



Water Works

Information for Older Adults and Family Members Who Take Care of Older Adults

We all need water to live. We use it for drinking, cooking, bathing, cleaning, and growing crops.

Some water is not safe. It is polluted. It has harmful matter in it that can make you sick.

Harmful matter can be in any water. It can be in your drinking water. It can be in the water where you swim. It can be in water from sewers that overflow. You can protect your health by learning how to avoid unsafe water.

Tap Water in the Home:

Most drinking water is safe. But sometimes harmful matter gets in it and makes it unsafe to use. This section describes some of the ways your tap water in your house can become polluted.

Lead

Lead in your water is bad news. As time goes by, lead builds up in your bones. It can cause pain in the muscles and joints. It can damage your brain and your nerves. Some plumbing systems have lead in the pipes. Old pipes can wear down and let lead into the water.

Microbes

Microbes are bacteria and other unseen matter that are in your drinking water. Most microbes will not harm you. But some microbes carry disease and can make you very sick. Salmonella and E. Coli are examples of harmful microbes

that can cause serious illness. Some 211 million cases of illness caused by harmful microbes occur in the U.S. each year¹.

Arsenic:

If your water comes from a public water system, it is tested for arsenic. EPA (the Environmental Protection Agency) sets the standard for the levels of arsenic allowed in the water. However, the standard does not cover private wells or very small water systems. Does your drinking water come from a well or from a very small system? If so, you may want to test it for arsenic.

Radon:

Radon gas is the second leading cause of lung cancer in the United States. You can't see or smell Radon. It can be in the rocks, in the soil, and in water. There are many ways that Radon can get into the home. One way is through well water. When you shower with well water, Radon can get into the air. But Radon can be in your home no matter what water supply you have. It's a good idea to have your home tested for Radon.

How Can I Avoid Unsafe Water?

Be aware of any announcement by your local health department about a water problem. Follow the advice carefully. Find out if there are any ongoing problems with your water.

Are you an older adult or do you have an ongoing health problem? If so, take extra care. You may be less able to fight off disease than others. And you may get sick from polluted water more easily.

¹ Mead PS, Slutsker L, Dietz V, McCaig LF, Bresee JS, Shapiro C, Griffin PM, Tauxe RV. Food-Related Illness and Death in the United States. *Emerging Infectious Diseases*, 1999; 5(5):607-625

Dehydration

Older adults can suffer from not drinking enough water. This is called dehydration. The feeling of being thirsty declines with age. You may not feel the urge to drink as often as when you were younger. You may take medicines that reduce the water in your body. You may have a physical problem that makes it hard to drink. Diarrhea and other health problems may rob your body of needed water.

Signs of dehydration include:

- Dry or sticky mouth
- Low or no urine output (urine without much water in it appears dark yellow)
- Lack of tear drops
- Sunken eyes
- Tired all the time

Your body needs a lot of water. Dehydration is life threatening. If you don't drink enough water because you don't like the taste of your tap water:

- Filter the water
- Get bottled water

But don't ignore the dangers of dehydration. Give your body the water it needs to keep alive and healthy.

Here are some safety steps you can take:

1. Learn About Your Water:

If your water comes from a public water system, it must meet EPA standards. Call your water company. Ask if there are any problems with your water supply. Ask for a copy of the annual water quality report. If you live in an apartment, ask the manager to post the water quality report.

If your water comes from a well, it is not covered by EPA Standards. You must get your well water tested at least once each year. It's the only way to find out if your well water is safe to use.

2. Follow public notices about drinking water:

Something may happen to make your drinking water in your house unsafe. Your water company will let people know about this by TV, radio, newspaper, or other means. The notice will tell you what to do to be safe. Sometimes you will have to boil the water for one minute. Sometimes you will have to use bottled water for a time. To stay safe, follow all the directions carefully.

3. See if you should test for lead:

Call your local health department or water company. Ask if you need to test your water for lead. If so, do not boil the water. Boiling will not get rid of the lead. It will make the problem worse. As the water evaporates, the amount of lead in the boiled water will increase. If you think your plumbing system might have lead in it, don't use the hot water. Use only cold water for drinking and cooking. Run the cold water until it becomes as cold as it can get.

To find out more, call the National Lead Information Center at (800) 424-LEAD.

4. Test for Radon in the Air of

Your Home: There are many low-cost, "do-it-yourself" radon test kits that you can buy. You can get them by mail or at the hardware store. You can also pay a professional to test your home for radon. If you have high levels of radon, it may be coming from the water. If your water comes from a public water supply, contact your water company. If you have radon in your water from a private well, call EPA's Drinking Water Hotline at (800) 426-4791.

How Can I Avoid Water That Is Unsafe for Swimming?

Most beaches are safe for swimming. But not all beaches are safe all the time. Sometimes beach water contains harmful matter that can cause problems. Swimming in it can give you a sore throat, diarrhea, or other illnesses.

- **Beach Closures:** Look for warning signs posted at the beach.

When the water is unsafe, agencies will close the beach or post warning signs. After storms levels of harmful matter in the water are most likely to be high.

How Can I Avoid Health Problems from Leaks and Floods?

Keep water from seeping indoors by making needed home repairs. Moisture and water can cause mold to grow indoors. And mold can give some people skin rash, runny nose, and even breathing problems.

