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Las Vegas South Stake Emergency Preparedness STORING WATER

BE PREPARED

You can survive only 3 days without water. Each person needs 1.5 gallons of water per day. Don't forget your pets.

Water Storage

Natural disasters have been making headlines with an alarming frequency, often leaving victims with limited access to fresh safe drinking water. A well-planned water storage system can ensure you and your loved ones have plenty of clean water in the event utilities have become interrupted without warning.

Storing Water in the Home

An Easy and simply way to start your water storage is to with 5-gallon containers. Five 5-gallon containers on a rack with one on a water dispenser will give you 30 gallons of water.

NOTES

Types of Containers

Big Enough
Containers come in all sizes and shapes. Typically, families should store between 200 to 700 gallons. Enough for family needs but not so much that it takes up too much space.

The Right Plastic
Look for water tanks that are built with high-density polyethylene plastic (HDPE) and are BPA-free, which makes water safe for drinking even when stored in direct sunlight.

Dark Colors
For mold and bacteria to grow in water they need light. That's why most emergency water tanks come in dark colors - so the light can't get in.

Only New
Do not buy used water tanks. Previously owned tanks may have toxins or chemicals embedded in the plastic that cannot be removed, even with cleaning.

Sturdy
Don't store water in flimsy containers. The bigger the container the thicker the plastic. Stay away from canned water or water bottles in thin plastic.

RESOURCES: Amazon, thereadystore.com/, Brian Scroggins – Somerset Ward 702-493-4088

How to Store Water

1. Store away from chemicals. Paints, gasoline, cleaners should not be stored close by. Chemicals can seep into plastic and eventually into the water.
2. Don't store directly on concrete. Elevate container on untreated plywood especially if you use cleaning agents to clean the concrete surface.
3. Store your water in a cool, dark location, out of direct sunlight.
4. Prepare for freezing weather. Make sure there is space on top for water to expand.
5. Treat the water.
6. Make sure your lid is tight fitting.
7. Date your water.
8. Rotate stored water every 6 months
9. If you want to extend the life of your water, add ion treatment drops. Available at thereadystore.com/. Also see the Purifying section of this document.

NOTES

Puravai Water

Puravai Water- A premium water option with a 20-year shelf life. Purvai is the only emergency water company that is certified 100% bacteria free. Puravai has passed stringent Class II medical-grade testing which means its clean enough for drinking water and to wash wounds during an emergency, or can even be used in a hospital setting. Purvai's high density bottles can be dropped, scraped or bumped without being damaged.

RESOURCES: Amazon, emergencykits.com/, prepsos.com/

Purifying

Treating your water for long term storage

1. **Bleach/Chlorine (Sodium Hypochlorite)**
   To purify water use approximately ½ teaspoon of bleach per gallon of water. To clean the inside of a large container, use approximately 2 teaspoons of bleach per gallon of water. Use this solution ratio to scrub the inside of a large container and thoroughly rinse.

2. **Calcium Hypochlorite (pool shock)**
   This is an extremely concentrated form of bleach. One teaspoon can treat 600 gallons of city water. This should be purchased in tablets.

3. **Chlorine Dioxide**
   One of the most thorough ways to treat water for long-term storage. It helps insure water is free of harmful microbes. Because it is has a very high potency it should be purchased in tablets. Available through Amazon.

4. **Boiling Water**
   Water should be at a rolling boil for 1 minute. Boil for 3 minutes if over 6500 FT elevation.

5. **Copper and Silver**
   Adding copper or silver to the water an extend the life of your water for an additional 5 years. This can be as simple as adding coins. Biofilm Defender – Another way to extend your water by 5 years. This liquid has the natural properties of copper to prevent Bactria growth. Available at legacyfoodstorage.com

NOTES

Filtering Water

1. **Prefiltering Water**
   Remove particles from water you want to use by straining it through some type of cloth – a bandana, terry cloth towel, etc.

2. **Drip Filters**
   Run water you want to use through a commercial grade filter, like the Berkey or DuraFlo, to pull out harmful contaminants. For water from pools, dirty streams or rivers.

