

# Storing and Treating Emergency Home Water Supplies



You and your family can survive for several days without food but only a short time without water. Emergencies such as floods or earthquakes may cut off supplies of safe water. Storing water now can help you and your family prepare for an emergency.

## How much water should I store?

In moderate weather a normally active person needs at least 1/2 gallon of water per day for drinking and cooking. To be safe store at least 6 gallons of water per person per week. You will need additional water for washing, brushing teeth, and dish washing. Some of the need for liquids can be met by using juices from canned fruits and vegetables. Store at least 1 week's emergency water supply for each member of your family, now!

## What containers should I use?

Food-grade plastic or glass containers are suitable for storing water,

provided they are completely clean. Food-grade containers include store-bought plastic or glass containers that have previously held food or beverages, such as 2-liter soda bottles and water, juice, punch, or milk jugs. You can buy new plastic containers for water storage at sporting goods stores.

Clean used containers with hot, soapy water. Next rinse well with plain water. Then sanitize by rinsing with a solution of 1/2 teaspoon of chlorine bleach per pint of water. Finally, rinse with clean water. Remember also to thoroughly clean the lid of the container. If you plan to store water in used plastic milk jugs, take special care to remove any milk residue, particularly at the handle.

*Never* use empty bleach containers to store water. Bleach containers are not food-grade. In addition, a child may not understand that some bleach bottles contain safe drinking water while others are hazardous. Do not take a chance. The results could be tragic.

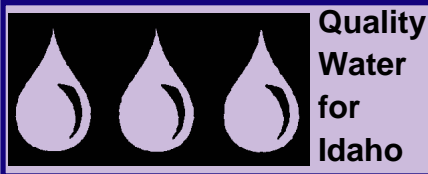
Clearly mark all containers "drinking water" with the current date.

E. Porter and M. A. Swanson

## Where should I store the water?

Store the tightly capped containers in a cool, dry place away from direct sunlight. Because most plastic milk and beverage containers degrade over time, be particularly careful to store them away from heat and light to prevent leakage. Store containers in cabinets or on shelves that will stay upright and hold the containers securely during an earthquake. To improve the taste of water stored for a long time, pour it from one clean container to another clean container, several times.

You can also store water for an extended period of time in the freezer. Although most families do not have enough freezer space to store all the water they would need in an emergency, storing some water in the freezer is a good idea. If you lose electricity, the frozen water will help keep foods in your freezer frozen until power is restored. Make sure you leave 2 to 3 inches of head space in containers before freezing. This will prevent water from spilling and the container from breaking.



## When and how do I treat the water?

It is not necessary to treat water for storage if it comes from a public water supply. All public water supplies are already treated and should be free of harmful germs. If stored properly, this water should have an indefinite shelf life. For the best-tasting stored water, you may want to replace stored water with fresh every 6 to 12 months.

Water from untested and untreated water supplies such as a farm pond or private well should be purified or treated before storage using one of the methods listed below. If you're storing farm pond or private well water for making formula for a baby, use the tablet or bleach purification method. After an emergency has occurred, you also may need to treat your water. Choose from among the following treatment methods:

**Boiling.** Bring water to a rolling boil for 1 minute (3 to 5 minutes if you live in a high-altitude area).

**Iodine.** Household iodine from the medicine chest or first aid kit will purify water. The iodine should be 2 percent United States Pharmacopoeia (U.S.P.) strength. Add 20 drops per gallon of clear water and 40 drops per gallon of cloudy water. Mix water and iodine thoroughly by

stirring or shaking them together in a container. Allow the water to stand for at least 30 minutes before using it.

**Purification tablets.** Available at any drug store. Follow directions on package.

**Bleach.** Liquid household bleach can also be used. It must contain hypochlorite, preferably 5.25 percent. Do not use scented bleaches; they are not safe for purification. Add the bleach according to table 1, then stir to completely mix.

**Table 1. Amounts of bleach to add to treat different amounts of clear and cloudy water.**

Amount of water	Amount of bleach	
	Clear water	Cloudy water
2 liters	4 drops	1/8 teaspoon
1 gallon	1/8 teaspoon	1/4 teaspoon
5 gallons	1/2 teaspoon	1 teaspoon

Let the water stand for 30 minutes. The water should have a slight chlorine odor. If it does not, add the same amount of bleach again and let the water stand for an additional 15 minutes.

*Caution:* If your stored water has come in contact with flood water, you must purify it and the container again before using it for drinking, cooking, brushing teeth, or dish washing.

## Emergency sources of water

In the case of an extreme emergency when water is unavailable

you can frequently find some sources. Emergency sources of water include ice cubes, frozen containers of water, your hot water tank, and your toilet tank (not the bowl). Do not drink from the toilet tank if a chemical disinfectant or purifier has been added to the water. Be sure you know where to shut off water coming into your home to avoid contamination.

To obtain a free flow of water from the hot water tank, you may need to open the valve at the top of the tank as well as the faucet at the bottom of the tank. You can increase the flow of water by turning on any hot water faucet before draining water from the hot water tank. Be sure to turn off gas or electricity to the tank before draining water for emergency use.



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