

Water Collection and Storage

In Surviving Disasters and Disaster preparation water is your most precious asset. Disasters occur in many forms and may be the meteor or comet collision of the Mayan 2012 predictions, but earthquakes, fires, storms, floods and hurricanes will also constitute emergencies that you will need to be prepared for. Clean fresh water is your most pressing problem in survival. You can survive days in an emergency without food but water is essential. Many will tell you that a quart of water a day is all that is required and you only need to survive on your own for 72 hours and the kits will say they last up to 72 hours knowing that you will likely run short and need more.

Depending on the type of disaster you are facing it will likely be days or weeks before you can reasonably expect assistance. If it is a national disaster or a global emergency such as a war, meteor major volcanic eruption, or other disaster movie type emergencies it will be a while. Yellowstone National park would be one example the ash cloud from its' very real potential eruption would cover a good part of the United States and contaminate all the water sources. Working with utility companies I have found even smaller earthquakes will take out the power grid and natural gas lines for 6 weeks or more.

In a disaster or emergency water is your first need after first aid is administered and the damage is assessed. You can survive days in an emergency without food but you need water. Many survival kits give you small packets of water and say it CAN last up to 72 hours knowing it is not going to make it that long. They allow you a quart of water a day but in hot climates or summer you need a gallon.

If you have warning before disaster or emergency strikes and you have time it is good to fill up your freezer with water jugs or the small plastic water bottles and let them freeze. This gives you a supply of water and will allow you to keep food fresh longer if the power goes out. The frozen water can be used to keep what food is in the refrigerator cold for several days allowing you to use up perishable goods before they spoil and have a source of water as well.

It is a great idea to plan ahead and use the time now to store water in larger jugs that can be stacked and stored. The square jugs of 2 ½ gallon size stack easy and do not take up that much room. They are heavy so be careful on what you stack them shelves are not usually built for that kind of weight, water weighs 8 pounds per gallon.

Most things like storms and hurricanes will allow you some time and if you do not have the space to store water for longer periods you can get the collapsible plastic jugs of 2-5 gallons each and have enough of them on hand so that you would have 5 gallons of water for each person likely to be in the house. They can be filled while there is still water and used as necessary. When preparing to survive disaster water is your most important asset you can live for days on little or no food but can dehydrate and die quickly without disaster preparation.

If the disaster has already hit and you did not prepare and store water then these are your sources of good clean water.

Go to lowest faucet in your house or apartment open the water valve and let water drain from the pipes into a container. If you have a basement start there, if not the lowest faucet could be an outside faucet. The water will flow better if you have first drained the water from a higher faucet and then left it open to allow the water to drain into your container. Next try disconnecting your washer hoses. Water will always be in them, have your container ready and let the water drain into it. It is not uncommon to have water in the pump or lower part of the washer and possibly a half gallon of water may be retrieved by tipping the washer back and getting the water from the drain hose. If the machine has been through the rinse cycle the water should be relatively soap free and usable but may need treatment with Iodine, bleach or boiled if it is available. Use 4 drops of Iodine or bleach per gallon of water.

In the house is a hot water heater. Turn off the gas or electricity going to the water heater and you can drain up to 30 or 40 gallons of water from it which can be enough to last a family of 4 ten days or longer. The valve at the bottom is often difficult to open and once open can leak water constantly draining your supply. If the upper level faucets are open it allows the water to come out faster. If the valve does not reseal and you have a garden hose then attach the hose to the valve and just raise the end above the tank and the flow should stop or kink the hose to save your water.

If you have an older refrigerator that is not frost free then you can use the ice on the sides of it or from a chest freezer for water as well.

Another easy source of water is using the water from the back of the toilet tank. The tank water should be good and fresh but do not use the toilet bowl water. Any water that you suspect has bacteria or fungi in it should be boiled or treated before it is used.

If you happen to live in an area of snow clear off the top layer and use the lower snow which is less likely to have contaminants in it, and melt it slowly to get water. The liquid from canned corn or canned green beans etc can be used as drinking water. Canned goods can store safely for 3-5 years and still be safe so are great for survival. If the cans are dented, or the tops bulging, or if the contents do have an odor then likely throwing it away is a good idea. Food poisoning is not what you need during an emergency.

If you have outside kiddies pools, swimming pools or hot tubs the water in them is likely to be usable unless it has been freshly chlorinated. Let the chlorine have time to get out before you use it. Obviously depending on the sort of disaster or emergency you are facing it could have bacteria, ash from fire, volcanic eruption, or worst case radioactive particles. In the last case it is not safe to drink and cannot be made so with your survival kits. Ordinary ash can be filtered out and the water drank after it has settled a couple times.

In emergency preparedness it is wise to see what other sources of water are available these sources do not need to be drinkable to be useful. If you have a water bed the water is not going to be good to drink it likely has stuff floating in it and has been treated to keep algae from growing. The water can be used to flush toilets if the plumbing is still intact. It should not be used to wash dishes or prepare foods. Even boiling it may not remove the chemicals and bacteria present in it.

There are several methods of making water safe to drink after the disaster has struck. You will hopefully have several gallon containers with screw on lids. Most stores sell purified water, spring water etc with those screw on lids. This will keep the water from spilling. The simplest method that is likely to be easy to treat the water for you using what is in your house is to use chlorine bleach. Bleach normally contains 5- 6% sodium hypochlorite which is the active ingredient. Use the bleach without the scent since it will affect the taste terribly. The water can be purified using four drops of water per quart. A gallon of water can be treated with a $\frac{1}{4}$ teaspoon of bleach. One teaspoon would treat 4 gallons of water. Many people have a party jug or igloo cooler that would work fine. Stir the bleach in and cap it and let it stand for 30 minutes or longer you should still be able to smell some of the chlorine odor if not a little more can be added. Bleach does not stay fresh and loses its potency so adjust if you have had the bottle sitting for months and know it is old or cannot smell the chlorine after treatment.

Iodine is not as handy in the first aid cabinet as it used to be but if you have no bleach and do have iodine then it will sterilize the water as well. Use a 2 percent tincture of iodine to sterilize water. Add 4 drops of the solution to every gallon of water to be sterilized. If you do not have a bottle in the medicine cabinet then you can use a feminine douche. They have Povidone Iodine in them and can be used if you need the water sterilized. Boiling is always good but if you are using water from pools or contaminated sources some bacteria are able to survive even boiling or leave spores that will activate later. Iodine in the water will kill the spores. So bleach, iodine and boiling are all good to use.