



## MONTHLY PREPAREDNESS TOPIC

### HOW TO PREPARE:

It is recommended to store 2 weeks worth of water in preparation for an emergency. For one person, this is 1 gallon per day or 14 gallons of water. That is equivalent to 27 2-liter bottles. It's important to know how to safely sanitize and store your water supply.

Method	Purify	Filter
Boil	X	
Disinfectant	X	
Filter Devices		X
Filter/Disinfect	X	X

Untreated water can make you very sick. It may contain toxic chemicals, heavy metals, and viruses/bacteria. Boiling, disinfecting, and filtering are different methods used to purify your water supply in the event that it is not deemed safe to drink.

# WATER IN DISASTERS

### DISINFECTION

Typical unscented household bleach will be 5.25%, 6%, or 8.25% sodium hypochlorite (NaClO). Add the amount of bleach suggested for the amount of water on the table to the right. Stir the solution well, let stand for 30 minutes before use, and store the disinfected water in clean, sanitized containers with airtight lids.

WATER	NaClO	BLEACH
1 Liter	1%	10 drops
1 Gallon		40 drops
1 Liter	4-6%	2 drops
1 Gallon		8 drops
1 Liter	7-10%	1 drop
1 Gallon		4 drops

If water is cloudy, murky, colored or very cold, DOUBLE the bleach added.

**FILTER:** Mechanically removes contaminants. Most filters, depending on the filter pore size, can remove everything but viruses. Carefully read instructions to learn about capability.

**PURIFY:** Chemically kills viruses and some (but not all) bacteria. Does not remove bad taste or debris from water.

**IMPORTANT:**  
Water contaminated with fuel or toxic chemicals will not be made safe by boiling or disinfection! Use a different source of water if you suspect contamination.

### FOR PROPER WATER STORAGE

- Label container as "drinking water" and include storage date; replace stored water that is not commercially bottled every six months.
- Keep stored water in a place with a fairly constant cool temperature, not in direct sunlight, and away from toxic substances such as gasoline or pesticides.
- Use metal bottles, BPA free plastic bottles or Lexan containers; Do NOT use milk or juice jugs as the material used in them is not meant for long-term storage use.
- Prepare containers for use by first washing with dish soap, and rinsing thoroughly with clean water; sanitize containers by swishing a bleach solution (1 teaspoon chlorine bleach to 1 quart water) around all interior surfaces of container. Rinse thoroughly with clean water before use.



**Oregon State**  
University