3. **Filter Straws and Water Bottles**

FIND IT: lifestraw.com, usaberkeyfilters.com/.com, prepsos.com

Capturing Water

1. Hot water tank
2. Bath tubs (WaterBob – waterbob.com)
3. Pool – Use a filter like the USAberkeyfilters.com
4. Rainwater harvesting. PreSOS.com has container ideas.

Reintroduce Oxygen into Water

Water that has been sitting in a tank for a long time can taste pretty bad. A simple fix is to pour the water back and forth between two cups.

NOTES

Using the Sun to Disinfect Water

SODIS method (Solar Disinfection)

1. Buy bottled water with the 1 recycle code. Look for the number 1 underneath the bottle.

2. To use SODIS, fill the plastic bottle most of the way with water that you want to disinfect. Tighten the lid. Shake the bottle to add oxygen to the water and then fill the bottle the rest of the way up. Remove label and lay the bottle on its side in direct sunlight for at least 6-10 hours before drinking, or if it's quite clouding, up to two days. You can speed up the process by placing the bottle on aluminum foil or reflective metal. Plastic bottles are preferred sense they allow more sunlight than glass bottles.

3. Limit the bottle to 4" or less in width. Make sure your bottle is clear with a limited number of bumps and bridges and no plastic water bottle coloring (like blue).

waterBOB™

emergency drinking water storage

- Fits any standard bathtub
- Holds up to 100 gallons of water
- Keeps water fresh for up to 16 weeks
- Easy to attach to your faucet and fill in minutes
- Includes a pump to dispense the water
- Constructed from FDA approved materials
- BPA Free

only $ +S&H

U.S. Patent 8,627,980

Never Be Without Water!

The waterBOB™ is very simple to use. Simply lay the bladder in your bathtub, attach the fill sock to the faucet and fill to capacity. A pump is included to easily dispense the water into jugs or pitchers.

Every household should have the waterBOB™ for temporary water storage during emergency situations and after disaster relief. Purchase one for your family and friends and for each bathroom in your home.

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Palm Harbor, FL 34683

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waterbob.com

waterBOB™

emergency drinking water storage

When an emergency arises and your power and water are out, storm surges and water main breaks can interrupt or even contaminate your fresh water supply.

When clean drinking water is unavailable it's more than just inconvenient, it can become life threatening. The waterBOB™ turns any standard bathtub into an emergency water reserve, storing up to 100 gallons of fresh drinking water for up to 4 weeks. Water stored in an open bathtub with dirt and soap film is unsafe.

With the waterBOB™ you'll have plenty of fresh water for your entire family for drinking, cooking, washing and flushing. Never wait in line again to buy expensive bottled water!

US Patent: 8,627,980
with other patents pending

Clean water is a top priority.
Be prepared with the waterBOB™!

waterBOB™
emergency drinking water storage

How to Get Emergency Drinking Water from a Water Heater

Co-authored by Patrick Johns

Last Updated: November 29, 2022

A typical home water heater can provide between 30 and 60 gallons of clean drinking water during a disaster. Hurricanes, floods, earthquakes, and other power outages may prevent you from having many things, but clean drinking water should not be one of them. To reclaim some clean drinking water from you water heater, and to tap your inner MacGyver, this is what you'll need to do.

Things You'll Need

- ☐ Flashlight to find the circuit breaker, plug, and valves if it is dark
- ☐ A short water hose to drain the water from the tank. The supply hose for a washing machine is perfect.
- ☐ A screwdriver or coin, to operate the drainage valve
- ☐ A shallow pan that fits under the valve to collect the water in. If you have a short hose you can use cooking pots, clean bucket, empty plastic gallon jugs, & water bottles.

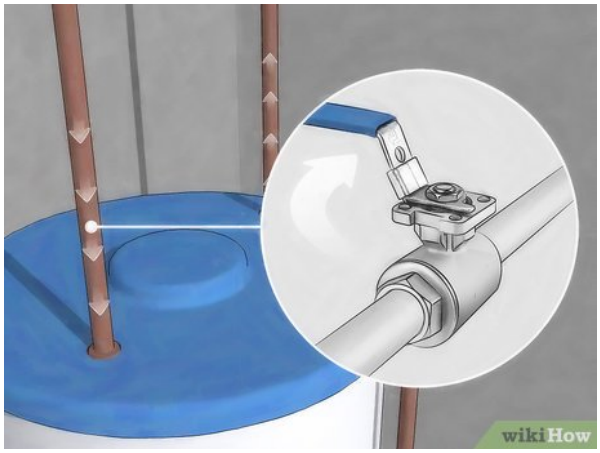
Method 1

Method 1 of 2:

