

Teton County Being Prepared

November 2001

Water in an Emergency

Cooperating Departments

Teton County Commissioners
733-8094

Teton County Cooperative
Extension Service
733-3087

Teton County Public Health
Nurse
733-6401

Bridger-Teton Chapter
American Red Cross
733-4049

Health Inspector
733-7030

Roads & Bridges
733-7190

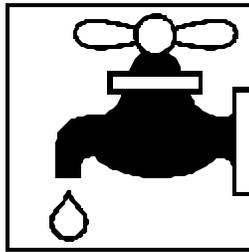
Building Department &
Inspections
733-7030

Fire Department
733-4732

Sheriff's Department
733-4052
911

*Prepared by
Teton County
Cooperative Extension
Service
1999*

After a disaster you must assume that all water sources are contaminated until proven safe. Water is easily stored but is often the most



neglected area of emergency food storage. The problem is compounded when a home food storage program relies heavily on dried foods. You may have enough calories stored to last for months but do you have enough water?

How much water?

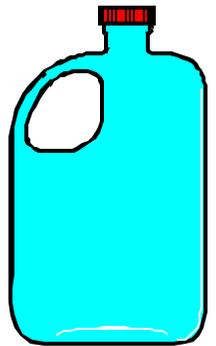
A gallon a day per person. A normally active person needs to drink at least two quarts a day. If your supplies begin to run low, remember: Never ration water. Drink the amount you need today, and try to find more for tomorrow.

Shelf Life of Water

The shelf life of water depends on the original quality of the water, the temperature at which it is stored and how much light it is exposed to just to mention a few determinants. Treated water out of the tap needs nothing added and should have a shelf life of about 10 years. Untreated water, from a well for instance, should be stored with about 16 drops of chlorine bleach per gallon.

Preparing Containers for Water Storage

Don't pour purified water into contaminated containers. Plastic gallon milk bottles are safe but are not very durable and may start leaking if stored for long periods. Glass gallon bottles like those used for apple



cider are also safe but be careful where you store them. Two-liter type soda bottles work well. Make sure whatever container you use is made of food grade material and has not been used previously for anything toxic.

1. Wash bottles with soapy water, then rinse thoroughly.
2. Run about three quarts tap water into one of the containers, then add 3/4 cup bleach to the water.
3. Shake well, turning upside down a time or two so that the cap will be sterilized also.
4. Let the mixture stand for two to three minutes, then pour it into the next container. You can use the same chlorinated water for several containers.
5. Fill the empty bottle with pure or purified water and seal it tightly closed with cap.
6. Label with "Drinking Water-Purified" and the date of preparation.

Water stored in plastic containers should not be stored near gasoline, kerosene, pesticides or similar substances. Vapors from these substances could permeate the plastic and affect the water. Thick walled polyethylene containers are significantly less permeable to vapors than are thin walled containers. Be certain that containers you select have a tight fitting cap or lid to prevent entrance of contaminants and evaporation of water. Sunlight has an adverse affect on plastic. Store water away from direct exposure to sunlight.

About Chlorine Bleach

Use liquid chlorine bleach that contains 4-6% sodium hypochlorite and no soap. Do not use scented bleach.

Water Purification Methods

If the water you gather is cloudy, smelly or otherwise polluted, strain it through a paper towel or several layers of clean cloth into a container in order to remove any sediment or floating matter.

Boiling - Short of using a high-quality water filter, boiling is the most reliable method for killing microbes and parasites. Most water can be purified for drinking purposes by boiling it rapidly for 10 minutes plus 1 minute for each 1000 feet in altitude. In order to improve the taste it will be necessary to aerate (add oxygen back to it) after boiling. This is accomplished by allowing the water to cool and then pouring the water from container to container several times.

Chlorination - Add eight drops of liquid chlorine bleach per half gallon of water. Stir and let stand for 30 minutes. If the water does not taste

and smell slightly of chlorine at that point, add another dose and let stand another 15 minutes.

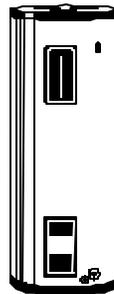
If you do not have a dropper, use a spoon and a square-ended strip of paper of thin cloth about 1/4 inch by 2 inches. Put the strip in the spoon with an end hanging down about 1/2 inch below the scoop of the spoon. Place bleach in the spoon and carefully tip it. Drops the size of those from a medicine dropper will drip off the end of the strip.

Emergency Tip: Keep an eye dropper taped to your emergency bottle of bleach, since purifying small amounts of water requires only a few drops.

QUICK CONVERSION	
AMOUNT OF WATER	AMOUNT OF BLEACH
2 Pints = 1 Quart = .94 Liter	4 Drops
2 Quarts = 1/2 Gallon = 1.9 Liters	8 Drops or 1/8 Teaspoon
4 Quarts = 1 Gallon = 3.8 Liters	16 Drops or 1/4 Teaspoon

Sources Of Emergency Water In Your Home

If a disaster catches you without a stored supply of clean water, you can use water from other sources in your home.



1. Hot-water tank. This water can be accessed by the valve at the base of the unit. Turn the power source off if you drain the unit. Start the water flowing

by turning off the water intake valve and turning on a hot water faucet.

2. Water beds hold up to 400 gallons, but some water beds contain toxic chemicals that are not fully removed by many purifiers. If you designate a water bed in your home as an emergency water resource, drain it yearly and refill it with fresh water containing 2 ounces of bleach per 120 gallons of water.
3. While pressure lasts there is existing water in the lines within your home. Conserve this for cooking and drinking. Don't flush toilets or use showers. The water can be drained by opening a faucet at the highest level and placing a bucket beneath a faucet at the lowest level to capture the draining water.

Note: During periods of flooding, septic systems and/or sewage treatment plant water may be washed into the lower elevations streams and rivers (Snake River, Flat Creek, Fish Creek, etc.) Therefore, water should be acquired from one of the many mountain streams which enter the valley from higher elevations (Cache Creek, Willow Creek, Horse Creek etc.) Utilize any clear water stream near your location, which has not been subjected to sewage contaminated flood water.

Do you know the location of your incoming water valve? You'll need to shut it off to stop contaminated water from entering your home if you hear reports of broken water or sewage lines.