

Is Your Water Deadly? +3 Ways to Find Out...

In a perfect world, we could walk into our kitchen, turn on our faucet, trust the liquid flowing out of it and drink pure, clean water until our heart's content and our tummies are full.

Sadly, we don't live in a perfect world, though. Instead, we live in a world with constant distractions.

TV, internet and print brings us a new "breaking news" story seemingly every five minutes, and we trust federal state and local governments who reassure us that our ever increasing cases of cancer and other deadly diseases have little or nothing to do with what they've approved as "safe" for human consumption.

The truth is, **we genuinely cannot sit back** and casually expect safety in our drinking water unless we fully confirm its safety for ourselves.

Author Daisy Luther, the co-founder of Preppers University is a survival and prepper expert who knows that water is at the very top of the list of the most important survival topics around. Genuinely safe drinking water is of so much importance to her that it is the subject of her book [The Preppers Water Survival Guide](#).

In her book (that should be included in every Prepper's library) she discusses new horrors related to Flint Michigan's drinking water:

"Residents of the city have been drinking water that was presumably safe for the past year without knowing that it was actually contaminated with chemical byproducts, E. coli, Legionnaires' disease and lead. It appears that both [the EPA](#)

and [the governor of Michigan knew](#) the water was unsafe for quite some time, but no one said a word to warn the people of Flint.

To heap insult onto injury, [the water company has had the audacity to bill people for the poisoned water](#) and has even [sent out shut-off notices](#). So, do you really think you can trust the water flowing from your own taps? If Flint was the last straw for you, it's time to take matters into your own hands and test your drinking water for contaminants."

She reminds us that whether we get our drinking water from a private or municipal source, **the responsibility of checking the water for safety lies with us.**

Luther also gives us an example of the best water testing kits Amazon has made readily available for purchase: [The Watersafe Well Water Test Kit](#) was specifically designed to help you test quickly and easily for the 10 most common contaminants found in private wellwater, including: iron, copper, lead, bacteria, pesticides, nitrates, nitrites, chlorine, pH and hardness.

The one family of contaminants that you will test for yourself are pathogenic bacteria, which, if present, can cause infectious diseases.

Keep in mind, **testing the pH of your water is also crucial** to maintaining its safety. If your water's pH level is too low or too high, lead and copper corrosion can contaminate your household plumbing. The safest pH measure for drinking water should be no lower than 6.5 and no higher than 8.5.



TAP WATER:

What Are You Really Drinking?



CHLORINE

Most treatment plants contaminate tap water with small doses of chlorine to kill parasites and viruses found naturally in freshwater sources.



HARMFUL EFFECTS

LONG-TERM EXPOSURE TO CHLORINE BY-PRODUCTS CAN LEAD TO:

miscarriage or birth defects



ACTION PLAN

Straight Carbon (Filter)

City Softener

Reverse Osmosis



LEAD

Water facilities strip out nearly all traces of the heavy metal. However, with homes built before 1975, it is likely that the pipes contain lead and can leach into the water.



HARMFUL EFFECTS

EVEN A SMALL AMOUNT OF LEAD CAN TRIGGER:

irritability, anemia, and nerve damage



ACTION PLAN

Requires more elaborate testing procedures. If lead is present, then a whole house Reverse Osmosis is the right choice



BACTERIA

Gnarly bacteria like E. coli can make their way into water from human and animal waste that runs into reservoirs from broken pipes and sewage systems.



HARMFUL EFFECTS

THE LAST TIME YOU HAD A 24-HOUR STOMACH BUG WAS LIKELY CAUSED BY:

waterborne bacteria



ACTION PLAN

Use of chlorine injection or UV light designed to kill microorganisms



HORMONES & DRUG BY-PRODUCTS

Traces of prescribed or over-the-counter medicine comes out in your urine and can eventually find its way back into our tap water.



HARMFUL EFFECTS

THE PRESENCE OF MEDICINE MAY CONTRIBUTE TO THE GROWTH OF:

illnesses resistant to antibiotics, such as MRSA



ACTION PLAN

Filters are fairly useless against drug residuals. So for now, just sit tight: The Environmental Protection Agency is assessing what regulatory action to take.

