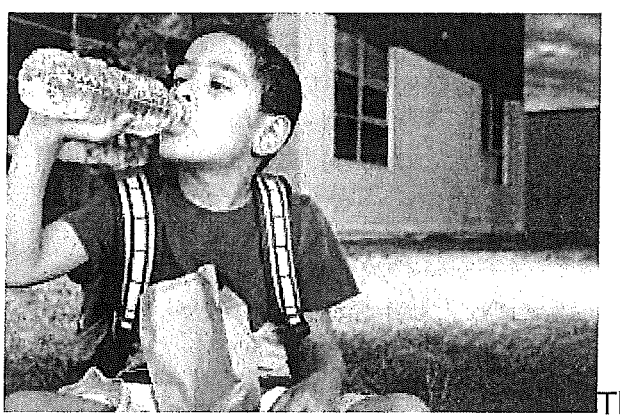
HOW MUCH WATER SHOULD YOU STORE?

This entry was posted on July 24, 2015 by Emergency Essentials.

When things get crazy out in that wide world in which we live – say, an earthquake or a tornado (or both!) come through town – bad things could happen that will disrupt the way you live. The grid could go down, and several water mains could break. It's not just natural disasters, either. Your local water supply could become contaminated from e.Coli or from a diesel spill, which means you could be without water for at least 48 hours – or longer – until they get the water clean again.

So now there you are, at home, without the running water you've come to rely on. Years ago, you wondered if this sort of thing could happen. You were reluctant at first, but eventually you began storing water, just in case something like this happened.

But did you store enough?



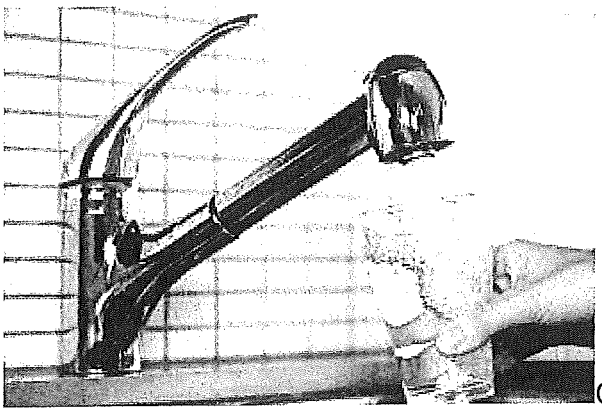
The general rule of thumb is to store one gallon of water per person per day, according to the Centers for Disease Control and Prevention. They also suggest that, in an emergency situation, you should drink two quarts (half a gallon) of water a day – more if you're in a hot climate, sick, pregnant, or a child. The other half gallon can then be used for hygiene (thanks in advance).

Of course, you should remember to store extra water for your pets (after all, they're part of the family, too). An additional gallon of water should be stored per day for each cat and dog. Now you know how much water per person (or animal) per day you need. Now the question is, how many days' worth of water should you have?

As a minimum, you should have three-day's worth of water. That means, if you have a family of four, you'll want at least 12 gallons of water stored up. That should keep you going during minor emergencies where you just have to wait a couple days for the city to fix whatever problem it's encountered.

Perhaps a safer minimum would be to have enough water to last for at least two weeks. This would enable you to survive much longer should a much more devastating disaster come through. And, going back to your family of four, this would mean you would need at least 56 gallons of water.
This is where you're beginning to ask, "Where on earth am I supposed to store all this water?" Wonderful question. Allow me to go ahead and answer that.

There are plenty of ways to store water. If you don't have much storage space, you can begin by getting a case or two of water from the store. Those are easy to keep under your bed and therefore won't take up any extra space. We also carry cases of boxed water as well as cases of emergency canned water. Empty pop bottles can be filled up to store water in, too, but be sure to thoroughly wash them first. This is also a good option if you're on a tight budget.
If you have a tad more room, you can add to your cases of water with some 5-gallon water jugs. Those fit nicely in many storage areas and are made of good, clean, water-safe material. In fact, it would be wise to have a couple of those around anyway, as they would make a great grab-and-go option should you have to bug out.
If you need to store a lot of water - and have the space to do so - then consider investing in a water barrel or two (or three, or four...). They can be small, such as the 15-gallon water barrel, or larger like the 55-gallon barrels. Of course, you could always have more water, and if you *do* have the room, then by all means, go big or go home! This 320-gallon water reserve should keep you going for quite some time. Remember, water is the most important resource you can have, so the more the merrier! If you do want a ton of water but are out of room, you can always commandeer your bathtub. With the AquaPod, you can store 65 gallons in a clean container that fills up your tub. Of course, bathing might be a wee bit difficult with that in there, but in an emergency, I'd rather have drinking water. Fortunately, it can store nicely under a bed or in a closet, so if you know a hurricane or other disaster is coming, bust that thing out and get filling!

