



**FRESNO COUNTY DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH DIVISION**

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EMERGENCY WATER SOURCES AND WATER PURIFICATION

Your household water heater tank can supply 30 to 60 gallons for an emergency supply. Shut off the main valve to the house to prevent possible contamination. When not under pressure (main valve to house shut off) the tank may have to be vented by opening hot water faucet or disconnecting the hot water line at the top of the heater.

Important: Turn off the gas or electricity to the tank before draining off the water for emergency use. Melted ice cubes, toilet reservoir tanks (without additives), and juices from canned foods may also be used. Swimming pool water may be used for bathing, flushing toilets, etc., but should not be used for drinking except as a last resort, due to the treatment chemicals used in swimming pools.

Recommendations for water rationing

If an adequate supply of pure water is not available, it may be necessary to limit consumption to the following amounts per person per day:

- Drinking and cooking: one gallon
- Personal cleanliness: one gallon
- Laundry and dishwashing: two gallons

If four gallons of water per person per day is not available, a minimum of two gallons per person per day should be rationed for drinking and personal cleanliness. Any "extra" water should be utilized conservatively for laundry and dishwashing.

Water Purification (Disinfection)

The purpose of disinfection is to destroy harmful (pathogenic) organisms. The type and extent of disinfection used is determined by the source and condition of the water to be treated. If there is a possibility of sewage contamination, then the following methods may be used. **It is important to remember that both CHLORINE RESIDUAL and CONTACT TIME are essential to effectively kill pathogenic microorganisms.**

To disinfect small quantities of water (5 gallons or less) the following procedures are recommended:

Boiling: Boil vigorously for 3 to 5 minutes. To improve taste, pour from one container to another several times to aerate. Add 1 additional minute of boiling time for each additional 1,000 feet of elevation.

Purification Tablets: Available at most drugstores or camping stores. Follow directions.

Bleach purification: Liquid household bleach (5.25 % sodium hypochlorite) can be used to achieve a concentration of at least 1 part per million (ppm) residual chlorine, by adding the bleach in accordance with the table below. Mix thoroughly and let stand for 30 minutes.

AMOUNT OF WATER	CLEAR WATER	CLOUDY WATER
1 quart water	2 drops bleach	4 drops bleach
1 gallon water	8 drops bleach	16 drops bleach
5 gallons water	½ teaspoon	1 teaspoon

Excessive turbidity (cloudiness) will greatly reduce the efficiency of the disinfection chemical or process. If possible, turbid water should be filtered prior to disinfection.

Filters: Use a “backpacking” type filter and follow the directions on the filter. **Adding disinfection after filtration is always wise. Follow the information provided above.**