A sewer backflow can bring polluted water into your home. This can happen if a water drainage pipe to your sewer or septic system is blocked. Sewage backflow often occurs during heavy rains that cause flooding.

- **Inspect Your Home for Leaks:** Establish a regular program to inspect your home for leaks. Check the bathrooms, the laundry, and around the windows and doors. Do not neglect the roof gutters and eaves. Fix all leaks as soon as possible.
- **Get Rid of Mold:** Scrub mold off hard surfaces with soap and water or with a cleaner designed to kill mold. Dry the area completely. Make sure the water cannot return to that surface.
- **After a Flood, Clean Damaged Areas:** Standing water and wet material are a health risk. They can breed disease. Remove all standing water and wet material. Dry out your home. Clean and disinfect the damaged area. You may need to replace rugs, curtains, and furniture if sewage came into your home.

How Can I Be Sure My Well Water Is Safe?

Well water users can take these safety steps:

1. Become Aware of any Local Problems

Talk with a local expert. This could be--

- your local health department
- an agricultural extension agent
- a nearby public water system
- a water expert at your local university

Ask them about problems with well water in your area.

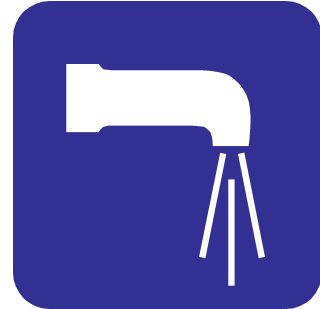
2. Test Your Well Water Every Year

A well is a private source of water. No one will inspect your well water. You have to get it tested yourself. Often you cannot see or smell harmful

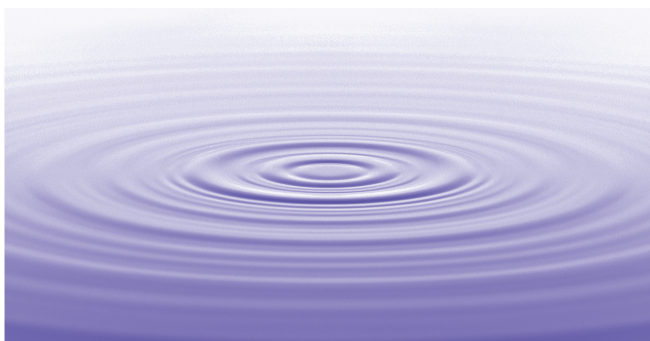
What Should I Do If I Can't Drink My Water?

Sometimes there is a problem with treating the water. When this happens, you may not be able to drink your water for a short time.

Do you have special health needs? Do you live in an area with low water quality? In either case, you may want to switch to another water source for the long term.



- **Follow Public Notices on Drinking Water:** You will be notified on TV, radio or in the newspaper if there is a problem with your water. The notice will tell you what to do during this time. It may tell you to boil the water or to use bottled water. Boiling your water for one minute will usually kill microbes. Boiling will not take out lead or chemicals.
- **Drink Bottled Water:** Some companies sell or lease a water service. They provide water dispensers and deliver large bottles of water to homes and businesses. Some brands of bottled water are better than others. If you are an older adult or if you have health problems, you may want to get bottled water that is purified. Read bottled water labels. Look for special treatment such as filtration or distillation. For information on the standards for bottled water, check with NSF International: (http://www.nsf.org/consumer/bottled_water/ or call 877-8-NSF-HELP).
- **Install a Home Treatment System:** If you have a long-term water problem, home treatment may be necessary. A home treatment system can include filters of different kinds. If radon is a problem, home treatment may be a solution.



matter that is in the water. The well water must be tested by an expert. Get it tested every year.

Also test the water any time there may be a problem:

- Test it if someone in your family is sick and you don't know why.
- Test it if your neighbors find something harmful in their water.
- Test it if you see a change in your water. (The water isn't clear or there is a change in its taste, odor, or color).
- Test it if there is a spill of chemicals or fuels into or near your well.
- Test it if you replace or repair any part of your well system.

3. Prevent Problems

- Keep things that can poison the water away from your well. Keep materials such as fertilizers, pesticides and fuels far away from your well.
- Take care when working or mowing grass around your well.
- Do not put paints, thinners, waste oils, poisons or other unsafe materials in your septic system.
- Find out how often you should pump and inspect your septic system. Ask your local health department.

How Can I Learn More about Aging and Health?

EPA's Aging Initiative is working to protect older adults from health risks in the environment. For more information, go to www.epa.gov/aging.

How Can I Get More Information?

These EPA websites can help you solve your water problems:

Water on Tap: What You Need to Know

www.epa.gov/safewater/wot/index.html

Arsenic in Drinking Water

www.epa.gov/safewater/arsenic.html

Beaches

www.epa.gov/beaches

Consumer's Guide to Radon Protection

www.epa.gov/radon/pubs/consguid.html#howenters

Emergency Disinfection of Drinking Water

www.epa.gov/safewater/faq/emerg.html

Floods

www.epa.gov/iaq/pubs/flood.html

Guidance for people with Severely Weakened Immune Systems

www.epa.gov/safewater/crypto.html

Information for Private Well Owners

www.epa.gov/safewater/privatewells/whatdo.html

Mold Resources

www.epa.gov/mold/moldresources.html

Safe Drinking Water

www.epa.gov/safewater/dwinfo/index.html



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