 One more thing. If you're filling your own water containers, you'll want to make sure your water is clean before it sits on a shelf for months on end. If it's coming straight from your faucet and is treated by your city, then you should be fine. If you're getting your water from a well or other source, consider treating it with bleach before consuming.

To treat with bleach, add two drops of non-scented liquid household chlorine bleach to the water, and let it sit for 30 minutes before using. If you don't notice a slight chlorine odor to the water, add two more drops and let the water stand another 15 minutes (these steps can be found at ready.gov). Or, if you prefer a pre-prepared method, get yourself some water treatment solution to drop in your water storage.
If your water hasn't been commercially treated, you should rotate it every six months.

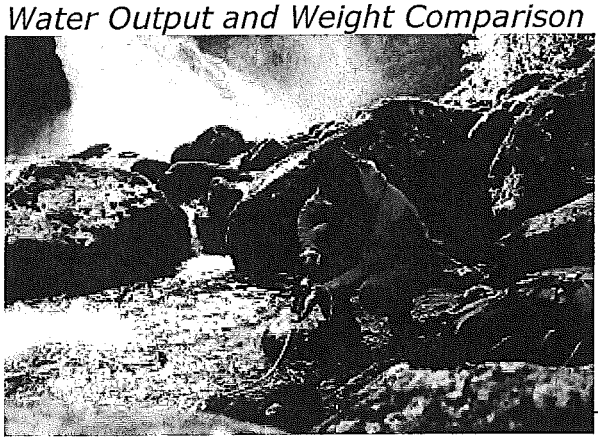
So there you have it. Now you know how much water you need, and have some different options for storing it long-term. Water is so very important during disasters and survival scenarios, so don't forget to get your emergency water storage in place.

PORTABLE WATER VS. STATIONARY WATER

This entry was posted on August 30, 2016 by Emergency Essentials.
When it comes to water storage, there are essentially two kinds: portable and stationary. Either you can transport it with you easily, or it's staying put. After all, just one gallon of water weighs 8.34 pounds, which means carrying around even five gallons would weigh you down quite a bit, not to mention 15 or 55 gallons. So what's the best method of emergency water preparation for you? Let's take a look at the differences and let you be the judge.

Portable Water
As you might expect from the classification of portable water, this is water that is easily carried should you need to bug out. As mentioned above, however, water is pretty heavy (8.34 pounds per gallon), so you certainly wouldn't want to be forced to carry it far. Even if you were, you would be hard pressed to carry more than five gallons.

Water Output and Weight Comparison

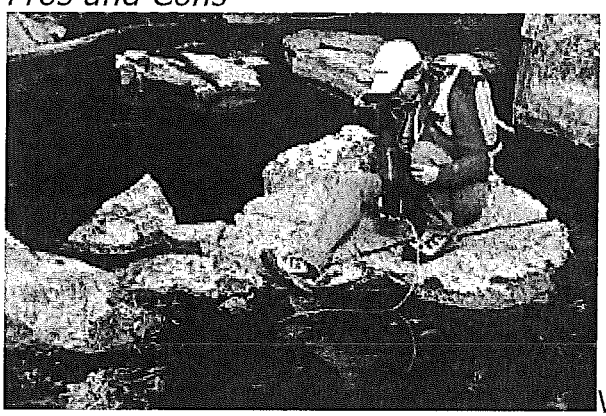


To counter the weight issue, you may look into a water filter. Water filters weigh much less than water and can produce anywhere from 300 to 13,000 gallons of clean water (depending on the filter) before needing a new replacement cartridge. Compare this water output with its weight and any water filter is the obvious option for portable water options. For example, the Katadyn Pocket Water Filterpumps out up to 13,000 gallons of drinkable water, and the filter itself only weighs 20 ounces. That's not bad at all, considering 13,000 gallons of water in barrels would end up weighing 116,220 pounds. That's over 58 tons of water!

