

## METHODS FOR EMERGENCY DISINFECTION (CONTINUED)

The flat taste of boiled water can be improved by pouring it back and forth from one clean container to another (called aeration), by allowing it to stand for a few hours, or by adding a pinch of salt to each quart of water boiled.

**Chemical Treatment:** When boiling is not practical, water should be disinfected with chemicals.

**Chlorine Bleach:** You can use liquid, household bleach to kill microorganisms in water. Use only regular, liquid household bleach that contains 5.25 percent sodium hypochlorite. Do not use scented bleaches, color-safe bleaches or bleaches with added cleaners.

**Add 8 drops of bleach per gallon of clear water or 16 drops of bleach per gallon of cloudy or colored water. Mix the water thoroughly and allow it to stand for 30 minutes.**

The water should have a slight chlorine odor; if not, repeat the dosage and allow the water to stand for an additional 15 minutes.

If the chlorine taste of the treated water is too strong, expose the water to air for a few hours or pour the water from one clean container to another several times.

### Granular Calcium Hypochlorite:

This type of chlorine is often used for swimming pool disinfection. Add and dissolve one heaping teaspoon of high-test granular calcium hypochlorite (approximately 1/4 ounce) into two gallons of water. This will produce a highly concentrated chlorine solution that may be used to disinfect water.

Add one part of the highly-concentrated chlorine solution to 100 parts of water to be treated (approximately 1 pint of concentrated chlorine solution to 12.5 gallons of water to be disinfected).

**Prevent Bacterial Growth and Contamination —  
Don't Store Water For More Than Six (6) Months Before Refilling Your Bottles.**

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**For Additional Information,  
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# Emergency Water Storage and Treatment



## HOW MUCH WATER IS ENOUGH?

Store at least a three-day supply of drinking water for each family member (at least one gallon per person, per day) You may want to store additional water for other uses, such as personal hygiene, cooking, etc.

## HOW TO PROPERLY STORE WATER

Store water in clean glass or food grade" plastic containers, such as 2-liter soda bottles, with **tight-fitting screw-cap lids**. Your container should be non-vented to prevent air intake and to prevent unauthorized materials from contaminating the water. If possible, use dark-colored bottles to inhibit light and bacteria growth. Do not reuse lightweight plastic containers previously filled with food. Never use a container that has been used to store chemicals , toxic materials or any substances that may be harmful to your health. Do not use metal containers that may corrode or milk jugs which may be bio-degradable.

**Store your bottles in a cool, dark location, such as a closet.**

**Empty and refill the water in your containers at least every six (6) months.**

## OTHER SOURCES OF EMERGENCY WATER

When your home water supply is interrupted by natural or other forms of disaster, you can obtain limited amounts of water as follows:

- **Drain your hot water tank**
- **Melt ice cubes**
- **Use beverages, canned fruits and vegetables stored in water or juice**
- **Swimming Pools (for hygiene purposes only, because acids in the water may be harmful to health)**
- **Collect water from a stream, river or lake (*Do not drink this water without treating it first! Avoid using water containing floating materials and water with a dark color or an odor.*)**
- **Bottled water** is a good source of drinking water during emergencies, but it does not store well. Bottled water has a shelf life in the store, because it usually does not contain a chemical disinfectant, such as chlorine. To be safe, rotate your bottled water every six (6) months or use one of the disinfection methods described in the next section.

**WATER TO BE USED FOR DRINKING, COOKING, MAKING ANY PREPARED DRINK, OR BRUSHING TEETH MUST BE PROPERLY DISINFECTED.**

## METHODS FOR EMERGENCY DISINFECTION

In addition to having a bad odor, taste and appearance, contaminated water can also contain microorganisms that may cause diseases such as dysentery, typhoid or hepatitis. Disinfect all water of unknown quality before using it for drinking, food preparation or personal hygiene.

When emergency disinfection is necessary, examine the physical condition of the water. Cloudy water will usually require more disinfection than clear water.

If water is murky or colored, filter it through clean cloths or coffee filters. You may also allow the water to settle and then carefully pour off the clear water from the top of the container. Do not drink this settled or filtered water until it has been disinfected using one of the methods described below.

**Boiling:** This is the safest and surest method to disinfect water for drinking purposes. The U.S. Environmental Protection Agency recommends vigorous boiling for one minute to kill any disease-causing microorganisms that may be present in the water.