Getting Drinking Water from Your Water Heater

1 **Turn off the electricity or gas to the water heater.** Turn off the circuit breaker for electric water heaters or close the gas valve for natural gas and propane types. If the power is still on when the tank is empty, your tank will almost certainly sustain significant damage. Most electric water heaters in residential applications are 208/240 volts, and supplied by a double-pole circuit breaker or two fuses rated at 30 amps.[1]

- Some gas valves have a thermostatic control knob facing forward. The "Off - Pilot - On" gas supply knob is located on the top, between the red interlock button the black "push-button" ignitor. Simply rotate the top knob from the "On" to the "Off" position to stop the flow of gas to the burner.
- Some electric-reliant heaters have double-pole 30 amp circuit breakers. Switch the circuit breaker from the "On" position to the "Off." Once off, there is no danger of damaging the heating elements.

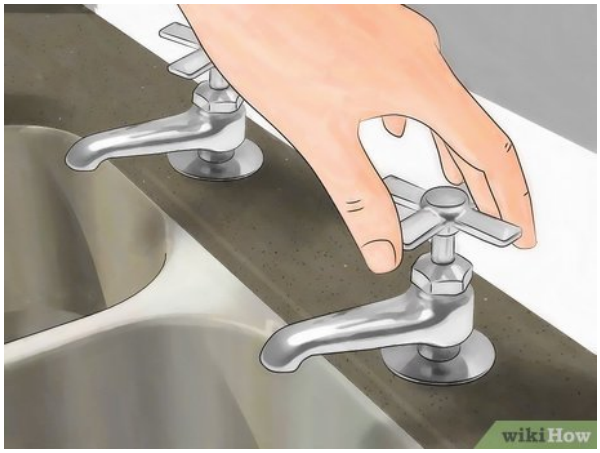


2 **Preserve the cleanliness of the water in the tank by closing the supply valve to the tank.** When water service is restored, the water department will be pumping water that could be contaminated. This will be fine to use for flushing toilets and for cooking, but not for drinking.[2]

- Determine whether you're dealing with a ball valve or a gate valve. Unlike a traditional gate valve's handle, which needs to be turned completely several times in order to shut off, a ball valve handle is rotated just a 1/4 turn between full on and off positions.
- If older, traditional gate valves were installed instead, bear in mind that the color of the handle does not guarantee an association with the temperature of the water in the pipe.

3 **Find the valve at the bottom of the tank for draining.** This is where your clean drinking water will come from. Many water heater valves have a connector for hooking up a garden hose to the drain valve. A short 3 foot (0.9 m) length of garden hose will make the collection of the water easier. A washing machine's supply hose is the perfect length and is available in many homes. Connect the hose and open the valve briefly to flush any debris that may have collected in the valve. Make sure the drain, hose, and container are clean before using them.[3]

- Threads are usually provided to connect an ordinary garden hose (or washer supply hose). Some gate valves do not have a traditional handle, but rather a slot at the end of the stem where a handle would normally attach. The slot allows for operation with a screwdriver, or coin. Work this valve gently, as these valves are seldom used more than once or twice per year under normal service conditions, and could be damaged if forced.



4 **Turn on the hot water from any tap in the house.** In order for water to be drained from the tank, you must allow air to get into it. This is easy to do by opening any hot water tap in the building such as the kitchen or bathroom sink. When either faucet is open, a sucking sound may be heard whenever water is drawn from the water heater's drain valve, and is normal.[4]

5 **Remove any sediment that has collected at the bottom of the water heater.** Water heaters are notorious for trapping sediments. The heavier-than-water sediment sinks and collects at the bottom of the tank because hot water is drawn from the top of the tank, rather than the bottom. If you have sediment in the drinking water let it stand for a period of time to let it settle to the bottom of container.