Cost per Gallon

Price point is also something to consider when investing in water storage options. These water can cost more than a water barrel, but in the long run, they do produce more clean water. For example, the Katadyn Pocket water filter ends up costing just $0.02 a gallon. It doesn't get much cheaper than that!

Pros and Cons



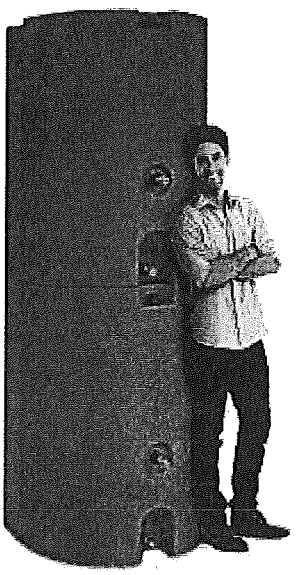
Water filters are small and lightweight, making them an ideal grab-and-go option in case of emergency. Because of their size, water filters are also a great portable water option for backpacking and camping. Also, water filters let you drink safely from most any water source. Lakes, rivers, and even puddles – any of which you wouldn't drink from normally – can become your new watering hole. This is especially important if you're in need of water but your municipal source has shut off for one of many reasons. And, as mentioned above, the cost per gallon can be very low.
Water filters are great tools to have on hand. However, they aren't always the most convenient. Instead of pouring your water into a bottle, filling it in mere seconds, it can take longer to produce that same amount of clean water directly from your filter. Some filters pump out up to a quart a minute. Still, considering it's cleaning the water as it fills your containers, that's still not too bad.

Also, water filters don't do much good if there's no water to filter. So if you're in an area where water (i.e. lakes, rivers, etc.) are sparse or drought stricken, filters may not be the most effective method of acquiring water. That being said, it's always a good backup.

Stationary Water

There aren't many situations where you'll be forced from your home. However, you may very well have to hunker down inside for one reason or another. Or, your municipal water supply could become contaminated (think Flint, Michigan), a water main could break, or some other cause that would make your water undrinkable. This is where water barrels come into play.

Water Capacity and Weight Comparison



There are many different sizes of water containers with which you can store water, ranging anywhere from two liter pop bottles to a 320 gallon water reserve. For those living in apartments or small homes, the smaller containers may be more ideal, since they take up less space. If you have the room, however, the water barrels and reserves make a great storage units. Holding much more water than just two liter bottles or five gallon jugs, water barrels can be your go-to source for emergency water.
The downside to large water containers is their weight. As mentioned previously, clean water weighs 8.34 pounds per gallon. One of the more common water barrels people use is the 55-gallon barrel. With 55 gallons of water, this would weigh over 450 pounds. Definitely not toting that around! But, if it's just sitting in a dark room in your basement, there should be nothing to worry about.

Pros and Cons

These large water containers let you have water when there is no other water to be found. You can't always make a hike to the nearby river, lake, or stream to fill up a small container from your water filter. By having water barrels in your home, you can ensure you'll always have water when you need it, because you never know when a water main might break, or some other inconvenience will take your tap water from you.

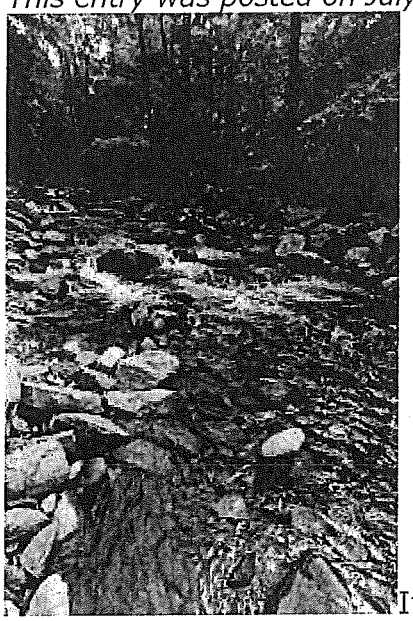
The most obvious con of water barrels and reserves is their size. However, that's one of the pros as well. They can be difficult to store with smaller living space, but if you have the room, just having a 15-gallon water barrel will give

you water for at least two weeks. That right there is one of the best kinds of insurance.

While it's true that there are pros and cons for both water filters and water containers, it is still essential to have a backup water supply. For most cases, water barrels and other containers are the primary source of water should the need arise, with a water filter being used as backup. There are plenty of options for both, however, so make sure you choose the options that best suit your own needs.

