being advertised.

Use water storage tanks and other types of containers with caution. For example, fire truck storage tanks and previously used cans or bottles may be contaminated with microbes or chemicals. Water containers should be thoroughly cleaned, then rinsed with a bleach solution before use, to be safe follow these tips:

- Mix soap and clean water in container. Shake or stir to clean inside of container, then rinse.
- For gallon - or liter-sized containers, add approximately 1 teaspoon (4.9 mL) household bleach (5.25%) with 1 cup (240 mL) water to make a bleach solution.
- Cover the container and shake the bleach solution thoroughly, allowing it to contact all inside surfaces. Cover and let stand for 30 minutes, then rinse with clean water.

Flooded, private water wells will need to be tested and disinfected after flood waters recede. If you suspect that your well may be contaminated, contact your local, state, or tribal health department or agriculture extension agent for specific advice. See *Disinfecting Wells After an Emergency* for general instructions. Listen to NOAA All-hazards Weather Radio and the local media for potential “Boil Water” statements.