#### REED COLLEGE OCCUPATIONAL HEALTH AND SAFETY COMMITTEE

PART ONE SUPPI SASTER YOUR HEALTH, **YOUR SAFETY:** 

**OUR CONCERN** 



# Don't you hate it when you forget to pack toothpaste?

While forgetting the little things on minor excursions may not be life threatening, forgetting to pack important items in an emergency can have terrible consequences. This segment of Your Health, Your Safety: Our Concern covers the basics on preparing the right food and water for a disaster, as well as a few things you should check immediately after a disaster.



### Water

Natural disasters might interrupt utilities and power for days or weeks depending on their severity, and being without water can be very hazardous. Instead of waiting for help to arrive, here are some tips to make sure you have plenty of water in an emergency.

Although you can survive days without food, a short time without water can be harmful or even deadly. The human body is made up of 54% (for females) or 60% (for males) water on average. A loss of 10-15% of water in the body can be damaging and very painful, and loss of greater than 15% is usually fatal. Crises such as earthquakes could restrict or contaminate traditional water sources, making it important to store an emergency supply of water.

How much water should you store? Store at least one gallon of water per person per day. A two-week supply of water is recommended, but at least a three day supply is necessary. This may seem excessive, but an active person needs ½ gallon per day for drinking alone and even more for hygiene and food preparation.

Store water in purchased food-grade water storage containers. If special containers are not an option, store water in clean plastic 2 liter soft

drink bottles. Do NOT store water in plastic milk jugs or juice containersthey cannot be cleaned to prevent bacterial growth.



Also, do NOT store water in waxed cardboard or glass containers-these containers decompose or break. Finally, store water in a cool place, preferably on the floor rather than on a shelf where it can fall and break open. Label with a fill date so that you can replace the stored water every six to twelve months. Despite best efforts, water can grow bacteria over this time period.

If you find yourself in need of an emergency supply of water, there are a few places to look: ice cubes from freezers, hot water heater after turning off the gas or electricity, natural sources (i.e.: rainwater, rivers, and natural springs) after the water is treated, and the toilet tank. Never use water from the toilet bowl, water beds, or swimming pools.

If you are using water from natural sources, or for any other reason the water gets contaminated, there are ways to purify the water you have.

### First, filter water using a coffee filter or a piece of cloth to get

rid of solid particles. Then choose one of the following options:

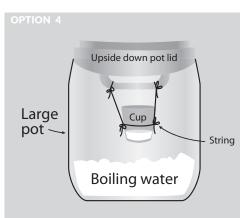




#### **OPTION 3**



Chlorinate using household liquid bleach with 5.25-6.0% sodium hypochlorite. Do NOT use scented, color safe, or bleach with added cleaners. Use 16 drops per gallon of water, so that water smells faintly of bleach)



Distill water. To distill liquid, boil water in a covered pot with a cup suspended from the lid to collect the condensed vapor (see diagram).



### Food

Store a supply of non-perishable foods that require no refrigeration, preparation or cooking, and little or no water. Preferably they are also compact, lightweight, and won't make you thirsty. If you must heat food, pack a can of sterno or use a fireplace, grill or camp stove.

When purchasing foods to store, remember each of the following:

- Canned, ready-to-eat meats, fruits, vegetables, and juices
- Staples (i.e.: salt, sugar, pepper, etc)
- High energy, high caloric foods, such as energy bars, nut butters and trail mix.
- Vitamins
- Foods for infants and pets.
- Some comfort foods.

Storing comfort foods may sound silly, but they can be important for lifting morale. Remember: in an emergency, it's vital to keep up your energy. Eat at least one balanced meal every day and consume enough calories and nutrients to function. Like water, it's best to keep food covered in a dry, cool, and preferably dark spot. Open and seal food carefully. Store any opened packages in air-tight containers for protection from pests. Wrap cookies and crackers in plastic bags, and keep them in tight containers. Be sure foods are not spoiled. Rotate foods in storage. Food, unlike water, can be rationed, except for children and pregnant women.



### Utilities Shutoff

Your utilities can be a friend or foe in a natural disaster, especially an earthquake. Make sure you know how to harness their power for good!

In the event of a disaster, you might need to shut off your utilities to be sure that neither the gas nor the water are leaking into your house, and that you won't get electrocuted by a stray spark.

Water quickly becomes a precious resource following many disasters. It is essential that all members of vour household learn how to shut off the water at the main house valve. Cracked water lines may pollute the water supply to your house, as well as that which is already in your pipes, a valuable resource for you in a disaster. It is wise to shut off your water until vou hear from authorities that it is safe for drinking. The effects of gravity may drain the water in your hot water heater and toilet tanks unless you trap it in your house by shutting off the main house valve (not the valve in the street in the cement box at the curb-this valve is extremely difficult to turn and requires a special tool).

#### To shut off your water, begin

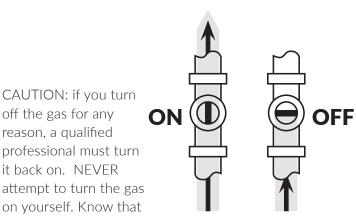
by locating the shutoff valve for the water line that enters your house. It may look like the valve to the right. Make sure this valve can be completely shut off. It is possible that your valve may be rusted open, or it may only partially close. Replace it if necessary. Label the valve with a tag for easy identification, and make sure everyone knows where it is located.

## Utilities Safety

### When good utilities turn bad.

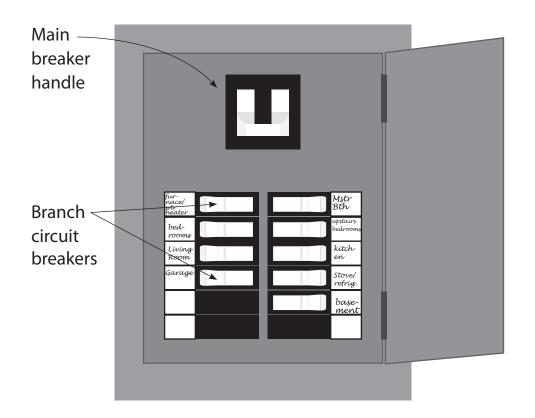
Natural gas leaks and explosions are responsible for a significant number of fires following disasters. It is vital that all household members know how to shut off the natural gas. Because there are different gas shutoff procedures for different gas meter configurations, you need to contact your local gas company for guidance. Once you learn the proper shutoff, share the information with everyone in your household. Be sure not to actually turn off the gas when practicing the proper gas shutoff procedure.

If you smell gas, hear a blowing or hissing noise, or your meter is running quickly, open a window and get everyone out quickly. Turn off the gas, using the outside main valve if you can, and call the gas company as soon as possible.



in a major disaster, it may take weeks for the company to inspect and turn it on.

Sparks could cause a fire or pose a shock hazard. To shut off your electricity, begin by locating the electricity circuit box. Flip the switches at each circuit to the off position. Be sure to shut off the individual circuits before shutting off the main circuit breaker.





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#### Sources...and for more information

The American Red Cross — http://www.RedCross.org US Department of Homeland Security — http://www.ready.gov Federal Emergency Management Agency — http://www.fema.gov