

# Safe Drinking Water During a Disaster



In addition to having a bad odor and taste, water from questionable sources may be contaminated by a variety of microorganisms, including bacteria and parasites that cause diseases such as dysentery, cholera, typhoid, and hepatitis. All water of uncertain purity should be treated before use.

## Water Treatment for Individuals or Families:

1. Filter the water using a piece of cloth or coffee filter to remove solid particles.
2. Disinfect using one of the following methods:
  - **Boiling:** Boil vigorously for 1 minute. To improve taste, pour from one clean container to another several times to aerate. Allow water to cool for 30 minutes before using.
  - **Purification Tablets:** Available at most drugstores or camping supply stores. Follow directions.
  - **Filters:** Use a “backpacking” type filter and follow the directions on the filter.
  - **Bleach Purification:** Liquid household bleach can be used for water disinfection. The only active ingredient in the bleach should be Sodium Hypochlorite of the concentration of 5.25% to 6%. There should not be any added soap or fragrances. (A major bleach manufacturer has also added Sodium Hydroxide as an active ingredient, which they state does not pose a health risk for water treatment.) Add bleach to the water according to the amounts listed in the table below. Stir to mix and let stand 30 minutes prior to using.

Amount of Water	Clear Water	Cloudy Water*
1 Quart	2 drops bleach	4 drops bleach
1 Gallon	8 drops bleach	16 drops bleach
5 Gallons	½ teaspoon bleach	1 teaspoon bleach

\*Excessive turbidity (cloudiness) will greatly reduce the effectiveness of the bleach.

## Rationing Water:

If an adequate supply of water is not available, it may be necessary to limit consumption to the following amounts **per person per day**:

- Drinking and cooking: 1 gallon
- Personal hygiene: 1 gallon
- Laundry and dishes: 2 gallons

**Note:** If 4 gallons per person per day is not available, a minimum of 2 gallons per person per day for drinking and personal hygiene can be used, and then any extra water can be utilized for laundry and dishes. Keep in mind that most household water heaters can supply 30-60 gallons of water for an emergency supply. Shut off the main valve to the house, and shut off the gas or electricity to the tank. Also, toilet reservoir tanks (with no additives) and juices from canned foods may be used. Swimming pool water may be used for bathing and flushing toilets.

Source: American Red Cross, <http://www.redcross.org>