Here, in an excerpt from Chapter 9 of Luther's book, she

discusses the importance of testing your own water, how to test your own water for safety, and what specifically to test for:

"...We've already discussed the infinite possibilities for contaminants in water sources. Bacteria, viruses, parasites, nitrate, PPCPs, and toxic chemicals could be lurking beneath the surface of virtually any water source you can think of. It is safest to assume at least some of those pollutants and impurities are present and plan accordingly."

"...Even if you are getting presumably safe "city water" from a municipal supply, you should be provided with an annual report that explains what kind of testing was done on your water and what was found, if anything. Of course, if you aren't the trusting type, you can still test that water yourself as an added precaution."

If you have a well or are collecting water from a source that is not monitored and regulated, you will need to take responsibility for testing and purifying your water yourself."

At a bare minimum, you should test your water once a year for coliform bacteria and nitrates because of the serious health risks associated with those contaminants.

It is best to test for nitrate during the spring or summer following a rainy period, if possible.

If someone in your household becomes pregnant, test your water supply for nitrate in early months of the pregnancy. Test it again before bringing a newborn home, and again during the first six months of the baby's life. Remember, in the body, nitrate is converted into nitrite, which can cause brain damage and death in infants because it reduces the amount of oxygen in the baby's blood. .

Test for total dissolved solids and pH every one to three years. These tests will provide you with an overall picture of

the health of your water. The total dissolved solids content of drinking water should be below 500 milligrams per liter (mg/L). This value should not change much from test to test. If it does, further testing is necessary because it is likely that pollution has occurred.

Lead

Lead is a naturally-occurring element that can be found in air, soil, and water. Lead from natural sources is present in tap water to some extent, but analysis of both surface and groundwater suggests that lead concentration is generally fairly low. The main source of lead in drinking water is (old) lead piping and lead-combining solders. Homes that were built before 1986 are more likely to have pipes made of lead, but even “lead-free” piping can contain up to 8 percent lead. If you don’t have lead pipes in your house, your water probably doesn’t contain any; it is rarely found in source water.

Even though it is unlikely that your water supply contains lead (unless you have lead pipes), testing for it is a good idea.

Lead can damage various systems of the body, including the nervous and reproductive systems, the kidneys, and the bones. It also can cause high blood pressure and anemia and can interfere with the body’s use of calcium and vitamin D. High amounts of lead in the blood of children can cause learning disabilities, behavioral problems, and mental retardation, all of which may be irreversible. At very high levels, lead can cause convulsions, coma, and death.[2]

If your water source tests positive for lead, you’ll need to use a filtration system that is certified for lead removal or find a safer drinking water source.

Arsenic

Something else you don't want in your water supply is arsenic. This naturally-occurring element is found in rocks, soil, water, air, plants, and animals. Natural events like volcanic activity, forest fires, and erosion of rocks can cause it to be actively released into the environment. Arsenic is also used in agricultural and industrial practices and is used in some fertilizers, paints, dyes, metals, drugs, and soaps. It is also used as a wood preservative and can be released by mining and coal burning.

Arsenic is highly toxic and can affect nearly every organ system in the body.

There are short- and long-term health effects associated with arsenic exposure. Some effects appear within hours or days of exposure, and others develop over many years.

Long-term exposure to arsenic through drinking contaminated water can cause chronic arsenic poisoning, leading to life-long problems. This most commonly affects the skin in the form of lesions, discolorations, thickening, and cancer. Cancer of the bladder, lungs, prostate, kidneys, nasal passages, and liver are other possible devastating diseases arsenic can cause.

Arsenic can also affect the cardiovascular, pulmonary, immunological, neurological (with symptoms including numbness and partial paralysis), reproductive, and endocrine systems.

Severe arsenic poisoning can cause vomiting, abdominal pain, and diarrhea. These symptoms are followed by numbness and tingling of the extremities, muscle cramping, and, in extreme cases, death.[3]

Water that contains high amounts of arsenic should not be used for drinking, cooking, or watering crops. Plants can take up

arsenic through their roots, causing the product of the plant to contain high levels of arsenic, which is then passed on to the person or animal who consumes it. Rice has been found to have particularly high levels of arsenic, so much so that many holistic nutrition experts recommend eating rice infrequently or not at all.

Groundwater sources tend to have higher levels of arsenic than surface water sources. That's because the demand on groundwater is usually higher. It is more commonly used in municipal systems and private wells. This heavy use can cause water levels to drop, allowing arsenic to be released from rock formations.