STORE, FILTER, PURIFY: 3 WAYS TO HAVE SAFE DRINKING WATER

This entry was posted on July 24, 2015 by Emergency Essentials.



If you're out in the wild and see a clear stream or river, you might think you've found safe drinking water. After all, you can see to the bottom and there aren't any weird-looking floaties. Before you take even a sip from that water source, you may want to treat it.

Actually, let me rephrase that. You *will* want to treat it.
Drinking water that hasn't been filtered or purified can have disastrous results. Diarrhea, fatigue, and vomiting are just a few of the negative side effects of drinking untreated water, not to mention diseases such as cholera that can crop up from it.

So yeah, you'll want to treat the water.

When it comes to securing clean, safe drinking water for you and your family, knowing the differences between filtering and purifying, as well as how and where to store said water, can help you make an educated decision as to which type of tool you will need. And that's exactly what we're going to talk about today.

Filters

 Get safe drinking water with Katadyn's Hiker Pro water filter

Water filters are like colanders. After you've finished boiling your pasta or pot stickers (or whatever it is you fancy for dinner), you dump it all into your colander. The water drains through the little holes in the strainer, while your food is unable to fit through, so it just stays behind. Water filters are the same way. They physically obstruct impurities in the water by not allowing them to pass through the filter. Filters are effective in eliminating bacteria, protozoa, and cysts, all of which can cause diseases. They may not, however filter out smaller floaties such as viruses.

One of the nice things about filters is that many are small and portable, so you can take them with you camping or hiking, or even to just keep in your emergency kit. Filters like the Katadyn Hiker Pro and the Katadyn Combi are favorites of many hikers, campers, and preppers alike.

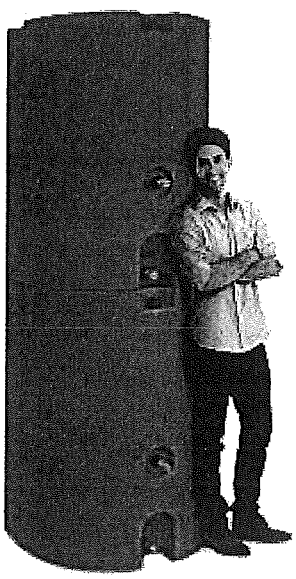
Purifiers

While filters get rid of many harmful substances, purifiers make water safe from the remaining impurities such as bacteria and viruses. Usually this is done by using chlorine or iodine. Purifiers will not, however, take out sediment and other larger, harmful things, such as heavy metals. These purification tablets are a popular choice among hikers, campers, preppers, and travelers, as they are small, easy to carry, and can be used to treat water wherever you are, especially during an emergency. Purification can be used after filtering your water for extra security in your water's safety.

Storing Water

Another option to ensure you have safe drinking water is to have a long-term water storage. Of course, that water needs to be clean when it was packaged. There are a few options to go about storing water.

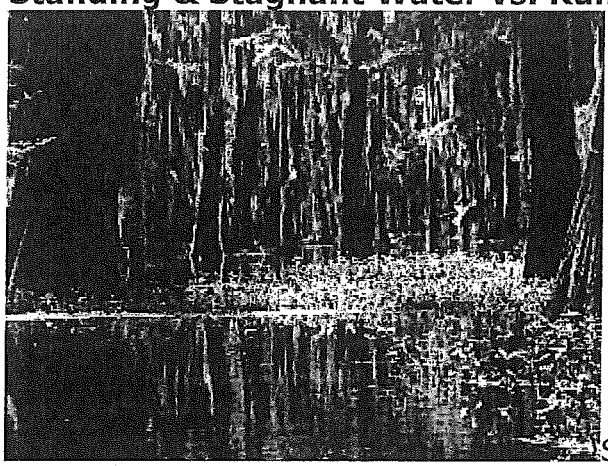
The first is to get pre-packaged water. You know it's clean and it will last quite some time. It's also easy to grab on your way out the door in the event of an emergency.
Another option is the do-it-yourself method. This is the favored way of many people. If you decided on the do-it-yourself method, make sure you use good, food-grade plastic, such as pop bottles. Don't use containers that once housed milk or juice, as the proteins and sugars can spoil your water.



