ENVIRONMENTAL HEALTH INFORMATIONAL BULLETIN

EMERGENCY DISINFECTION OF DRINKING WATER

When natural or other forms of disaster interrupt the home water supply, you can obtain limited amounts of water by draining your hot water tank or melting ice cubes. In most cases, well water is the preferred source of drinking water if it is available.

When emergency disinfection is necessary, examine the physical condition of the water. Disinfectants are less effective in cloudy water. Filter murky or colored water through clean cloths or allow it to settle, and draw off the clean water for disinfection. Water prepared for disinfection should be stored only in clean, tightly covered containers, not subject to corrosion.

There are two general methods by which small quantities of water can be effectively disinfected. One method is boiling. It is the most positive method by which water can be made bacterially safe to drink. Another method is chemical treatment. If applied with care, certain chemicals will make most water free from harmful or pathogenic organisms.

BOILING: Boil vigorously for 3 to 5 minutes. To improve taste, pour from one container to another several times to aerate.

PURIFICATION TABLETS: Available at most drug stores. Follow directions on the package.

BLEACH PURIFICATION: *Liquid household bleach (sodium hypochlorite 5.25%) can be used. Add according to the table below. Mix thoroughly and let stand for 30 minutes.

AMOUNT OF WATER	CLEAR WATER	CLOUDY WATER
1 quart	2 drops	4 drops
1 gallon	8 drops	16 drops
5 gallons	1/2 tsp.	1 tsp.
50 gallons	1 tbsp. (3 tsp.)	2 tbsp.
100 gallons	1 oz. (2 tbsp.)	2 oz.
500 gallons	2 oz.	4 oz.
1,000 gallons	4 oz. (1/2 cup)	8 oz.
5,000 gallons	16 oz. (2 cups)	32 oz.
10,000 gallons	32 oz. (1 qt.)	60 oz.

*IMPORTANT NOTE: If liquid pool chlorine (10% available chlorine) is used, add half of the amounts shown on the chart above. If you have any questions, please call the Environmental Health Division at (714) 433-6000.

Sources: US Environmental Protection Agency
County of Santa Clara, Environmental Health Services

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