

Disinfecting and Finding Water

- ◆ **Obey public announcements** about whether your tap water is safe to drink or to use for cooking and bathing.
 - ◆ **Shut off your incoming water valve** if you hear reports of broken water or sewage lines, to stop contaminated water from entering your home.
 - ◆ **If the water is unsafe**, use only bottled water, or boil or disinfect your water for drinking, cooking, cleaning, bathing, washing dishes, brushing your teeth, and washing your hands.
 - ◆ **If you have your own water supply**, such as a well, cistern, spring, or other private source, ask your health department or Texas AgriLife Extension office to inspect it for sanitary quality and to show you how to keep it safe. **Have the water tested** for disease-causing bacteria such as *E. coli* and for total or fecal coliform.
 - ◆ **Disinfect all water during a disaster.** Don't assume the water is safe unless you have test results to confirm it.
 - ◆ **If water is limited**, use an alcohol-based hand sanitizer to wash your hands.
 - ◆ **Never ration your water.** Drink the amount you need today and try to find more for tomorrow. Minimize the amount of water your body needs by being inactive and staying cool.
- ◆ **Toilet tank:** The water in the tank (not the bowl) is safe to drink unless chemical treatments have been added.
 - ◆ **Water pipes:**
 - Release air pressure into the plumbing system by turning on the faucet at the highest point in the house.
 - Then drain the water from the lowest faucet.
 - ◆ **Outside:** Rainwater and water from coiled garden hoses can be used after they have been disinfected.
 - ◆ **In an emergency:**
 - Underground water, such as from wells or springs, is less likely to be contaminated than surface water.
 - If underground water is unavailable you may use surface water from a creek, river, lake or pond, in that order. If possible, get the water upstream from inhabited areas, and dip it from below the surface.
 - Disinfect all underground and/or surface water before using it.
 - ◆ **Do not disinfect or drink water when** it is dark in color, has an odor, contains floating material, or contains chemicals from a spill such as oil or gas.

Emergency water sources

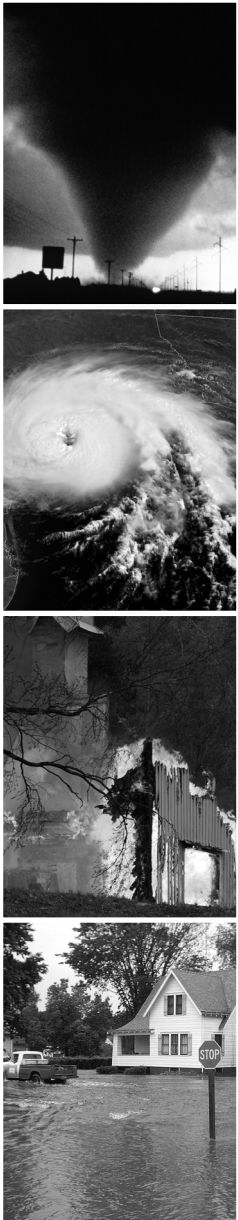
- ◆ **Water heater:**
 - Turn off the power that heats the tank, and let the tank cool.
 - Place a container under the tank and open the drain valve at the bottom. Or, start the water flowing by turning off the water intake valve and turning on a hot-water faucet.
 - Don't turn the tank back on until utility services are restored.
- ◆ **Ice cubes**

Purifying water—It's often best to use more than one method

Boiling

1. Strain the water through a clean cloth, coffee filter, or paper towel into a clean container (where possible) to remove any sediment or floating matter.
2. Boil the water vigorously for at least 1 minute.
3. The water is ready to use after it cools.
4. To improve the taste, add a pinch of salt to each quart of boiled water, or pour the water back and forth from one clean container to another several times.

continued



Disinfecting and Finding Water continued

Using chemicals—Strain the water (step 1 above) before using chemicals.

Bleach (from the home or grocery store):

1. Use unscented, liquid laundry bleach. Read the product label to find the percentage of chlorine, and use this table to determine how much bleach to add to the water:

Chlorine % (from the label)	Drops to be added per quart	
	Clear water	Cloudy water
1%	10	20
4–6%	2	4
7–10%	1	2

2. Add the bleach, and stir or shake the container thoroughly. If you do not have a dropper:
 - a. Use a spoon and a square-ended strip of paper or thin cloth about $\frac{1}{4}$ by 2 inches.
 - b. Put the strip in the spoon with an end hanging down about $\frac{1}{2}$ inch below the scoop.
 - c. Place the bleach in the spoon and carefully tip it. Water will drip from the end of the strip.
3. Let the water stand for 30 minutes. If you can smell a slight chlorine odor, the water should be safe.

4. If you cannot smell a slight chlorine odor, repeat the dosage and let the water stand for 15 more minutes before using it.

Tincture of iodine (from a medicine chest or first aid kit):

- ◆ **For clear water**, add 5 drops of iodine per quart of water.
- ◆ **For cloudy water**, add 10 drops of iodine per quart of water.
- ◆ **If you do not have a dropper**, make drops following the instructions in Step 2 for disinfecting with bleach.
- ◆ Let the mixture stand for 30 minutes; then the water should be safe to use.

Purification tablets (from a drugstore or sporting goods store)

- ◆ Purification tablets release chlorine or iodine. Follow the package directions.
- ◆ Usually one tablet is enough for 1 quart of water.
- ◆ Double the dose for cloudy water.