The 320-gallon water reserve will keep you well-watered with safe drinking water

Purchasing water containers is a good option, because the quality will be good, and many (if not most) are blue in color, which helps prevent the sun from penetrating your water and helping little organisms grow. As some examples of these kinds of water containers, we carry 5-gallon jugs, 15-gallon, 30-gallon, and 55-gallon water barrels, and even a 160-gallon water reserve (the 160-gallon water reserves stack, by the way, to allow you to have a 320-gallon ultimate water reserve. That'll keep you going for a while!). While you may not have room for a 320-gallon behemoth, the smaller barrels and containers are great options to keep in your basement, garage, or wherever it is you store water. Just remember: keep them out of direct sunlight, and the cooler the storage temperature, the better!
When storing water that came from your faucet, it should be swapped out every six months. However, in order to make sure the tap water you've stored for a year or more is still safe to drink, Zane Satterfield (engineer scientist at West Virginia University), suggests adding four drops of plain, unscented bleach (per gallon of water) to your water container, let sit for 30 minutes, and you'll be good to go.

Standing & Stagnant Water vs. Running Water

 Standing water is a breeding ground for microorganisms.

If you find yourself hunting for water in the wild, running water is practically always a better option than standing or stagnant water. That's because water that isn't moving becomes a breeding ground for harmful microbes that can make us incredibly sick – or worse. Running water, such as in rivers and streams, make it more difficult for such dangerous life to settle down and thrive. Of course, that doesn't necessarily make running water safe to drink, either. There are still harmful microbes floating around in rivers and creeks and streams that you'll want to filter out.

As you can see, there are plenty of options for securing safe, clean drinking water. Choose the option that's best for you, but don't forget to have a backup plan, just in case. After all, if you have a 55-gallon water barrel and are forced to evacuate, you'll be happy you have your handy-dandy Katadyn Hiker water filter (or other water filter that suits you better). On the other hand, your favorite water filter won't be much good in case of a drought, but your 320-gallon water reserve will most certainly come in handy. And of course, a combination of resources is always a great option.

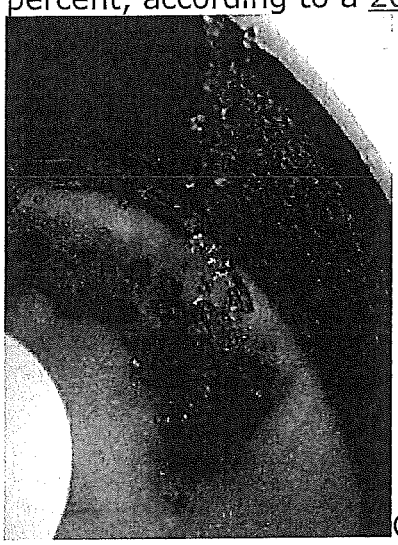
GREYWATER CAN SAVE WATER

This entry was posted on July 16, 2015 by Emergency Essentials.

Let's face it. Most of us can't do much of anything about where we get our municipal water.

However, we can do quite a bit about how much we use.

By recycling some of the water used in their homes, called greywater, some homeowners in north-central California cut their water use by an average of 26 percent, according to a 2013 study by Greywater Action.



Greywater is used water from bathroom sinks, tubs and washing machines. One writer described it as gently used. Greywater recycling systems collect at least some of this water for landscape irrigation or flushing the toilet.

Collection is as simple as sticking a bucket in the shower or as complex as the NEXtreater, an installed system that washes greywater, sends it through two filters and a UV light and stores it so it comes out looking and smelling like tap water.

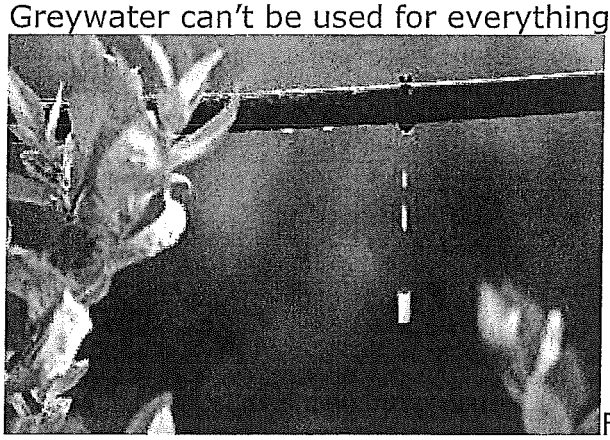
The three most common types of greywater collections systems are laundry-to-landscape, branched drain, and pumped, according to Greywater Action. Laundry-to-landscape is the easiest and least expensive. In fact, plans and directions are free online. It simply takes water from the washing machine and, using the washing machine pump, sends it outside. Branched drain also takes water from sinks and showers and does the same thing. Both go out to a mulch basin, basically a hole in the ground filled with wood chips, and out to plants.