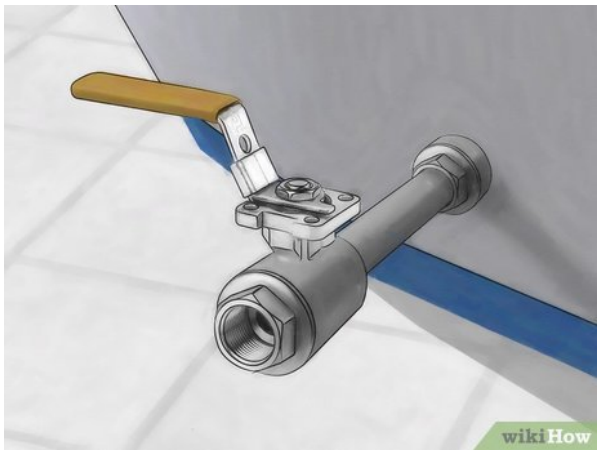
- Typical mineral sediment that has settled in the hot water is usually harmless, but if your heater has an aluminum anode, there may be a lot of jelly-like aluminum corrosion by-product on the tank bottom.
- Many people mistakenly believe that the tank is made of glass (or another inert substance). It is not. The inside of the tank will likely be *lined* with glass to prevent corrosion, since corrosion is the leading cause of water heater failure. There is no danger cooking or consuming water that has been contained in a water heater.

Method 2

Method 2 of 2:

Other Practical Considerations

1 **Although water from a water heater is considered safe to drink, consider purifying or filtering it before drinking.** Although it's probably fine to drink water from the heater during an emergency, it's best to be on the safe side.[5] You can purify water by boiling it or using iodine or bleach in very small quantities. You can filter water in an emergency by layering filtering agents on top of each other.



2 **Seriously consider replacing the original valve on the water heater with a ball-valve drain assembly.** Factory valves do not have a straight path and have small orifices. In hard-water areas, those can easily clog with sediment buildup and then no water will flow from the tank.

3 **In an emergency, consider other options for potable water.** If you can't, for whatever reason, access your water heater in an emergency, don't panic. You should have plenty of other options. Consider these to get at potable water:[6]

- Possible indoor sources of water:
  - Liquid from canned fruit and vegetables
  - Water from the toilet tank (**not** the toilet bowl), unless it has been chemically treated with toilet cleaners
  - Water from melted ice cubes
- Possible outdoor sources of water:
  - Water from a rainwater collection system.
  - Water from rivers, steams, springs, and other moving bodies of water
  - Water from ponds, dams, and lakes

Tips

- Before disaster hits, mark which valve is for the water supply. Run some hot water from any sink. Go back to the hot water tank and feel the two pipes attached to it. The supply line will be the colder one. Somehow mark the valve as "supply". This will be the one to close in an emergency so that contaminated water will not go into the tank as you drain the clean drinking water that is stored in it.
- It is a good idea to flush some water from the bottom of the tank on a quarterly basis. Sediment can collect on the bottom of the tank. Draining some water under pressure will clean out the sediment.
- A "tankless" water heater will not provide this source of drinking water. Tankless systems provide heated water from a coiled pipe located in a furnace. Water that is passed through the coiled pipe is rapidly heated and available for immediate use. There is no storage of the heated water - hence the term "tankless".

Show More Tips

Warnings

- Allow the tank to fill before restoring power to the water heater. Open the supply valve and wait for the water to run out of the open hot water faucet.
- Turn off the power supply to the tank first. Even if there is a power failure you must unplug, turn off the circuit breaker, or close the gas valve first.
- Be sure that the water has had time to cool before opening any valves on the water heater!
- If you live in an apartment contact the management first.
- Be sure the water inside the water heater is not soft water. It can contain excess sodium (the harder your water supply is, the more sodium is used to soften it), which is not recommended for those with certain health concerns (such as high blood pressure, cardiovascular or kidney disease). If you don't

have a water softener...you're good to use the water inside the heater like normal!

References

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About This Article

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This article was co-authored by Patrick Johns. Patrick Johns is a Home Improvement Specialist and the Owner of CatchAll Handyman Services. With more than 28 years of experience, he has worked on a variety of home improvement projects, such as carpentry, plumbing, and door and window installations in both commercial and residential properties. This article has been viewed 217,584 times.

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