

# Making Water Safe in an Emergency

After an emergency such as a water main break, hurricane or flood your tap water may not be available or safe to use. In these situations, it's important to know how to prevent illness from unsafe water.

- If you know or suspect your water is unsafe, don't use that water to drink, wash dishes, brush teeth, wash and prepare food, wash your hands, make ice, or make baby formula.
- Use bottled water, boiled, or treated water for drink, cooking, and personal hygiene.
- Follow recommendations from your state, local, or tribal health department for boiling or treating water in your area.
- Never use water from radiators or boilers that are part of your home heating system. Learn about places inside and outside of your home where you might find other safe sources of water.

**Important:** Water that has fuel, toxic chemicals, or radioactive materials in it **will not be made safe** by boiling or disinfection. If you suspect your water is contaminated with fuel or chemicals, contact your local health department for specific advice.

- **Boil:** If you don't have safe bottled water, you should boil to make it safe to drink. Boiling is the surest method to kill disease-causing viruses, bacteria, and parasites. You can improve the taste of boiled water by pouring it from one container to another or adding a pinch of salt for each quart or liter.
  - If the water is cloudy, first filter it through a clean cloth, paper towel, or coffee filter OR allow it to settle then draw off the clear water.
  - Bring the clear water to a rolling boil for 1 minute (at elevations above 6,500 feet, boil for 3 minutes).
  - Let boiled water cool.
  - Store the boiled water in clean sanitized containers with tight lids.
- **Disinfect:** If you don't have safe bottled water and if boiling is not possible, you can make small quantities of water safer to drink by using a chemical disinfectant, such as an unscented household chlorine bleach, iodine, or chlorine dioxide tablets.
  - Disinfectants can kill most harmful or disease-causing viruses and bacteria, but are not as effective as boiling for killing parasites *Cryptosporidium* and *Giardia*.
  - Chlorine dioxide tablets can kill *Cryptosporidium* if you follow the manufacturer's instructions. **If the water has chemical or radioactive material, adding disinfectant will not make it drinkable.**
- **Using bleach to disinfect water:** Bleach come in different concentrations. Check the label. Typically unscented household bleach in the USA will be between 5% to 9% sodium hypochlorite. Check the bleach bottle for **possible directions** to disinfect drinking water.
  - Check active ingredients (% Hypochlorite) on bleach label.
  - Then follow these medicine dropper or milliliters amounts. 1 Quart water = 2 drops or 0.1 ml bleach / 1 Gallon water = 8 drops or ½ ml bleach / 5 Gallon water = 40 drops or 2 ½ ml bleach.
- **Using Chemical Tablets to disinfect water:** Follow manufacturers package instructions.

See: <https://www.cdc.gov/healthywater/emergency/making-water-safe.html>