A pump system takes greywater, stores it in a tank and pumps it to where you want it.

Greywater pipes are separate from pipes that go to sewage.

Greywater Action's study found that laundry-to-landscape systems can cost $250 to $2,000, depending on installation and permit costs (in some states, no permit is necessary). Branched drain systems cost from $400 to $3,000, pumped systems cost $600 to $3,000 and high-tech systems like the NEXtreater that filter and clean water can cost $5,000 to $10,000.
Homes can be retrofitted for greywater recycling, said Ralph Petroff, Executive chairman of Nexus eWater, the company that makes the NEXtreater.
"We think that, nationally, maybe 50 percent of the homes could do a full-house gray-water retrofit relatively inexpensively, and the other 50 percent would be either challenging or you could do a partial retrofit," he said in an interview with Water Deeply.

Greywater can't be used for everything, according to greywateraction.org.

 For example, the water shouldn't touch the edible parts of garden plants. Therefore, a drip irrigation system is necessary and greywater isn't for root crops like carrots.

Greywater should not pool or create runoff and, unless it's a high tech system, should be used the day it's produced so it doesn't start to stink. It shouldn't be touched or ingested. A system needs valves so greywater can't backwash into regular water.

Normal laundry detergent won't work with greywater either. It contains salts and boron that accumulate in soil. A story in Mother Earth News said boron levels in detergent should be below 0.1 mg per liter and sodium below 40 mg per liter, which is about as much as in some tap water. Detergent shouldn't contain bleach. Most bath products are OK because they're used in such small amounts, according to Mother Earth News.
Greywater codes differ between states. Look for them in the state's plumbing codes in its building department or in its environmental health department, Laura Allen wrote in "The Water Wise Home: How to Conserve, Capture, and Reuse Water in Your Home and Landscape."

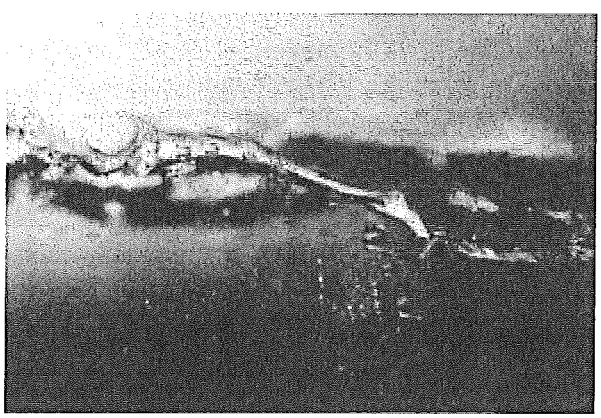
"Florida bans outdoor greywater use but allows it for flushing toilets. Georgia allows you to carry greywater in buckets to the plants, but you can't get a permit to build a simple greywater irrigation system. Washington State's code allows very small systems built without a permit (following performance guidelines), but all other systems have quite stringent requirements. Oregon requires an annual permit fee," Allen wrote.

Even though greywater can come with difficulty, using it could produce extraordinary water savings, according to waternow.com.
"If just 10 percent of California's 12 million+ households captured and reused greywater, the state could save 373,000 acre-feet annually. Just for comparison: The Hetch Hetchy Reservoir holds about 300,000 acre-feet. The proposed expansion of Shasta Reservoir would yield about 76,000 acre-feet annually," according to its California Graywater Factsheet.

WATER FILTRATION VS PURIFICATION: A BASIC HOW-TO

This entry was posted on May 14, 2013 by beprepared.

Next to air, water is what we need most. In a challenging situation, it is critical to be able to find, store or treat water. Our bodies are about 80% liquids. We lose water in three ways: perspiration, breathing and urination. Dehydration of 6 to 8% of the body's weight results in decreased body efficiency. In the summer heat, we lose about one gallon of water per day. Within three days of water depletion or loss, the body and organs can experience severe damage. Blood loses its density; heart attack and stroke possibilities increase; the kidneys begin to fail; the brain begins to hallucinate.



Not only is drinkable water essential to maintaining health, it is also important for cooking, personal hygiene, sanitation, cleaning wounds, sprouting seeds and reconstituting dehydrated foods including baby formula. Because water is so essential for survival, it is wise to have both a stored supply of drinking water and a way to acquire water for your continuing needs.

