

Water

Stocking water reserves and learning how to purify contaminated water should be among your top priorities in preparing for an emergency. You should store at least a one-week supply of water for each family member. While everyone's needs will differ, depending on age, physical condition, activity, diet and climate, the general rule of thumb is to store a total of one gallon of water, per person, per day.

How to Store Emergency Water Supplies

You can store water in thoroughly washed plastic, glass, fiberglass or enamel-lined metal containers. Heavy plastic containers such as soft drink bottles work best and are more durable. Containers for emergency supplies of water should be rinsed with a bleach solution before using. Of course, you can always purchase bottled water from a local retailer but if you choose to store tap water, you should treat it with a preservative, such as unscented chlorine bleach, to prevent the growth of microorganisms. Use liquid bleach that contains 5.25 percent sodium hypochlorite and no soap.

Add two drops of unscented bleach per quart of water (or two teaspoons per 10 gallons), stir, and let stand for at least thirty minutes. It should be noted that not all parasitic organisms are destroyed by this method. Seal your water containers tightly, label them and store them in a cool, dark place.

Three Easy Ways to Purify Water

If you run out of stored, purified water you can always use the water stored in your home water heater or plumbing.

In addition to having a bad odor and taste, contaminated water can contain microorganisms and viruses that cause diseases such as dysentery, cholera, typhoid and hepatitis. You should therefore purify all water of uncertain purity before using it for drinking, food preparation or hygiene.

There are many ways to purify water. None are perfect. Often the best solution is a combination of methods. Before purifying, let any suspended particles settle to the bottom, strain them through layers of paper towel or clean cloth.

Three easy purification methods are outlined below. These measures will kill microbes but will not remove other contaminants such as heavy metals, salts, and most other chemicals.

Boiling is the safest method of purifying water. Bring water to a rolling boil for two minutes, keeping in mind that some water will evaporate. Let the water cool before drinking. Boiled water will taste better if you put oxygen back into it by pouring it back and forth between two containers that have been treated in the manner stated earlier. This will also improve the taste of stored water.

Chlorination uses unscented household liquid chlorine bleach to kill microorganisms. Add two drops of bleach per quart of water (four drops if the water is cloudy) , stir and let stand for 30 minutes. If the water does not taste and smell of chlorine at that point, add another dose and let stand for another 15 minutes. This method will not kill all parasitic organisms.

Purification tablets release chlorine or iodine. They are inexpensive and available at most sporting goods stores and some drugstores. Follow the package directions. Usually one tablet is enough for one quart of water. Double the dose for cloudy water. This method does not kill all parasitic organisms.

There is also a more rigorous purification method that will remove other contaminants.

Distillation will remove microbes, heavy metals, salts and most other chemicals. It involves boiling water and then collecting the vapor that condenses back to water. The condensed vapor will not include salt and other impurities. To distill, fill a pot halfway with water. Tie a cup to the handle of the pot's lid so that the cup will hang right-side up when the lid is upside-down. Put the lid on the pot upside-down (making sure the cup is not dangling into the water), and boil the water for 20 minutes. The water that drips into the cup from the lid is distilled.