

# Purifying Water During an Emergency

The treatments described below work only to remove bacteria or viruses from water. If you suspect the water is unsafe because of chemicals, oils, poisonous substances, sewage or other contaminants, do not drink the water. Don't drink water that is dark colored, has an odor or contains solid materials.

## Storing water safely

The best source of drinking water during an emergency is water you have stored with your emergency supplies.

- Store one gallon of water per person per day--enough for at least three days.
- Store-bought, factory-sealed bottled water is best. Check for an expiration date and replace as needed.
- If you choose to fill your own water containers:
  - Collect the water from a safe supply.
  - Store water in thoroughly washed plastic containers such as soft drink bottles. You can also purchase food-grade plastic buckets or drums.
  - Seal water containers tightly, label with date, and store in a cool, dark place.
  - Replace water every six months.
  - Never reuse a container that held toxic substances such as pesticides, chemicals or oil.

## Purifying by boiling

If your tap water is unsafe, boiling is the best method to kill disease-causing organisms.

If tap water is unavailable, the following may be considered as potential water sources. Water taken from these sources should be boiled before drinking.

- Rainwater
- Lakes
- Rivers and streams
- Natural springs
- Ponds

**Caution:** Many chemical pollutants will not be removed by boiling.

Cloudy water should be filtered before boiling. Filter cloudy water using coffee filters, paper towels, cheesecloth or a cotton plug in a funnel.

- Bring the water to a rolling boil for at least one full minute.
- Let the water cool before drinking.
- Add two drops of household bleach per gallon to maintain water quality while in storage.

## Purifying by adding liquid chlorine bleach

- Treat water by adding liquid household bleach, such as Clorox or Purex.
- Household bleach is typically between 5.25 percent and 8.25 percent chlorine. Read the label.

- Avoid using bleaches that contain perfumes, dyes and other additives. Be sure to read the label.
- Cloudy water should be filtered before adding bleach.
- Place the water in a clean container. Add the amount of bleach according to the table below.
- Mix thoroughly and let stand for at least 60 minutes before drinking.

Treating water with household bleach containing 5.25-8.25 percent chlorine	
Volume of Water to be Treated	Bleach Solution to Add
1 quart/1 liter	5 drops
1/2 gallon/2 quarts/2 liters	10 drops
1 gallon	1/4 teaspoon
5 gallons	1 teaspoon
10 gallons	2 teaspoons

**Caution:** Bleach will not kill some disease-causing organisms commonly found in surface water. Bleach will not remove chemical pollutants.