WATER CONTAMINANTS

In order to understand how to make water potable (suitable for drinking), we must first understand what things make water unsuitable for drinking. Most surface water (rivers, lakes, streams, reservoirs) contains some types of microorganisms (protozoa, bacteria, viruses) and/or pollutants (chemicals, foul odors, sewage, spilt fuel).

Microorganisms are living microscopic cells that, when consumed, can cause diseases such as dysentery, cholera, typhoid and hepatitis. Some microorganisms can even cause death for those with weak immune systems (children, elderly, sick).

Protozoa (the largest of all microorganisms) include such parasites as Giaridia Lamblia and cryptosporidium. Bacteria (medium-size microorganisms) include E. coli, Vibrio Cholerae, campylobacter, and salmonella, all of which are found in human and animal waste. The most common occurrences are in preparing and processing food at home and in the food industry (especially associated with not washing hands after using the bathroom). Viruses are the smallest of all the microorganisms. They include hepatitis A and E, Norwalk virus, rotavirus, poliovirus and echovirus.

Pollutants generally fall into two categories: man-made and natural. They include water contaminants such as minerals (salts) and heavy metals. Man-made pollutants are introduced into water sources by manufacturing plants, poor waste and disposal management, air pollution, and so on. Most often these pollutants are chemicals, fuels, sewage, or their by-products. These pollutants can cause water to taste foul, and they can cause physical ailments or death.

For a long-term emergency plan you need to have a method to make questionable water "potable" and safe. You should also have a method of replenishing your drinking water. There are three primary methods to convert "raw" undrinkable water into safe "potable" drinking water: purification, filtration, and stilling (solar). Each method has its advantages and disadvantages. NOTE: Start with the cleanest, salt-free, and least polluted water in your surrounding living area. Cold river water that is running is preferred over warm stationary water. Realize that no method is perfect and sometimes combining methods is the best solution.

METHOD 1--WATER PURIFICATION

There are three general ways to make surface water free from disease-causing microorganisms: A) add extreme heat to the water (boiling and distilling), B) add disinfectant (purification, chemical or silver), and C) add light (ultraviolet).

BOILING

Historically, boiling water has been the main way to disinfect water from microorganisms because it kills them all if done correctly. Recommendations are to boil water for at least three minutes to kill all viruses. Bacteria and protozoa are dead at the first bubbles. But there are drawbacks to boiling water. First, boiling can require a lot of fuel and cooking equipment. Second, you must consider the long cool-down period. Third, some of the water will evaporate before it is ready to drink. Fourth, the water will still have particulate substances in it, so you should use a clean handkerchief to filter it before drinking. Last, boiling water does not eliminate pollutants, poor taste or foul odors. In fact, boiling can give water a stale taste. A helpful hint to improve the taste is to transfer water from one container to another several times while boiling.

CHEMICAL

Two primary chemicals are used for purifying water: iodine and chlorine. These two chemicals are lightweight, low-cost and relatively easy to use.

Iodine has been found to be very effective against viruses, bacteria, and protozoa with the exception of cryptosporidium. Using iodine has some drawbacks. The colder the water you wish to disinfect, the more required time is needed for disinfecting. Because iodine is absorbed into dirt and debris, which is found in water, its purification dosage varies. Pregnant women and people with thyroid conditions should not drink water purified with iodine. Additionally, iodine is a short-term water-purification solution and should not be used regularly for more than three months. Iodine does not change the clarity of water but it does change its taste. Iodine is not necessarily a flavor that people enjoy. This taste can be improved by adding a sugar-based drink/juice mix. A good product is Potable Aqua™ Iodine Purification Tablets—Just add two tablets per liter of water.

Chlorine bleach can also be used to purify water. The Federal Emergency Management Agency (FEMA), the Clorox® Company and the Red Cross have recommended using Clorox Bleach to purify raw water. Their pamphlet states, "...use regular household bleach that contains 5.25% sodium hypochlorite. Do not use scented bleaches, color safe bleaches or bleaches with added cleaners." When using bleach to purify, "add 8 drops of bleach per gallon of water, stir and let stand for 30 minutes. If the water does not have a slight bleach odor, repeat the dosage and let stand another 15 minutes." The process of chlorination will cause dirt and debris to settle to the bottom of the water container and make the water visually clearer. There are some drawbacks to the chlorination method. If the household bleach is over six months old, it may not have enough potency to disinfect. You must be very careful if you attempt to use household bleach as a purifier. Chlorine is very poisonous and adding too much can cause illness, internal organ damage or even death. If you decide to use bleach, be sure to add it at the time you intend to use your water, NOT when you store it.

