



Drinking Water Contamination

You have just been told by officials you cannot drink tap water. What do you do?

- 1. Boil for 10 minutes. Water is safe to drink -OR-**
- 2. Add Chlorine**

- Take chlorine used for laundry (i.e. Clorox) — must be unscented/no dyes.
- After treating with bleach, leave the water bottle open for 30 minutes to let the bleach evaporate.
- Treated water should have a slight taste and smell of bleach.

QUANTITY OF WATER	CLEAR WATER add this much bleach	CLOUDY OR 40°F WATER add this much bleach
1 quart	2 drops	4 drops
2 liter bottle	4 drops	8 drops (1/8 teaspoon)
3 liter bottle	6 drops	12 drops
1 gal (4 liters/4 quarts)	8 drops (1/8 teaspoon)	16 drops (1/4 teaspoon)
5 gallon	½ teaspoon	1 teaspoon
15 gallons	1½ teaspoons	3 teaspoons
55 gallon	2 Tablespoons	4 Tablespoons

- Stored water does not go bad. There is NO expiration date.
- It may go flat but is still safe and drinkable.
- To restore taste, pour back and forth between two containers to add air.
- Chlorination is commonly used as a disinfectant for drinking water at a concentration of 3 parts per million (ppm) from your water department.



Water Contaminants

Organism	Examples	Size	Filter Type	Particle Size Rating
Protozoan Cysts	Giardia, Cryptosporidium	5 microns +	Water Filter	1.0-4 microns
Bacteria	Cholera, E. Coli, Salmonella	0.2-0.5 microns	Micro Filter	0.2-1.0 microns
Viruses	Hepatitis A, Rotavirus, Norwalk Virus	0.004 microns	Water Purifier	0.004 microns

- Boiling will kill 100% of all the above! Boil for 10 minutes.
- Chlorine alone does not provide adequate protection against protozoa cysts. It is recommended water be first passed through a filter to remove parasites and then treated with chlorine for 30 min.
- The water should have a slight smell of chlorine. This is good, you want that.
- If there is no smell, chlorinate again and allow another 30 mins. If there is still no smell of chlorine, find another source of drinking water.
- Filters remove bacteria and protozoa cysts, not viruses. That's why combined with chlorine (kills viruses) they provide the protection from all three contaminants.
- Filtering and chlorination will not make water contaminated with chemicals (pesticides, oil, and gas) safe to drink. Look for another source.