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EPA

Home Water Testing

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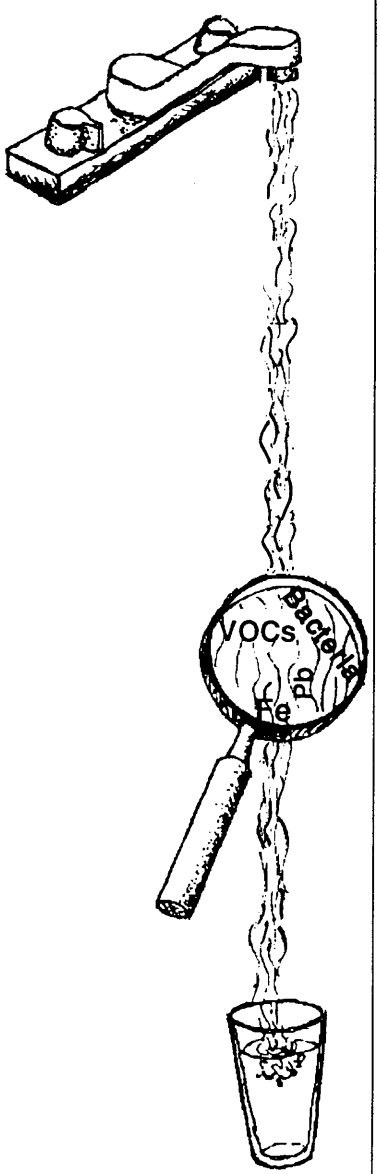

Should You Have Your Water Tested?

The question of whether or not to have your water tested is a serious one that concerns the health of you and your family. In addition to illness, a variety of less serious problems such as taste, color, odor and staining of clothes or fixtures are symptoms of water quality problems.

Not everyone needs to test their water and it is impractical and unnecessary to test for all possible contaminants. This fact sheet provides a few guidelines for deciding whether or not to have your water tested, and if so, what tests would be appropriate for your situation.

Public Versus Individual Water Supplies

If you obtain drinking water from your own well, you alone are responsible for assuring that it is safe. For this reason, routine testing for a few of the most common contaminants is highly recommended. Even if you currently have a safe, pure water supply, regular testing can be valuable because it establishes a record of water quality. This record can be helpful in solving any future problems and in obtaining compensation if someone damages your water supply.

If your water comes from a public or municipal water system, your water is regularly tested for contaminants regulated by Federal and state standards, such as pathogens, radioactive elements and certain toxic chemicals. However, some municipal or rural water supply districts do not have enough money to hire trained specialists or to immediately comply with expanding government requirements. In addition, bacteria may grow in your plumbing, or corrosive water or deteriorating pipes in the house may add contaminants to municipal drinking water after it enters your home.

Individual Water Supplies

Routine Tests. The testing frequencies in this fact sheet are general guidelines. Test more often if you suspect there is a problem with the quality of your drinking water. If any tests give positive results, contact either the state health department or call the Safe Drinking Water Hotline for more information.

- Once each year test for coliform bacteria, nitrate, pH and total dissolved solids (TDS). It is best to test for these contaminants during the spring or summer following a rainy period. These tests should also be conducted after repairing or replacing an old well or pipes, and after installing a new well or pump.
- Every 3 years test for sulfate, chloride, iron, manganese, hardness and corrosion index.
- If your home plumbing contains lead materials, brass fittings or lead solder, test your water as soon as possible. Congress has banned the use of lead in new or replacement plumbing materials.

For More Information

Safe Drinking Water Hotline:

1-800-426-4791

- If a new baby is expected in the household it is a good idea to test for nitrate in the early months of a pregnancy, before bringing an infant home, and again during the first 6 months of the baby's life.

Special Situations. Where you live, or what you are living next to, can sometimes affect the quality of your well water. If someone in your family becomes ill, or the taste, odor or color of your water changes, your water supply may be contaminated. Table 1 lists other situations that deserve attention.

When Should You Test Your Water?

Municipal water supply systems perform regular tests and will provide water quality reports upon request. If these reports do not meet your need, or if you have an individual supply, you should have your water tested if any of the situations in Table 1 arise.

If you are considering buying a home treatment device for protection against any of these contaminants, first have your water tested by an independent certified laboratory. Also, if you are buying a home and wish to assess the safety and quality of the existing water supply, test for coliform bacteria, nitrate, lead, radon, iron, hardness, pH, sulfate, total dissolved solids (TDS), corrosion index and other parameters depending on proximity to potential sources of contamination.

How Should You Collect Test Samples?

Most testing laboratories or services supply their own sample containers. Use the containers provided and carefully follow the instructions given for collecting, preserving and handling water samples. Samples for coliform bacteria testing must be collected using sterile containers and under sterile conditions. Some procedures require that water runs from an inside tap for several minutes before filling the sample containers. Laboratories may sometimes send a trained technician to collect the sample or to analyze the sample directly in your home. Ask if this service is available since you may obtain better samples and therefore more reliable test results.

Keep a record of all your water test results as a reference for future testing. By comparing recent test results with original results, you may discover that a change in treatment is needed or that a treatment device is not working as it should.

Where Can You Have Your Water Tested?

- Private testing laboratories are listed in the telephone book; call the state lab certification officer to make sure they are certified by the state health department. The Safe Drinking Water Hotline can help you contact the certification officer.
- County and state health laboratories, departments of health, and local hospital and university laboratories.
- Water treatment companies and plumbing supply stores may offer certain tests in your home for free.
- Local engineering firms.

Table 1.
When To Test Your Water

Conditions or nearby activities	Recommended Test
Recurrent gastro-intestinal illness:	coliform bacteria
Household plumbing contains lead:	pH, lead, copper.
Radon in indoor air or region is radon rich	Radon
Scaly residues, soaps don't lather:	hardness
Water softener needed to treat hardness:	manganese, iron (before purchase)
Stained plumbing fixtures, laundry:	iron, copper, manganese.
Objectionable taste or smell:	hydrogen sulfide, corrosion, metals
Water appears cloudy, frothy or colored:	color, detergents
Corrosion of pipes, plumbing	corrosion, pH, lead
Rapid wear of water treatment equipment	pH, corrosion
Nearby areas of intensive agriculture:	nitrate, pesticides, coliform bacteria
Coal or other mining operation nearby:	metals, pH, corrosion
Gas drilling operation nearby:	chloride, sodium, barium, strontium.
Odor of gasoline or fuel oil, and near gas station or buried fuel tanks:	volatile organic compounds (VOC's).
Dump, junkyard, landfill, factory or dry-cleaning operation nearby:	VOCs, TDS, pH, sulfate, chloride, metals.
Salty taste and seawater, or a heavily salted roadway nearby:	chloride, TDS, sodium.