ULTRAVIOLET (UV)

Because ultraviolet light requires electricity, it is mainly used as a home filtration method for water; it is not typically practical otherwise. Water enters an ultraviolet-lighted chamber and swirls around a high output, low-pressure mercury vapor lamp, which emits powerful ultraviolet light. The energy components of microorganisms absorb the light energy, which disrupts their DNA preventing them from reproducing. UV lighting literally sterilizes the microorganisms rendering them ineffective in making one sick. UV lighting adds no chemicals to change water's taste. Beyond requiring electricity, UV methods demand some

form of filtration to remove dirt, debris, chemicals, tastes and odors. UV purification is considered a good "stage" of the purification process, but it is not complete by itself.

METHOD 2--WATER FILTRATION

Water filtration simply means to strain out the impurities from a water source. The larger the impurity particulate the easier it is to filter. The opposite is true also, the smaller the impurity particulate, the harder it is to remove. Thus, the size of the filter pore and the durability of the filtering element are important to the filter's longevity and ability to perform. Most filtering elements are made of ceramic, glass fiber, hard-block carbon, or materials that resemble compressed surgical paper.

Ceramic elements (most expensive, most durable, and maintainable) have the smallest pore size (0.1-0.5 microns) and are used by some of the leading portable water filtering companies in the world. Portable ceramic filters boast an impressive list of long-term users, such as: International Red Cross, World Health Organization, Armed Forces (USA, Germany, Portugal, Switzerland, and US Navy Seals), United Nations, and the FBI. Ceramic elements can filter only free floating particulates and microorganisms. They do not remove chemicals, poor tastes, odors, or pollutants.

Glass fiber elements and compressed surgical paper (mildly expensive, medium durability, and usually not cleanable) also have small pores (0.2-1.0 microns). Like the ceramic filter, they remove only particulates and microorganisms, but they do not help much with pollutants. These are good low-cost filtering elements for home, backpacking and scouting needs, but they are not good for long-term storage because they can develop mold and mildew and they are hard to clean.

Hard-block carbon elements (less expensive, brittle, and not cleanable) have a small, but still effective pore size (0.4-2.0 microns). They are also used as an absorption filter. The best contribution that carbon makes to filtering is its ability to reduce chemical quantities, poor taste, odors and many pollutants. Because carbon is only mildly effective in filtering out particulates and microorganisms, it is mostly used as a second or third stage filter in home and portable water use. It is seldom used as a stand-alone filtering unit.

METHOD 3--SOLAR STILL

Solar stills operate upon the "greenhouse effect." A clear plastic barrier (a plastic bag, ground cloth, or a plastic grocery sack) is placed over a "source," such as the ground, tree branches or other organic materials. The sun's (solar) energy passes through the barrier and heats the source material. Moisture from the source vaporizes, rises and then condenses on the underside of the plastic barrier. The moisture is then collected as

drinkable water. Solar stills are capable of distilling almost any tainted water, even seawater. Solar stills can condense drinkable water from substantially anything that contains moisture. The only source materials that it cannot distill drinkable water are materials that give off toxins, such as fluids with high amounts of chemicals, radiator fluids, and fuels.

Solar stills are easy to assemble and require only two essential components: 1) a container to catch the water, and 2) a large sheet of clear plastic (from 6′ x 6′ to 9′x 9′). Optional items include a long plastic drinking tube with end cap, a small shovel, and duct tape. Solar stills are inexpensive to make and most of their component parts can be purchased at a hardware store. However, solar stills should not be your only method for finding drinkable water during an emergency. This distilling process is extremely slow and only small amounts can be collected daily. A solar still is good when you have exhausted other methods.

PLAN AHEAD TO COMBINE METHODS

Combining methods can make water safe to drink and taste better. Become aware of your area's surrounding surface water and determine what methods work best to make that water safe to drink. Educate yourself to know what works, what doesn't, and how you could get more drinkable water if needed.

We hope this information has proved to be valuable. The time to store water is now. The water that we take for granted becomes absolutely critical in an emergency. Water is not an item you can afford to overlook in your preparedness program.