Storing Water

MONTH 3

Preventing thirst after a disaster

Water is essential for survival. The ground trembling and shaking caused by earthquakes can crack or break the lines that bring fresh water to your house. You may have to rely for three days or more on the water you have stored.

How much water should I store?

Three (3) gallons for each person in your household is the minimum amount required to take care of drinking, cooking, and hygiene needs for the first 72 hours of a disaster.

Which containers are good?

Plastic containers with a screw-cap lid, such as two-liter soda pop bottles or food-grade plastic jugs, work great.

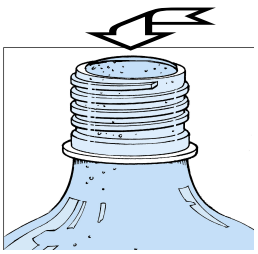
If you use two-liter soda pop bottles, plan to store at least six (6) of these for each person in your household.

Do not use glass bottles or old bleach bottles (or any container that has held a toxic substance). Glass breaks too easily. The plastic of old bleach bottles contains substances that, over time, get into the water and make it unfit for drinking.

Avoid the use of plastic milk jugs. They are difficult to seal tightly, and their plastic becomes very fragile and brittle over time.

✔ Storing water

1. Choose containers that have a tight-fitting screw-cap lid. Two-liter pop bottles are a great choice.



2. Thoroughly rinse out the container and the lid with water, and **fill it to the very top** of the container. For extra safety, thoroughly rinse the container with a weak solution of liquid chlorine bleach (8-10 drops in two cups water). Empty this solution out and fill the container right to the top with fresh water.
3. Seal the container tightly.
4. Label it "drinking water" and date it.
5. Store it in a cool, dark place. Examples:
   - under the bed
   - in the corner of closets
   - behind the sofa

   Hint: To make it easy to find many places to put your water, think about this activity as a priority rather than an inconvenience.

Can I improve the taste of stored water?

Stored water will taste better if you put oxygen back into it by pouring the water back and forth between two clean containers several times.

Is adding liquid bleach recommended?

In March, 1994, the Food and Drug Administration and the Environmental Protection Agency stated:

- Tap water does not need anything added to it before it is stored because it has already been chemically treated.
- Commercially purchased water does not need anything added to it. Keep it in its original, sealed container.

What about rotation?

It is recommended that water be rotated every six months.

Treating water of questionable purity:

1. Filter the water to remove as many solids as possible. Coffee filters, cheesecloth, or several layers of paper towels work well.

2. Bring the water to a rolling boil for a full 10 minutes.

3. Let it cool for at least 30 minutes. Water must be cool or the chlorine you add next will dissipate and be rendered useless.

4. **Add 1/8 teaspoon of liquid chlorine bleach per gallon** of cool water, or **8 drops per two-liter bottle**. The only active ingredient in the bleach should be 6.00% sodium hypochlorite, and there should be no added thickeners, soaps or fragrances.

5. Let it stand for 30 minutes.

6. If it smells of chlorine, you can use it. If it does not smell of chlorine, add 16 more drops of chlorine bleach per gallon, let it stand for another 30 minutes, and smell it again. If it smells of chlorine, you can use it.

   If it does not smell of chlorine, discard it and find another source of water.

Distillation - A second method of purification:

1. Fill a pot halfway with water.

2. Tie a cup to the handle on the pot's lid so that the cup will hang right-side up when the lid is placed upside-down on the pot (make sure the cup is not dangling in the water).

3. Boil the water for 20 minutes. The water that drips from the lid into the cup is distilled.

   This method allows the vapor resulting from boiling water to collect in the cup. This condensed vapor will not include salts or other impurities.

Additional information:

- The only thing that should be used to purify water is liquid household bleach containing 6.00% sodium hypochlorite and no thickeners, soaps or scents.

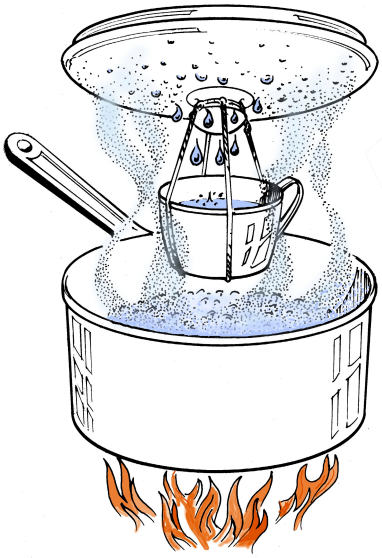
  Other chemicals, such as iodine or products sold in camping or surplus stores have a short shelf life and ARE NOT RECOMMENDED AND SHOULD NOT BE USED.

- Boiling water kills bacteria, viruses, and parasites that can cause illness. Treating water with chlorine bleach kills most viruses, but will probably not kill bacteria. Therefore, boiling and then adding chlorine bleach is an effective water purification method.

- The only accepted measurement of chlorine is the drop. A drop is specifically measurable. Other measures, such as "capful" or "scant teaspoon" are not uniformly measurable, and should not be used.

- There is no difference in the treatment of potentially contaminated water that is cloudy or that which is clear.

SOURCE: FDA and EPA Report, 1994



distillation is an effective method of water purification