

## Flush standing water from pipes to reduce lead levels

Well water in Illinois rarely contains detectable levels of lead. However, lead can enter drinking water through decay of plumbing materials. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures. Exposure to lead at levels above health standards can impair a child's development, as well as cause a variety of other adverse health effects in both children and adults.

To minimize your exposure to lead in drinking water, never use water from the hot water tap for drinking or cooking. Hot water is likely to contain higher levels of lead. When using the cold water tap, **RUN THE WATER UNTIL IT GETS COLD** before using it for drinking or cooking. This will flush out most of the lead that may have accumulated in the plumbing. The only way to be sure of the amount of lead in your household water is to have it tested by a certified laboratory.

## Who can I contact to have my well water tested?

Coliform bacteria and nitrate should be tested on a yearly basis and can be done by most local health departments. You can find an alphabetical listing of local health departments at [www.idph.state.il.us/local/alpha.htm](http://www.idph.state.il.us/local/alpha.htm), or by county on the online regional map at [www.idph.state.il.us/local/map.htm](http://www.idph.state.il.us/local/map.htm). You can also check the phone book for your local health department. Certified labs also test well water and may be your only option for certain chemicals. A list of certified labs is available at [www.illinoiswellwater.org](http://www.illinoiswellwater.org).

## For more information

For more information about water quality testing for private wells, including information about contacting certified labs in Illinois, contact your local health department, the Illinois Department of Public Health at 217-782-5830, the Illinois Environmental Protection Agency at 888-372-1996, or go to: [www.illinoiswellwater.org](http://www.illinoiswellwater.org).



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## Testing Private Well Water



*"Don't Just Wish for Safe Water  
– Test for It!"*



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## What you need to know

Properly constructed and maintained water wells can provide many years of trouble-free service, but wells can eventually deteriorate or become damaged and allow surface contaminants to enter the water. In addition, some groundwater can contain one or more chemical substances at levels above health-based standards. In some cases, contamination of the water can be detected by sight, taste or smell; however, many of the most serious problems can only be detected through laboratory testing of the water.

Community public water systems are tested regularly under the supervision of the Illinois Environmental Protection Agency for a variety of contaminants. However, [if you have a private well, regular testing is your responsibility](#). Here are some recommendations that you can follow to help ensure that your well water is safe.

## Test your well water at least once a year for bacteria

Water that has become contaminated by human or animal waste can transmit a variety of infectious diseases, including dysentery, salmonellosis, hepatitis, and giardiasis. Symptoms vary, but nausea, vomiting, and diarrhea, with or without fever, are most common. To assess bacterial safety, test for a group of "indicator bacteria" called total coliform bacteria in your well. These bacteria do not usually cause disease themselves, but their presence indicates that surface contamination has found its way into the well and disease organisms may also be present. When coliform bacteria are found in well water, the water should be boiled before being used for drinking and cooking and the well should be disinfected.

## Test your well water every year for nitrate, and always test the water for nitrate before giving it to an infant

Nitrate is a common contaminant in Illinois groundwater. An elevated level of nitrate is often caused from septic systems or by run-off from barnyards, feedlots, or farm fields. Wells most vulnerable to nitrate contamination include shallow wells, dug wells with non-water-tight casings, and wells with damaged, leaking casing or fittings. Well water containing nitrate at levels above the maximum contaminant level established by the U.S. Environmental Protection Agency (10 milligrams per liter as nitrogen) should never be given to infants less than 6 months old, because it can cause a potentially fatal disease called "blue baby syndrome." In many cases, constructing a deeper well can reduce or eliminate a nitrate problem. If you know, or suspect, that your well water may contain high levels of nitrate, [DO NOT BOIL THE WATER](#), as this will only concentrate nitrate levels.

## Testing your well water for other contaminants

### VOCS

Volatile organic compounds, or "VOCS," are common components of gasoline and other fuels, as well as paints and solvents, such as cleaners and degreasers. Long-term exposure to VOCS at levels above health standards may damage the central nervous system, liver, or kidneys, and some VOCS are known to cause cancer. If you live near a current or former commercial or industrial area, gas station or landfill, and especially if your well is old

or shallow, you should consider having your water tested for VOCS periodically.

### PESTICIDES

Wells most at risk of pesticide contamination are shallow or old, located close to areas of pesticide use or storage, and located in geologically sensitive areas, such as sand plains or "karst" bedrock areas. Wells that have elevated levels of nitrate are also more likely to have detectable levels of pesticides. Long-term exposure to some pesticides at levels above health standards may affect the development of the nervous system.

If you have an old or shallow well and you live in an agricultural area, or if your well has an elevated nitrate level, consider testing your well water for one or more of the pesticides used most frequently in your area.

### RADIUM

This naturally occurring radioactive element is found primarily in the northern third of Illinois within the deep rocks and soil. Radium has been detected in private wells and can only be identified through testing of the water. Long-term exposure to radium at levels above health standards may increase the risk of bone cancer.

### ARSENIC

This metal is naturally occurring and can also be found in some industrial waste material. Illinois has a band of arsenic that runs across the state from northwest to southeast and has been detected in public water systems at levels exceeding health-based standards. Long-term exposure to arsenic at levels above health standards may increase the risk of several types of cancer.

A list of other contaminants to test for can be found at [www.illinoiswellwater.org](http://www.illinoiswellwater.org).