

Drinking Water, by: Nayda I. Torres, University of Florida Disaster Handbook

Sources of Drinking Water - One of your most crucial needs is a supply of safe water. Every person in your family needs about 2 quarts of water or other liquids daily (more in hot weather). You also need pure water for preparing foods, brushing teeth and keeping clean.

When warned of a severe storm which could cause flooding, or which could otherwise disrupt water services, insure an adequate supply of safe water for your family by filling large clean containers: pots, pans, sinks and bathtubs with water. Then shut off the main water valve to protect the clean water already in your water system. If possible close the valves on the water lines leaving the house.

You may have emergency sources of water, such as ice cubes on hand. Soft drinks and fruit juices are water substitutes. In addition, the water in your water pipes and toilet tanks (NOT THE BOWLS) is safe to drink if you closed the valve on the main water line before the flood.

To use the water still in pipes, turn on the faucet located in the highest point in the house usually in an upstairs bathroom. This lets air into the system. Then draw water from the lowest faucet in the house.

Your water heater or water pressure tank could supply 30 to 60 gallons of safe water in an emergency. Before using water from the water heater, switch off the gas or electricity which heats the water. Leaving the heating part on while the heater is empty could cause an explosion or burn out elements. After turning off the gas or electricity open the drain valve at the bottom of the tank. Do not turn the water heater on again until the water system is back to normal service.

Purifying Water - Unless you are absolutely certain your home water supply is not contaminated by flood water, purify all water before using it for drinking, food preparation, brushing teeth or dishwashing. If the water contains sediment or floating material, strain it through a cloth before treating it. Water can be purified by boiling or by chemical treatment.

Boiling -Boil water at a rolling boil for 10 minutes to kill any disease-causing bacteria in the water. Add a pinch of salt to each quart of boiled water to improve the taste.

Chemical Treatment

If water cannot be boiled, treat it chemically. Two chemicals usually found in the home will purify water.

Table 1

Chlorine Bleach such as Clorox or Purex. Household bleach is a good disinfectant for water. However, check the label to sure that the active ingredient, sodium hypochlorite, is 5.25 percent. Do not use bleach which contains detergents.

Mix bleach thoroughly into the water. Let it stand for 30 minutes. The water should have a slight chlorine odor. If it doesn't, repeat the dose and let the water stand for an additional 15 minutes.

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. Seal the container and let stand for 30 minutes. The water supply will be safe for an indefinite period.

Water Purification Tablets will also purify water. Follow manufacturer's directions. Water purification tablets are available at drug stores and camping supply departments of your local stores.

Table 1.

Percent Chlorine	Add Per Gallon of Water
1 percent	40 drops
4 to 6 percent	8 drops
7 to 10 percent	4 drops
Unknown	10 drops

Source: Fact sheet (HE8 172) provided by the National Food Safety Database, University of Florida Disaster Handbook. University of Florida Cooperative Extension.