

# Preparing for Disasters: Your Food and Drinking Water Supply<sup>1</sup>

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## Preparing Your Drinking Water

Having enough clean drinking water is a top priority during any emergency! A normally active person needs at least two quarts of water each day. However, needs vary depending on the weather and an individual's age and health status. When clean water is not available, we need to purify all water before using it for drinking, preparing food, or personal hygiene. Many methods for purifying water are available, but none (by itself) is perfect. Often, a combination of more than one method works best. If these recommendations are different from those of the local health department, the local recommendations prevail.

### Three Ways to Purify Water

1. **Boiling** is the safest and most reliable method to make water safe to drink.
  - Bring water to a vigorous boil (3-5 minutes), and then allow it to cool.
  - Boiled water will taste better if you add oxygen back in by switching back and forth between two CLEAN containers.
2. **Chemical disinfection** can be used when power or fuel for boiling is not available.
  - Liquid household bleach can be used to kill microorganisms. Use only regular bleach with 5.25 percent sodium hypochlorite. (Do NOT use colorsafe bleach or bleach with scent or added cleaners.) Add 16 drops of bleach per gallon of water. Stir. Let stand for 30 minutes. Smell the water. If you don't smell a slight bleach odor, add another dose of bleach and let stand another 15 minutes.
  - Tincture of iodine and tetraglycine hydroperidoide tablets are recommended when liquid household bleach is not available. The tincture of iodine can come from a medicine chest or first-aid kit. Tetraglycine hydroperidoide tablets are available from pharmacies and sporting goods stores. Follow manufacturer's instructions. For clear water, use one drop of 2% tincture of iodine per quart or liter of water. Water must stand for a minimum of 30 minutes before it is safe to use. For cold or very cloudy water, ten drops of 2% tincture of iodine are required. The water should be allowed to stand several hours before use. To ensure that *Cryptosporidium* is killed, water must stand for 15 hours before drinking.

**IMPORTANT NOTE:** Chemically treated water is intended for short-term use only. If iodine-disinfected water is the only water available, it should be used for only a few weeks.

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3. **Distillation** involves boiling water and collecting the vapor. It removes microbes, heavy metals, salts, and most other chemicals. The American Red Cross document has a method for distilling water.

## Preparing Your Food Supply

Preparation for emergency food supplies can be simple if it is done before the emergency occurs. Although individual and family needs vary, anyone can use the following general tips to build a food supply for emergency situations.

- **Length of supply:** Several resources are available on how to prepare food supplies for various lengths of times, such as three days, seven days, or two weeks.
- **Nutritional considerations:** Include a variety of foods to maintain nutritional needs, and for other special considerations; include foods that are familiar to you and your family.
- **Foods should need little or no energy to keep or prepare:** Foods should not need to be refrigerated or frozen or need cooking. These include many canned, dried, and other non-perishable foods.
- **Balancing water and food supplies:** If the water supply is limited, avoid foods that are high in fat or protein or salty. Omit foods that require large quantities of water to prepare.
- **Equipment and utensils:** Keep a can opener, a pair of scissors and disposable utensils in your emergency kit.

For additional information, check out the following resources.

Publication (source)	Description	Contact Information
Emergency Food and Water supplies (FEMA-215)	<ul style="list-style-type: none"> <li>• How to store water</li> <li>• Outdoor water sources</li> <li>• Short-term food supplies</li> <li>• Food and water storage tips</li> <li>• Nutrition tips</li> <li>• How to purify water</li> <li>• Disaster supplies</li> </ul>	Call your local American Red Cross chapter or write to: FEMA 500 C Street, SW Washington, D.C. 20472 (202) 566-1600
Home Emergency Supplies (American Red Cross)	<ul style="list-style-type: none"> <li>• Mini survival kit for car</li> <li>• How to store emergency supplies</li> </ul>	Local American Red Cross Chapter
Your Family Disaster Supplies Kit (FEMA)	Describes how to put together your kit: <ul style="list-style-type: none"> <li>• Water, Food</li> <li>• First Aid Kit</li> <li>• Supplies</li> </ul>	Write: FEMA P.O. Box 70274 Washington, D.C. 20024 FEMA L – 189, ARC 4463 ...or visit <a href="http://www.fema.gov/areyouready/assemble_disaster_supplies_kit.shtm">http://www.fema.gov/areyouready/assemble_disaster_supplies_kit.shtm</a>
Emergency Food and Water Supplies (FEMA)	<ul style="list-style-type: none"> <li>• Water purification</li> <li>• Preparing an emergency stockpile</li> </ul>	FEMA 500 C Street, SW Washington, D.C. 20472 (202) 566-1600

Publication (source)	Description	Contact Information
FoodSafety.gov	<ul style="list-style-type: none"><li>• List of web sites and fact sheets about food safety during disasters</li></ul>	<a href="http://www.foodsafety.gov/~fsg/fsgdisas.html">http://www.foodsafety.gov/~fsg/fsgdisas.html</a>

## References

Centers for Disease Control. (2007). *Risks from food and water (drinking and recreational)*. Retrieved September 11, 2007, from <http://wwwn.cdc.gov/travel/yellowBookCh2-FoodWaterRisks.aspx>

FEMA. (1998). *Emergency food and water supplies (FEMA-215)*. Retrieved September 11, 2007, from <http://outlands.tripod.com/survival/fema-215.htm>