Certain regions of the United States tend to have higher levels of arsenic in their water supplies. The EPA's standard is 10 parts per billion (ppb), and some western states have levels that are higher than that. Some parts of the Midwest and New England have levels that high, or close to it.[4]

Because of this toxic element's prevalence in the environment, testing your water source for arsenic contamination is a good idea. Most home-testing kits cost less than \$15, and you'll see your results within minutes.

Radon

Radon is a gas that comes from the natural radioactive breakdown of uranium in the ground. It has no color, odor, or taste. Radon can dissolve and accumulate in groundwater, which means it can be found in water from wells. Not all groundwater contains radon, but drinking water that contains it can cause internal organ cancers like stomach cancer.

You can buy a simple kit to test your water source for radon, or you can contact your state radon office for assistance.

Fluoride

Fluoride is an ionic compound that contains a reactive element called fluorine. It is naturally found in many rocks

Because it is believed to protect teeth from decay, it has been added to public water supplies since the 1940s. By 1960, water fluoridation had become widely used in the US, reaching about 50 million people never, ever consumes municipal water if we are in an area that deliberately adds the compound to the public supply.

The incidence of tooth decay has declined in the United States since fluoridation began; however, it has also declined in other countries that do not fluoridate. Many argue the reduction in tooth decay is because of more accessible dental care and better dental hygiene, not water fluoridation.

Backing them up is research conducted within the last 15 years that has shown that fluoride primarily works topically, such as when it is applied to the teeth in toothpaste that contains fluoride.

Water fluoridation has been the subject of much controversy, and for good reason. Studies have shown that fluoride intake may cause a startling array of serious health problems, including increased risk of bone fractures, thyroid disorders, impaired immune system functioning, and cardiovascular disease. There is also some evidence that fluoride can cause osteosarcoma, a form of bone cancer. Researchers suspect a connection to cancer because half of ingested fluoride is deposited in bones, and fluoride stimulates growth in the end of bones, where osteosarcoma occurs.[6]

When Should You Test Your Water?

Even if your water is crystal-clear, odorless, and tastes

great, you still should test it for contaminants and pollutants on a regular basis. But sometimes there are signs that your water supply may need to be tested even more frequently. Here are some of those signs, and what they might mean.

Taste and Odor

- **Strong chlorine taste or smell.** Generally this occurs when the water is treated at a water treatment plant to disinfect it and kill off bacteria and other harmful microorganisms.
- **Metallic taste.** Some water systems have a high mineral concentration, resulting in a salty or soda-like taste. In the case of iron and manganese, a strong metallic taste is noticeable.
- **Rotten egg smell.** This is usually a result of decaying organic material underground. As water flows through these areas, hydrogen sulfide gas is picked up. When the water reaches the surface or comes out of your faucet, the gas is released into the air. Hydrogen sulfide gas is what produces the rotten egg smell. In large enough quantities, it is toxic to aquarium fish. You'll be able to taste as little as 0.5 parts per million (ppm) in your water. If your water smells like rotten eggs, it also may indicate the presence of bacteria.
- **Musty or other unnatural or unusual smells.** These smells are normally a result of organic matter or even some pesticides in the water supply. Even very low amounts can make your water smell funny.
- **Turpentine taste or odor.** This smell can be a result of MTBE contamination in your water. MTBE (methyl tertiary butyl ether) is a flammable, colorless liquid fuel oxygenate chemical that dissolves easily in water. MTBE is added to gasoline to increase its oxygen content to lower carbon

monoxide and other air pollutants that are emitted from vehicles. While MTBE may help reduce air pollutants, it certainly isn't good for your drinking water. It spreads quickly through water and can easily contaminate it. This includes private drinking water systems like wells. Even a small amount will make your water undrinkable. According to the EPA, MTBE has not been used in significant quantities in gasoline since 2005. But groundwater in some areas of the US might still contain MTBE. It can enter water sources through leaking underground or aboveground gas storage tanks and pipelines, as well as from gasoline spills. It isn't known if MTBE causes health problems in humans, so it is best not to drink water that contains it.

As survivalists and preppers, we know that the value of healthy, safe water for drinking and bathing can not be stressed enough. We know that the human body can survive for up to three weeks without food, but we'll only live up to three days without water!



**Get Your Own Amazing Device
That Turns Air Into Water**

[Watch Video »](#)